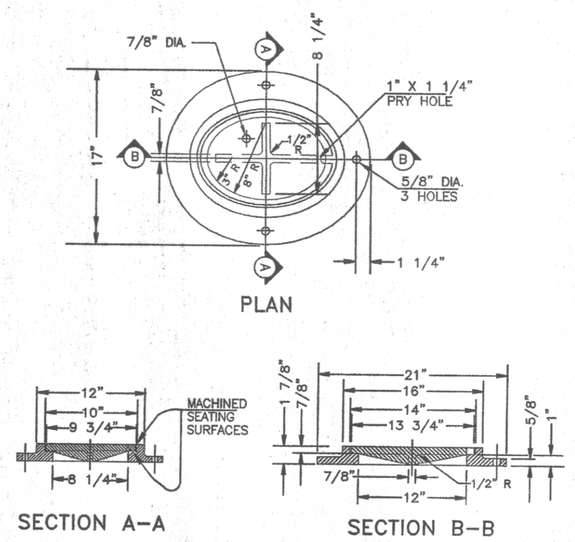
BP 08-676-5



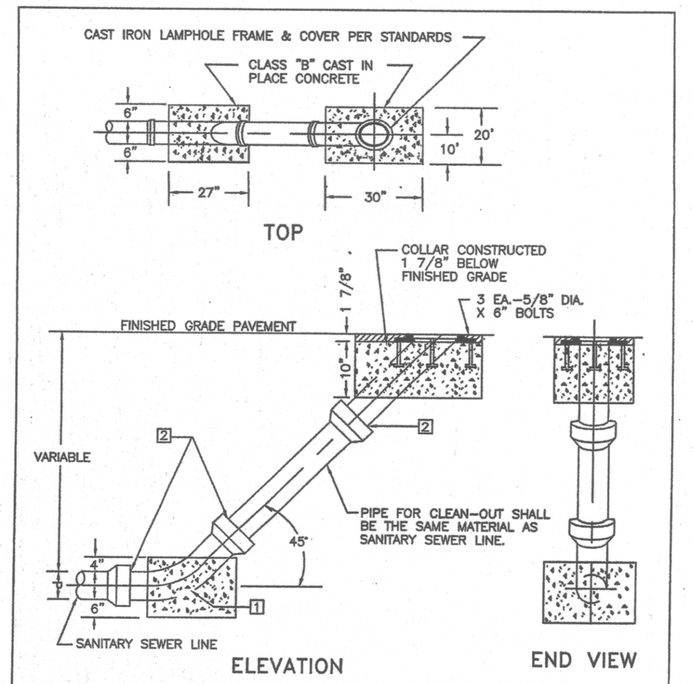
NOTES:

1. FRAME AND COVER SHALL BE MANUFACTURED OF CAST IRON CONFORMING TO ASTM A–48–CLASS 30.
2. FRAME AND COVER SHALL BE HS20–44 RATED.
3. FRAME SHALL WEIGH APPROX. 45 LBS.
4. COVER SHALL WEIGH APPROX. 25 LBS.
5. FRAME AND COVER SHALL BE COATED WITH BITUMINOUS MATERIAL CONFORMING TO A.W.W.A. C203.
6. COUNTRY OF ORIGIN AND MANUFACTURER SHALL BE CAST INTO FRAME AND COVER.

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		LAMPHOLE FRAME & COVER	SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS — DATE
			IMPROVEMENT STANDARD NO. CW–M5

1 LAMPHOLE FRAME & COVER

NOT TO SCALE



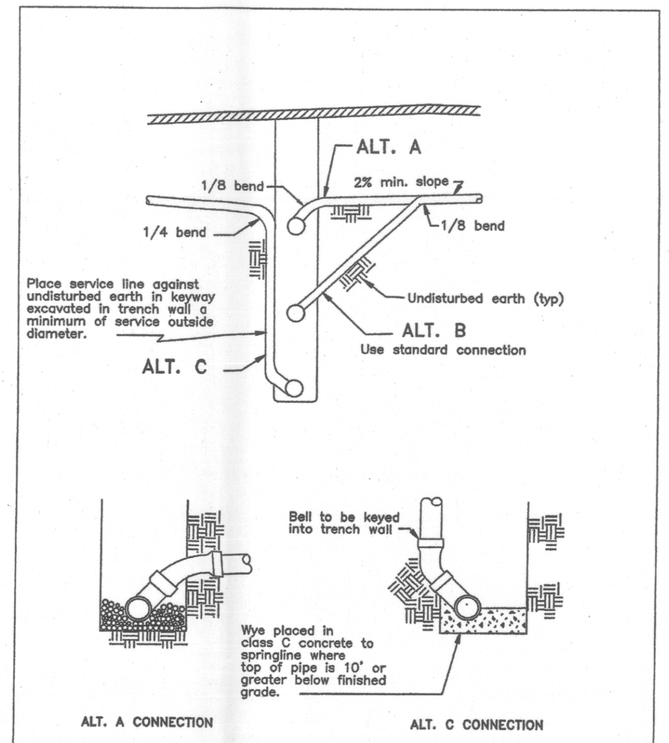
NOTES:

1. 6"ϕ 45° ELBOW
2. JOINTS ARE NOT TO BE ENCASED IN CONCRETE
3. LAMPHOLE MAYBE USED WHERE APPROVED BY AGENCY

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		SANITARY SEWER LAMPHOLE	SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORK — DATE
			IMPROVEMENT STANDARD NO. CW–S11

2 SANITARY SEWER LAMPHOLE

NOT TO SCALE

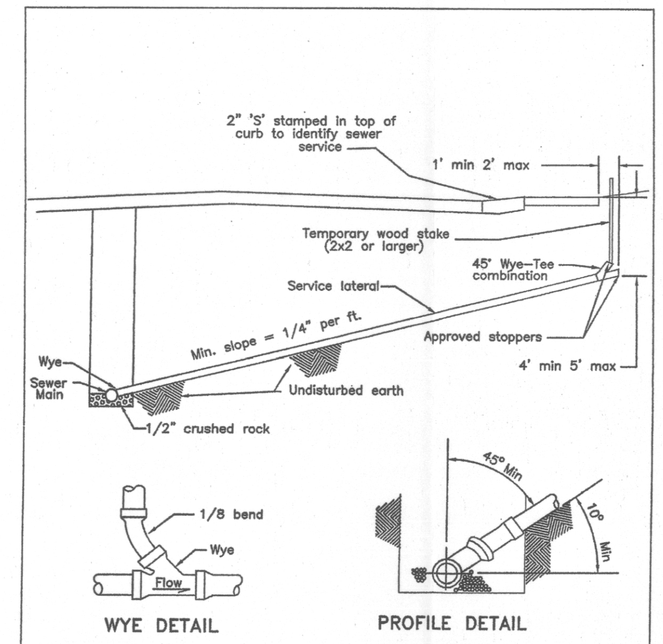


Sheet 2 of 2

No.	Revised	By	SEWER SERVICE LATERAL	Approved by Director of Public Works
Drawn by JLD			COUNTY OF SAN JOAQUIN DEPARTMENT OF PUBLIC WORKS	Date SEPT. 1991
Checked by				Drawing No. S – 7B
Scale NONE				

3 SEWER SERVICE LATERAL

NOT TO SCALE



NOTES:

1. All services shall be 4" inside diameter or as shown on plan.
2. Contractor shall use the most appropriate type connection (alternates on sht. 2) for the particular situation.
3. See standard plan for required cleanouts & boxes.

Sheet 1 of 2

No.	Revised	By	SEWER SERVICE LATERAL	Approved by Director of Public Works
Drawn by JLD			COUNTY OF SAN JOAQUIN DEPARTMENT OF PUBLIC WORKS	Date SEPT. 1991
Checked by				Drawing No. S – 7A
Scale NONE				

4 SEWER SERVICE LATERAL

NOT TO SCALE

Lionakis Beaumont Design Group Inc.

1919 Nineteenth Street
Sacramento, CA 95814
P: 916-558-1900 F: 916-558-1919
www.lbdg.com

Architecture · Planning
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BKF
Engineers / Surveyors / Planners

980 9TH STREET
SACRAMENTO CA, 95814
PH: 916–556–5800
FAX: 916–556–5899

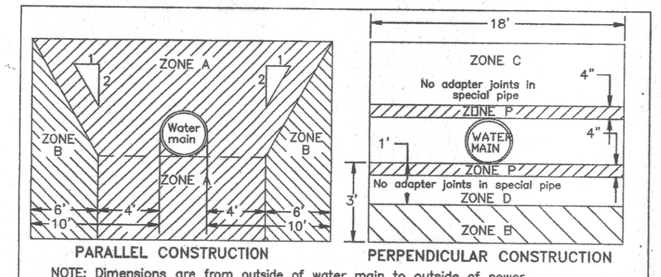
SEAL

LICENSED ARCHITECT — JAMES R. BEAUMONT — 4-29-09 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — 7-1-09 — C 64950 — EXP. 6/30/09 — CIVIL — STATE OF CALIFORNIA

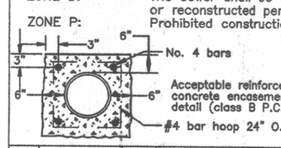
ISSUED

DSA APPROVAL SET
10–29–2007



NOTE: Dimensions are from outside of water main to outside of sewer. all crossings shall be at 90° where possible.

CASE I: New sewer–existing water main
ZONE A: Sewer lines will not be permitted in this zone without special permission from County Environmental Health.
ZONE B: Extra strength vitrified clay pipe with compression joints; or rubber gasketed plastic pipe conforming to ASTM D3034–81 SDR–35 specifications.
ZONE C/D: Where sewer will carry flows from industrial or commercial development class 50 or heavier ductile iron pipe with standard bituminous coating and approved mechanical joints shall be used. Where sewer will carry flows from residential developments only ductile iron pipe as above, class 200 PVC (DR14 per AWWA C900) plastic pipe or rubber gasketed pipe conforming to ASTM D3034–81 SDR–35 specification may be used. In each case a minimum 18 foot length of pipe with no joints shall be centered at the water main. No adaptor joints will be allowed closer than 8 feet to the water line.
CASE II: New water main–existing sewer
ZONE B: No water mains shall be constructed without special permission from County Environmental Health Dept.
ZONE C: If the sewer does not meet the ZONE B requirements given above the water main shall be of class 200 pipe or equivalent.
ZONE D: No water mains shall be constructed without special permission from the County Environmental Health Dept. If permission is granted, the sewer shall be encased with reinforced concrete as detailed below, or reconstructed per case I ZONE C/D requirements.
ZONE P: The sewer shall be encased with reinforced concrete as detailed below, or reconstructed per case I ZONE C/D requirements. Prohibited construction zone.

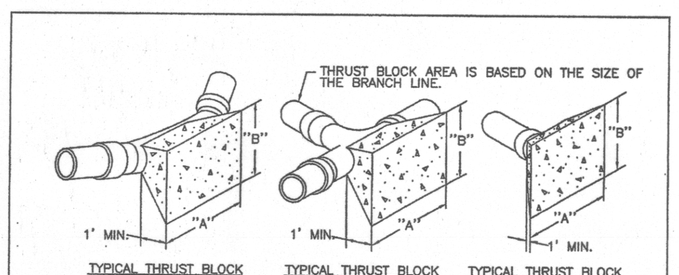


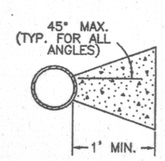
NOTE:
(1) Sewer lines larger than 24" diameter, house laterals above pressure water mains & sewer lines within 25' of low head water mains, shall be reviewed and approved by the County Environmental Health Dept.

No.	Revised	By	WATER–SEWER SEPARATION STANDARDS	Approved by Director of Public Works
Drawn by JLD			COUNTY OF SAN JOAQUIN DEPARTMENT OF PUBLIC WORKS	Date SEPT. 1991
Checked by				Drawing No. W – 7
Scale NONE				

5 WATER–SEWER SEPARATION

NOT TO SCALE





TYPICAL SECTION THRU THRUST BLOCK

THRUST BLOCK AREA REQUIRED		
FITTINGS	ALLOWABLE SOIL BEARING 1000 LBS. PER SQ. FT.	
6" LINE OR SMALLER	"A"	"B"
22 1/2°	1'–6"	1'–8"
45°	2'–0"	2'–0"
90°	3'–0"	2'–6"
TEE OUTLET	2'–6"	2'–0"
DEAD END	2'–6"	2'–0"
8" LINE		
22 1/2°	2'–0"	2'–0"
45°	3'–0	2'–6
90°	4'–0"	3'–0"
TEE OUTLET	3'–0"	3'–0"
DEAD END	3'–0"	3'–0"
10" LINE		
22 1/2°	3'–0"	2'–0"
45°	3'–6"	3'–0"
90°	5'–0"	4'–0"
TEE OUTLET	4'–0"	3'–6"
DEAD END	4'–0"	3'–6"
12" LINE		
22 1/2°	3'–0"	3'–0"
45°	4'–0"	4'–0"
90°	7'–0"	4'–0"
TEE OUTLET	5'–0"	4'–0"
DEAD END	5'–0"	4'–0"

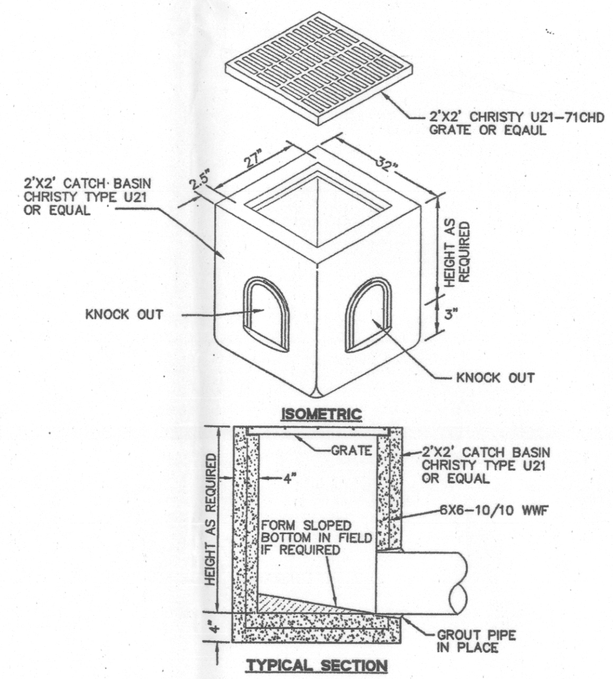
NOTES:

1. ALL THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
2. RESTRAINT SYSTEM FOR VERTICAL PIPE BENDS SHALL BE APPROVED BY THE AGENCY.
3. THRUST RESTRAINT SYSTEMS FOR PIPES LARGER THAN 12" SHALL BE DESIGNED ON A CASE BY CASE BASIS AND SHALL BE APPROVED BY THE AGENCY.
4. CONCRETE SHALL BE CLASS B.

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		THRUST BLOCK CHART	SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS — DATE JUNE 1997
			IMPROVEMENT STANDARD NO. CW–W4

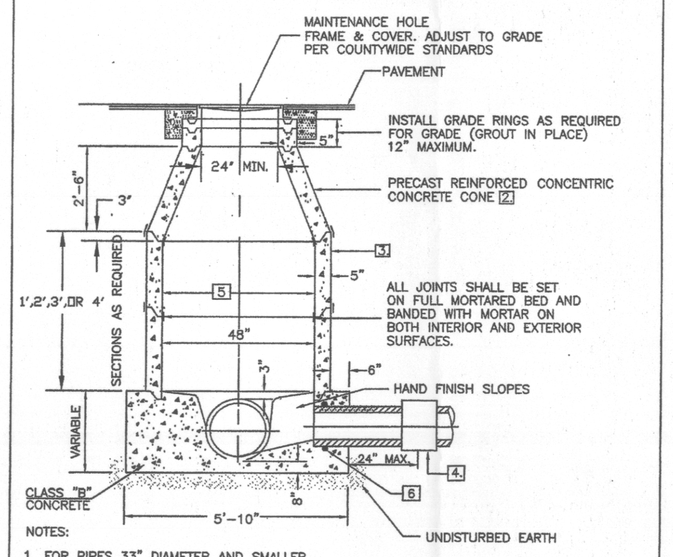
6 THRUST BLOCK CHART

NOT TO SCALE



7 STORM DRAIN CATCH BASIN

NOT TO SCALE



NOTES:

1. FOR PIPES 33" DIAMETER AND SMALLER.
2. ECCENTRIC REINFORCED CONCRETE CONE MAY BE USED ON APPROVAL OF AGENCY
3. PRECAST REINFORCED CONCRETE MAINTENANCE HOLE UNIT SHALL CONFORM TO A.S.T.M. C–478
4. CONSTRUCT FLEXIBLE PIPE JOINT AT 2 FEET MAXIMUM FROM BASE OF MAINTENANCE HOLE FOR RIGID PIPE. (EXCEPT CAST–IN–PLACE).
5. INTERIOR COATING WHERE REQUIRED BY AGENCY.
6. RUBBER RING WATERSTOP OR ADAPTER REQUIRED FOR PVC PIPE INSTALLATIONS.
7. FOR UNPAVED AREAS LEAVE MAINTENANCE HOLE ABOVE GROUND AS REQUIRED BY AGENCY

REVISION	DATE	COUNTYWIDE IMPROVEMENT STANDARDS COUNTY OF SAN JOAQUIN	APPROVED BY
		TYPE I MAINTENANCE HOLE	SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS — DATE
			IMPROVEMENT STANDARD NO. CW–S7

8 TYPE I MAINTENANCE HOLE

AGENCY APPROVALS

FILE NO.: 39–46

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. 02–109126
DATE 10-30-07

INCREMENT #1

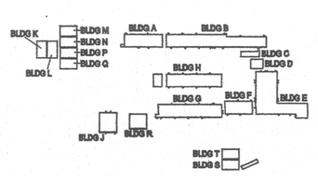
PROJECT NO. 25639

LINCOLN UNIFIED SCHOOL DISTRICT

CAMPUS MODERNIZATION

LINCOLN ELEMENTARY SCHOOL
818 W. LINCOLN ROAD
STOCKTON, CA, 95207

KEY PLAN



SHEET TITLE

DETAILS

SHEET NO.

C7.2