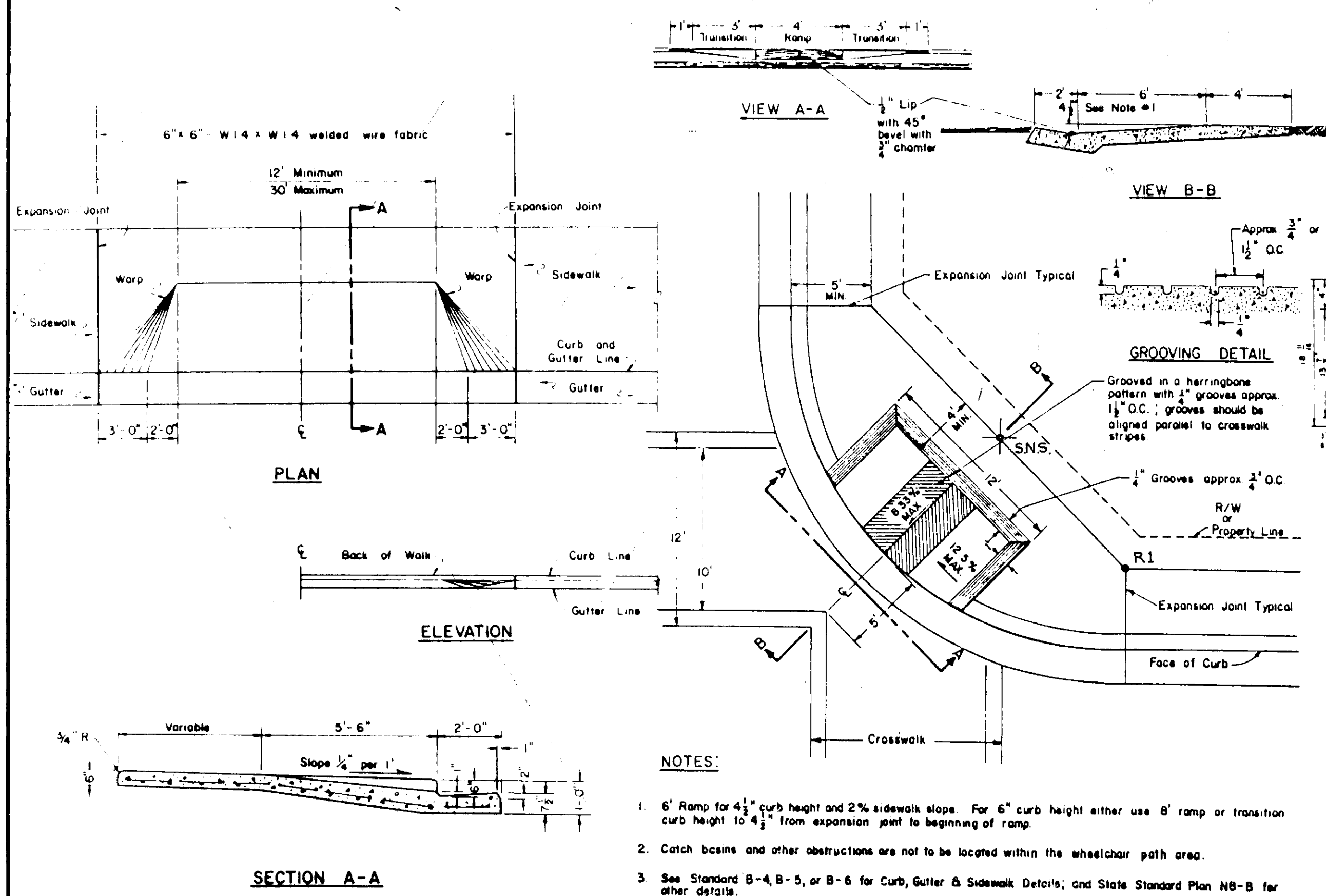


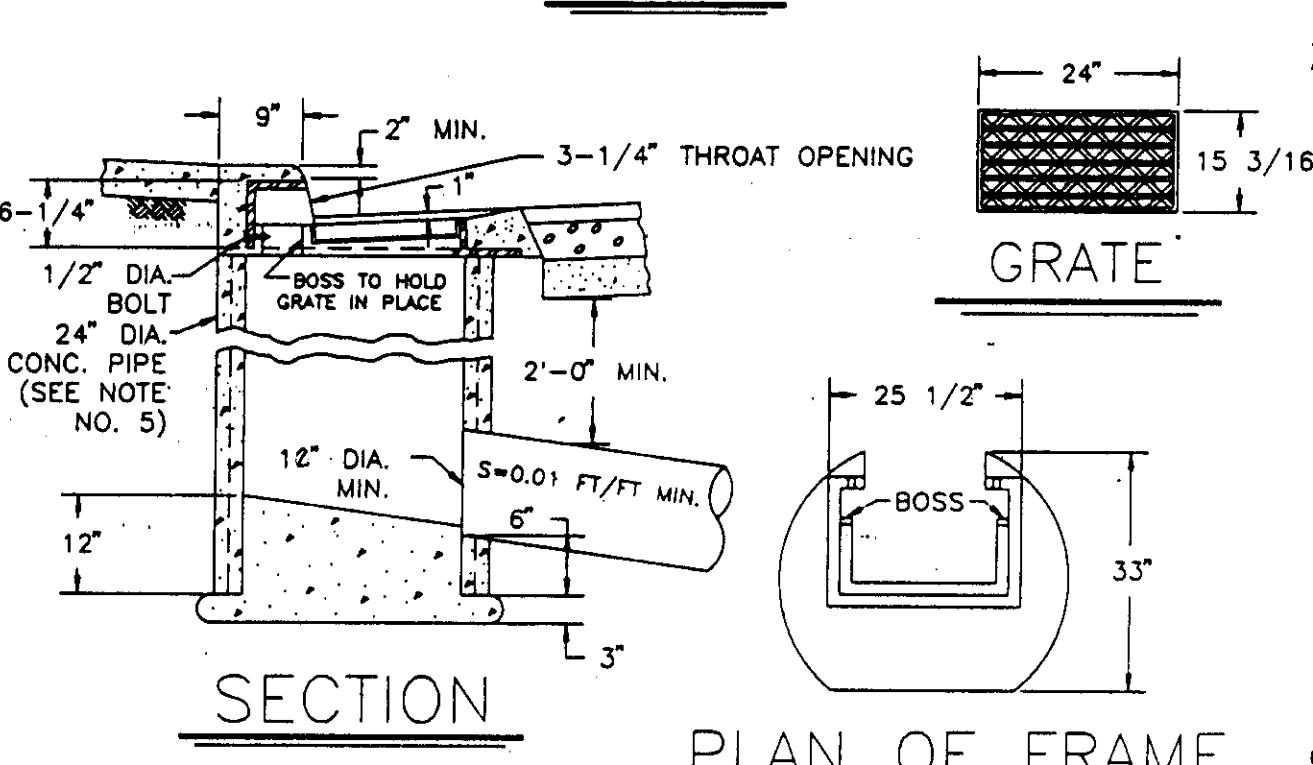
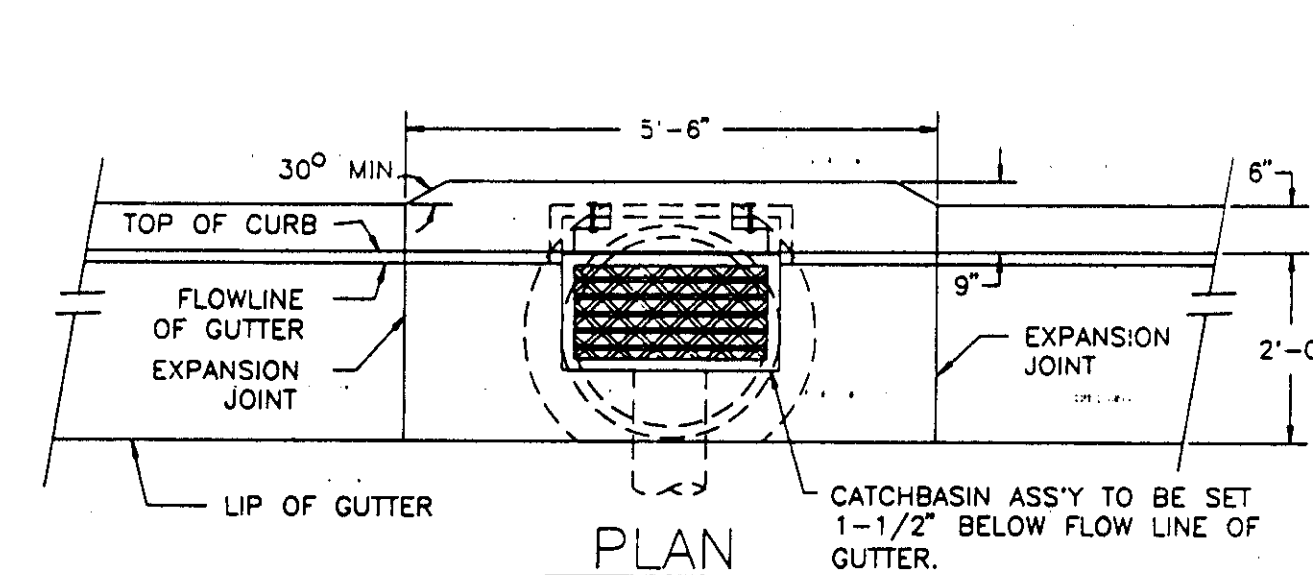
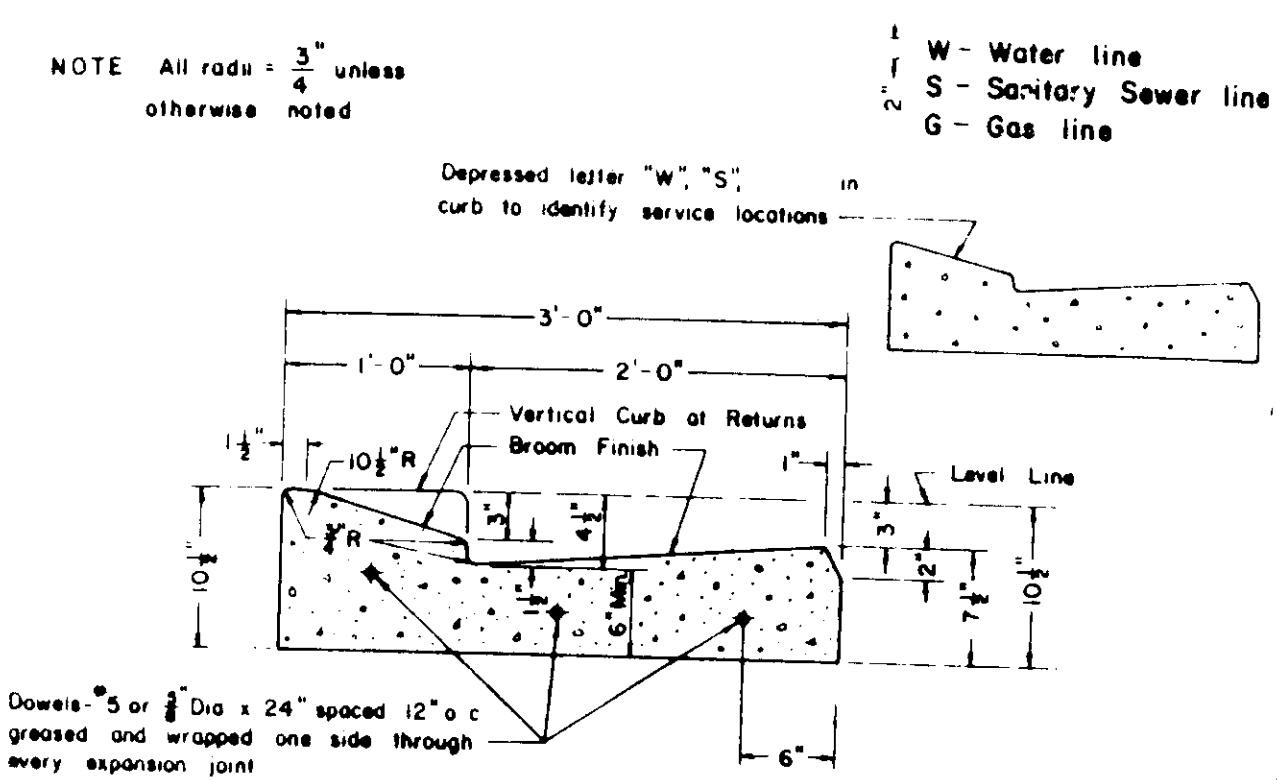
FOR ADDITIONAL DETAILS SEE SPECIFICATIONS



TYPICAL COMMERCIAL DRIVEWAY

HANDICAP RAMP

FRAME & GRATE (STANDARD STORM DRAIN INLET)



- NOTES:**
1. ALL EXPOSED STEEL SHALL BE COATED WITH 2 COATS OF COAL TAR PITCH HEATED TO A MINIMUM OF 180° F OR GALVANIZED. AMERICAN DUTCH FOUNDARY
2. GRATE, FRAME AND MODIFIED SIDE INLET SHALL CONFORM TO PINKERTON A-645 FRAME WITH EITHER A-390 RIVETED OR A-390-M FABRICATED STEEL GRATE.
3. GRATE SHALL BE CHAINED TO FRAME.
4. GRATE SHALL BE DEEPENED 1-1/2" BELOW GUTTER PROFILE GRADE.
5. 24" PIPE BARREL SHALL BE CLASS II R.C.P., OR CLASS 2 OR 3 NON-REINFORCED CONCRETE PIPE.

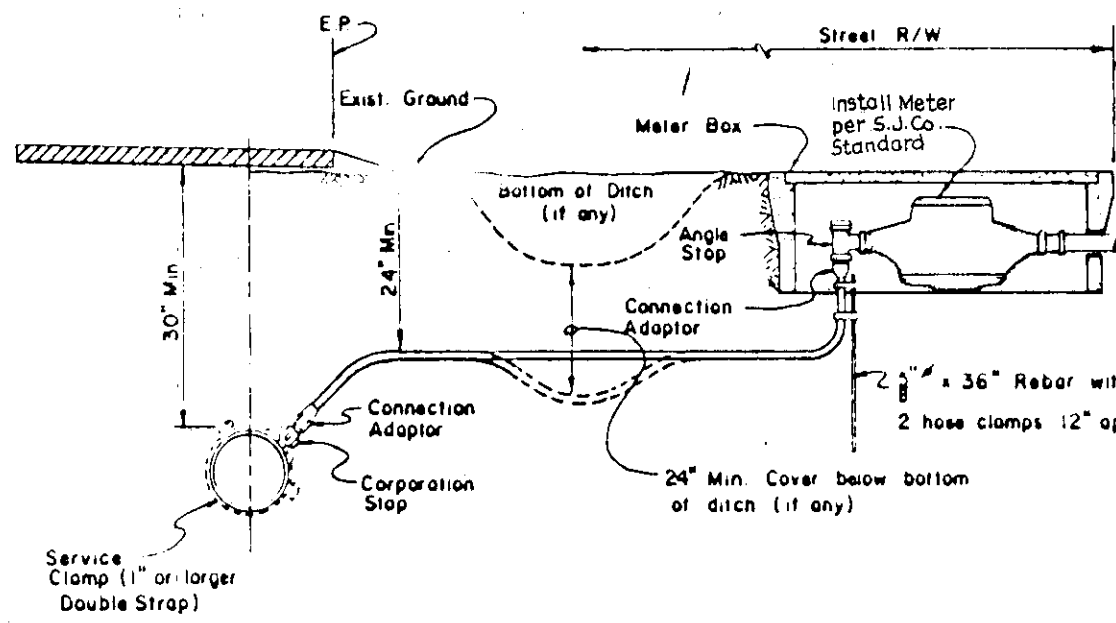
CURB GUTTER & SIDEWALK SUBDIVISION STREETS

STANDARD STORM DRAIN INLET

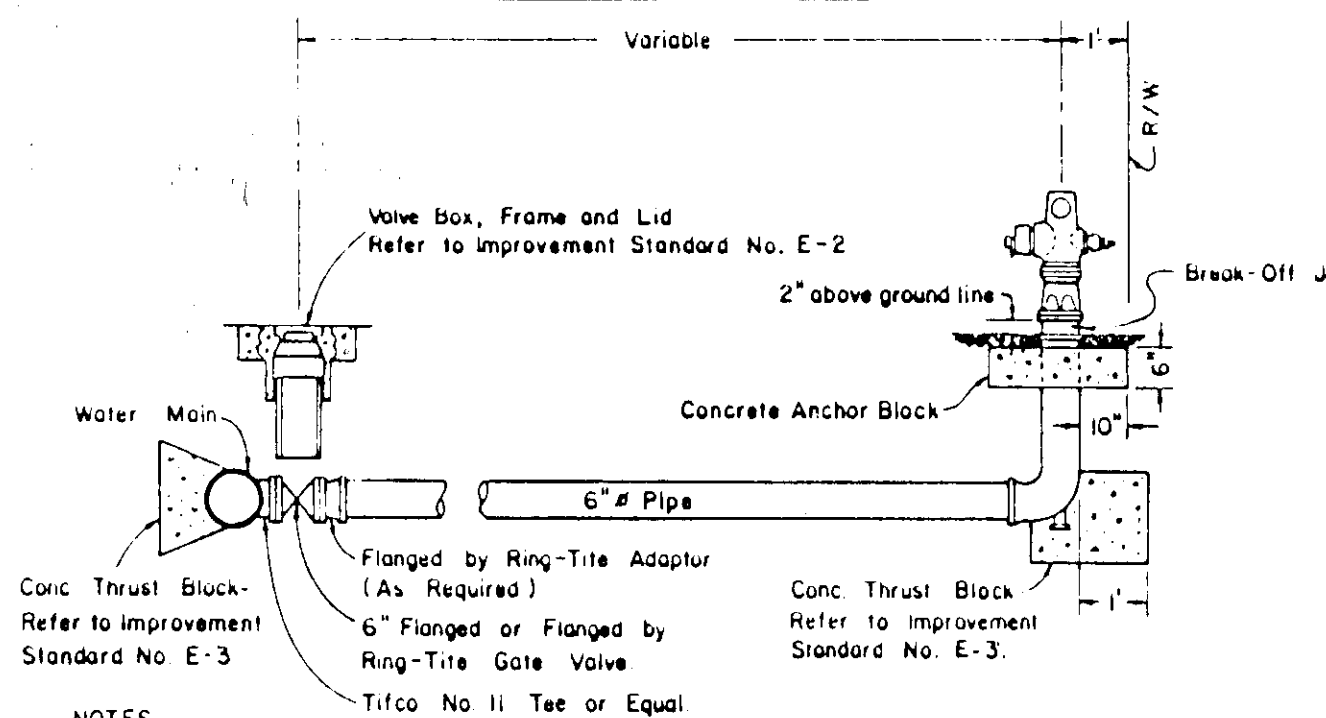
TYPICAL SANITARY SEWER DETAILS

THRUST BLOCK DETAILS

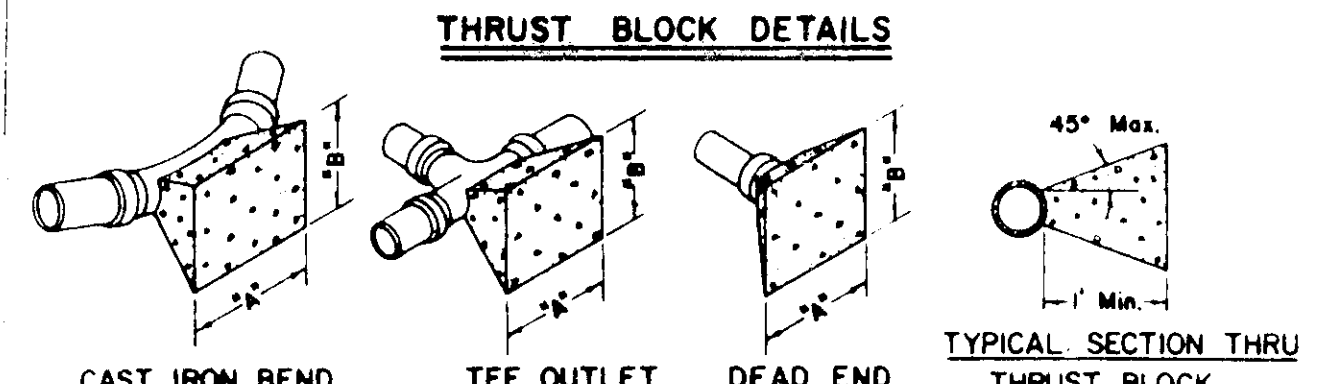
STANDARD STREET SIGN DETAILS



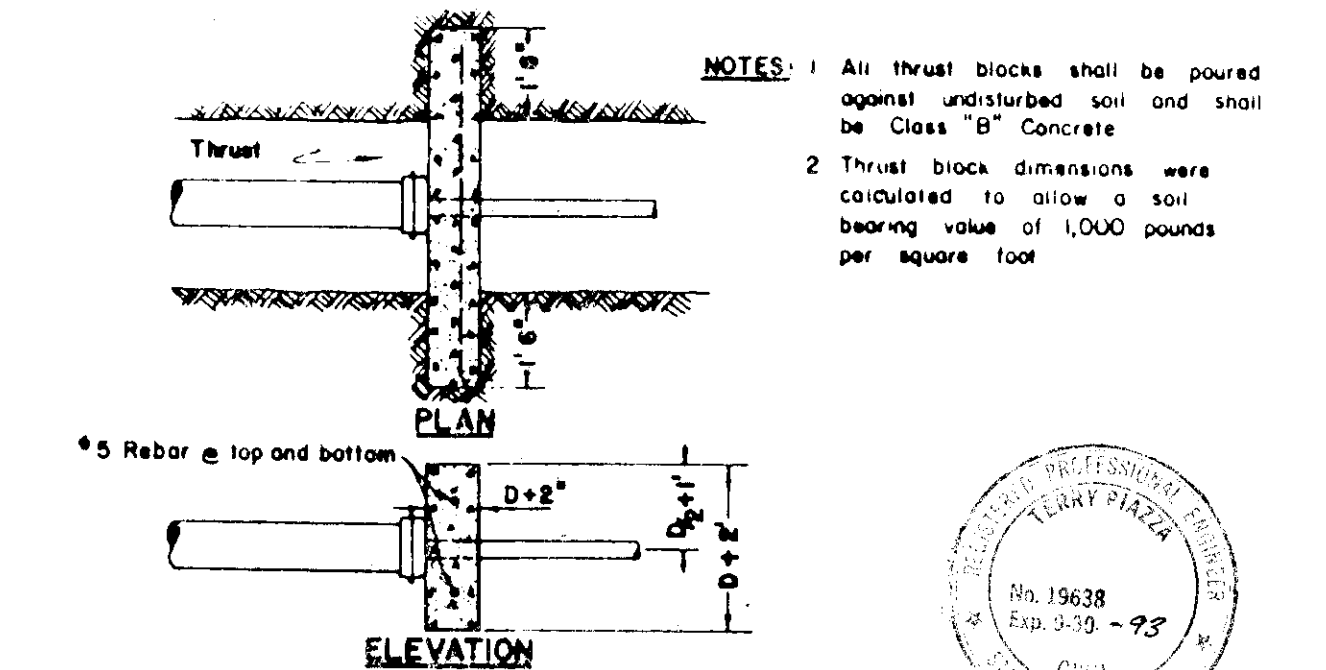
- NOTES:**
1. Plastic pipe up to 1/2" I.D. service shall be ultra high molecular weight (UHMW) Polyethylene as manufactured by "Driscope", "Orangeburg" or approved equal with minimum pressure rating of 160 psi.
2. Plastic pipe for 2" I.D. service shall be PB 210 Polybutylene or approved equal with minimum pressure rating of 160 psi.
3. Corporation stop shall have corporation block threads.
4. Angle stop shall have swivel nut and lock wings.
5. Angle stop shall be vertically plumbed.
6. Size of service line shall be as required by the County.
7. Mueller Insta-tite connection shall conform to ASTM Designation D 2239.



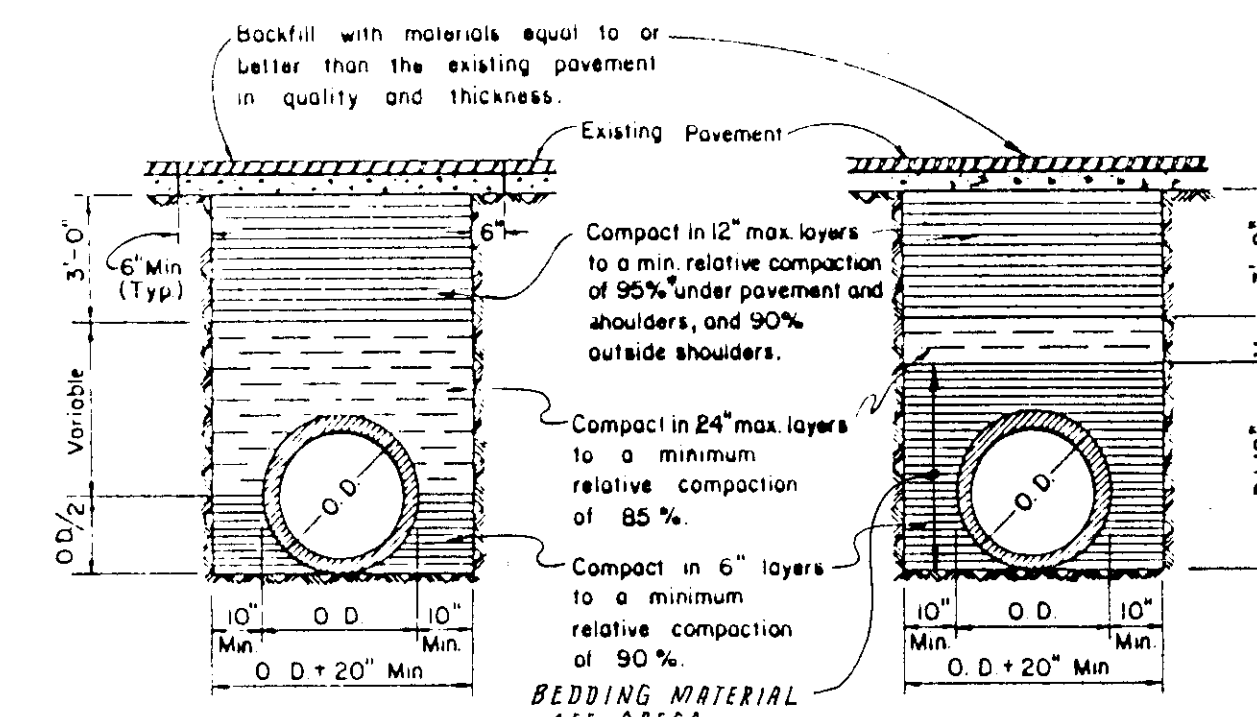
- NOTES:**
1. Fire Hydrants shall be placed with 4" outlet facing directly towards the street.
2. Fire Hydrants shall be clean and free of concrete.
3. Fire Hydrants to be American Darling Model B-62B, Dresser M.B.H. Style 929 "Reliant", Mueller "Centurian" or "Modern Centurian" or approved equal (2-1/2" & 1-4" outlets) Use Long Beach Wet Barrel P.H. Woodbridge).
4. All Hydrants shall be painted OSHA safety yellow or as required by local Fire District.



THRUST BLOCK DIMENSIONS			
FITTINGS	"A"	"B"	"C"
6" LINE and 4" Onsite LINE			
22 1/2"	1'-6"	1'-6"	22 1/2"
45"	2'-0"	2'-0"	45"
90"	3'-0"	2'-6"	90"
TEE OUTLET	3'-0"	2'-0"	TEE OUTLET
DEAD END	3'-0"	2'-0"	DEAD END
8" LINE			
22 1/2"	2'-0"	2'-0"	22 1/2"
45"	3'-0"	2'-6"	45"
90"	4'-0"	3'-6"	90"
TEE OUTLET	3'-6"	3'-0"	TEE OUTLET
DEAD END	3'-6"	3'-0"	DEAD END

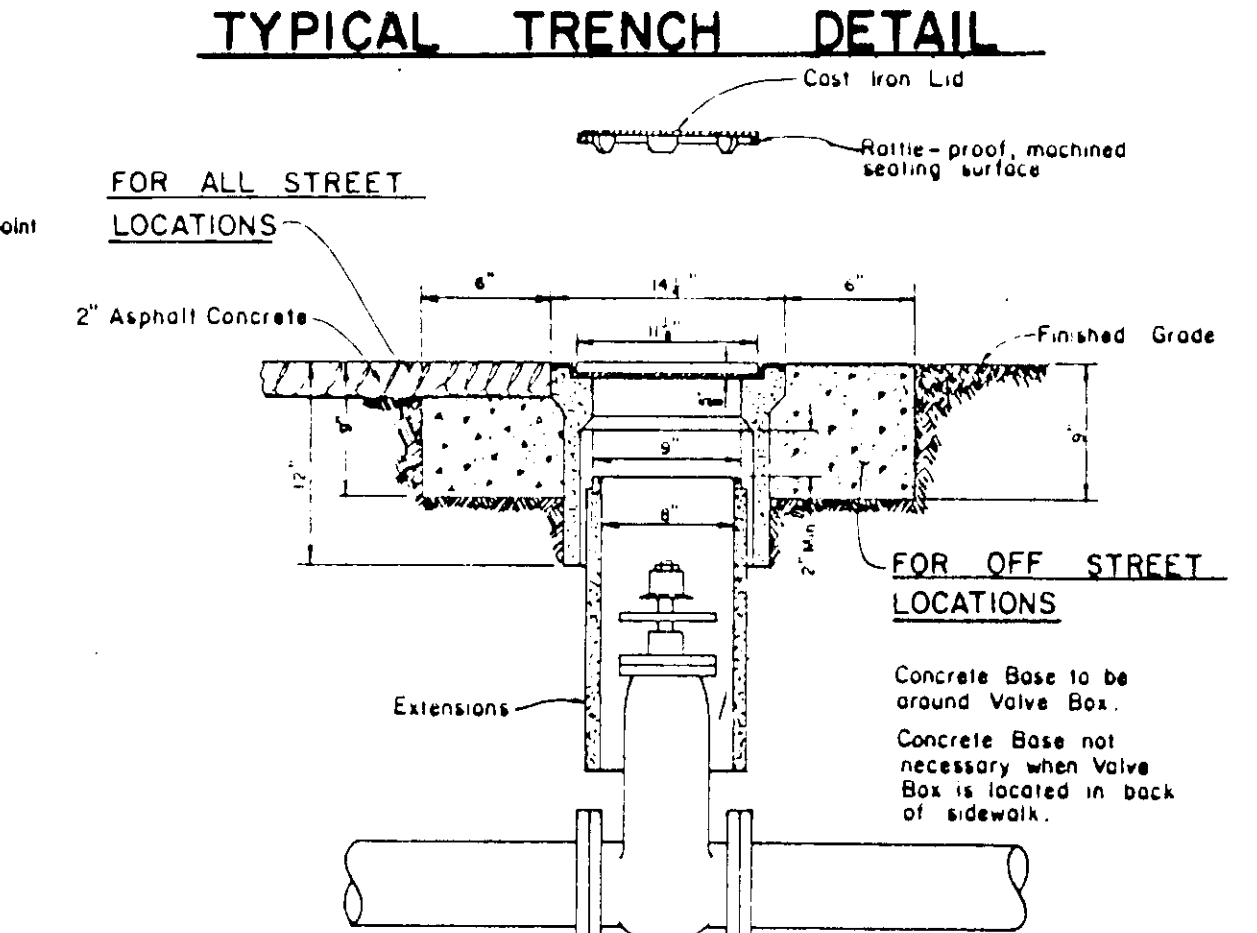


- NOTES:**
1. All thrust blocks shall be poured against undisturbed soil and shall be Class "B" Concrete.
2. Thrust block dimensions were calculated to allow a soil bearing value of 1,000 pounds per square foot.

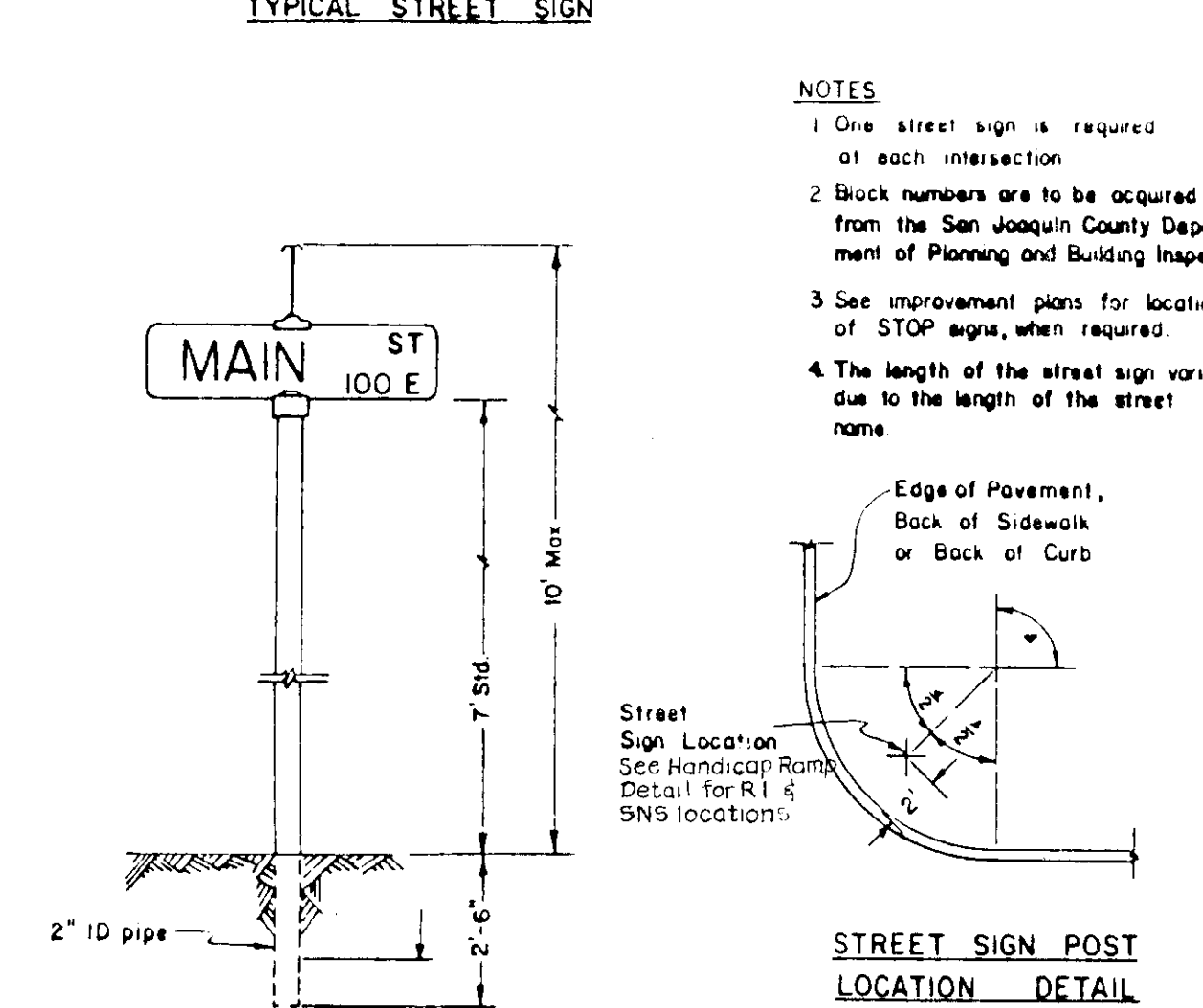
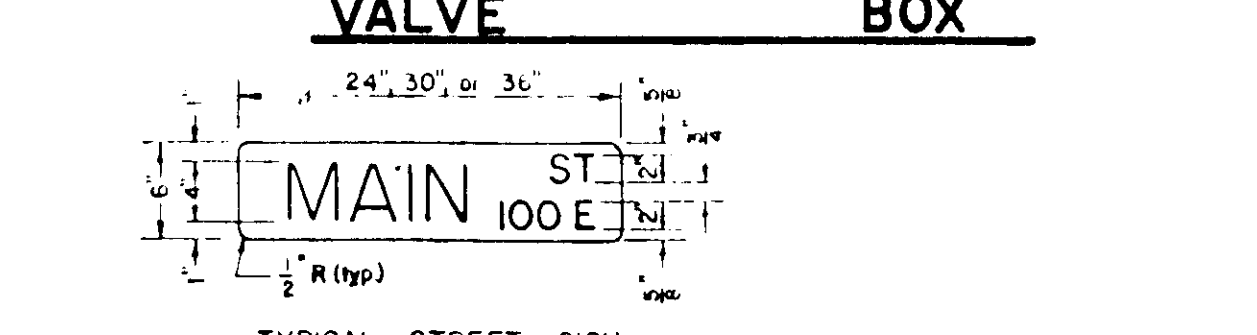


RIGID CONDUIT FLEXIBLE CONDUIT

- NOTES:**
1. Relative compaction of materials shall be tested by the State of California, Dept. of Transportation Testing Manual, test method No. California 216 or 231.
2. All existing pavement shall be neatly cut to line prior to trench excavation.
3. Jetting or ponding will be permitted within the street Right of Way with 3 year band.
4. * When shown by soil composition and compaction, ninety percent (90%) compaction may be used, when approved by the Director of Public Works.



- NOTES:**
1. Valve Box and Lid shall be Christy No. G5, Brooks No. RT or 4-TT, or equal.
2. All Lids and Grade Rings shall have machined sealing surfaces.
3. Extensions shall be as manufactured for the Valve Box supplied or Pipe of correct size can be used.



- NOTES:**
1. One street sign is required at each intersection.
2. Block numbers are to be acquired from the San Joaquin County Department of Planning and Building Inspection.
3. See improvement plans for location of STOP signs, when required.
4. The length of the street sign varies due to the length of the street name.

STANDARD STREET SIGN DETAILS

NO.	DATE	REVISIONS	BY	DESIGN	DRAWN BY
1	1963B				

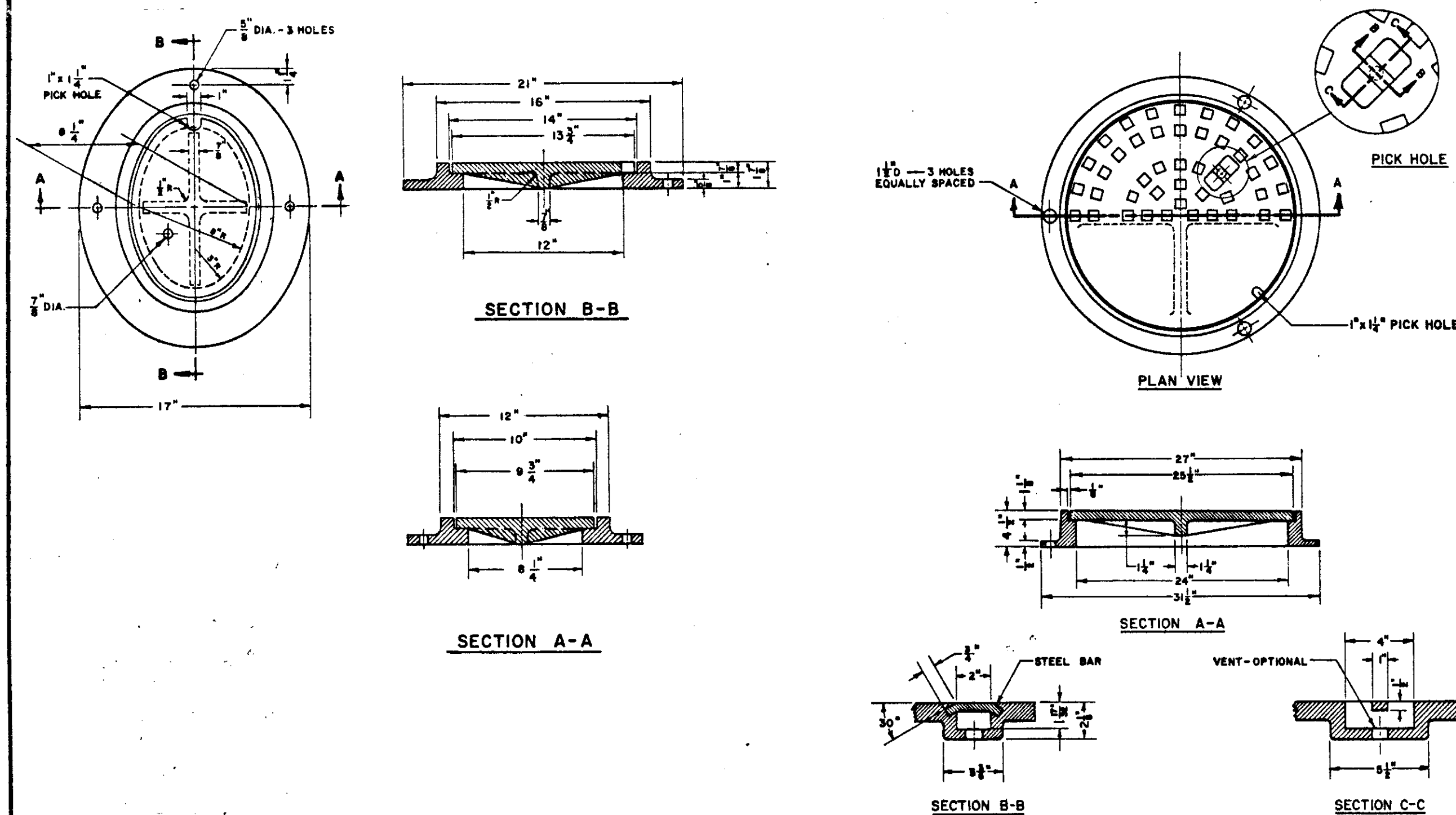
APPROVED: Henry M. Hirata RCE No. 21258
19
SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS

BAUMBACH & PIAZZA
CIVIL ENGINEERS - SURVEYORS
323 W ELM ST., LODI, CALIF. 95240 PH 209-368-6618

DETAIL SHEET

"TOWN SQUARE"

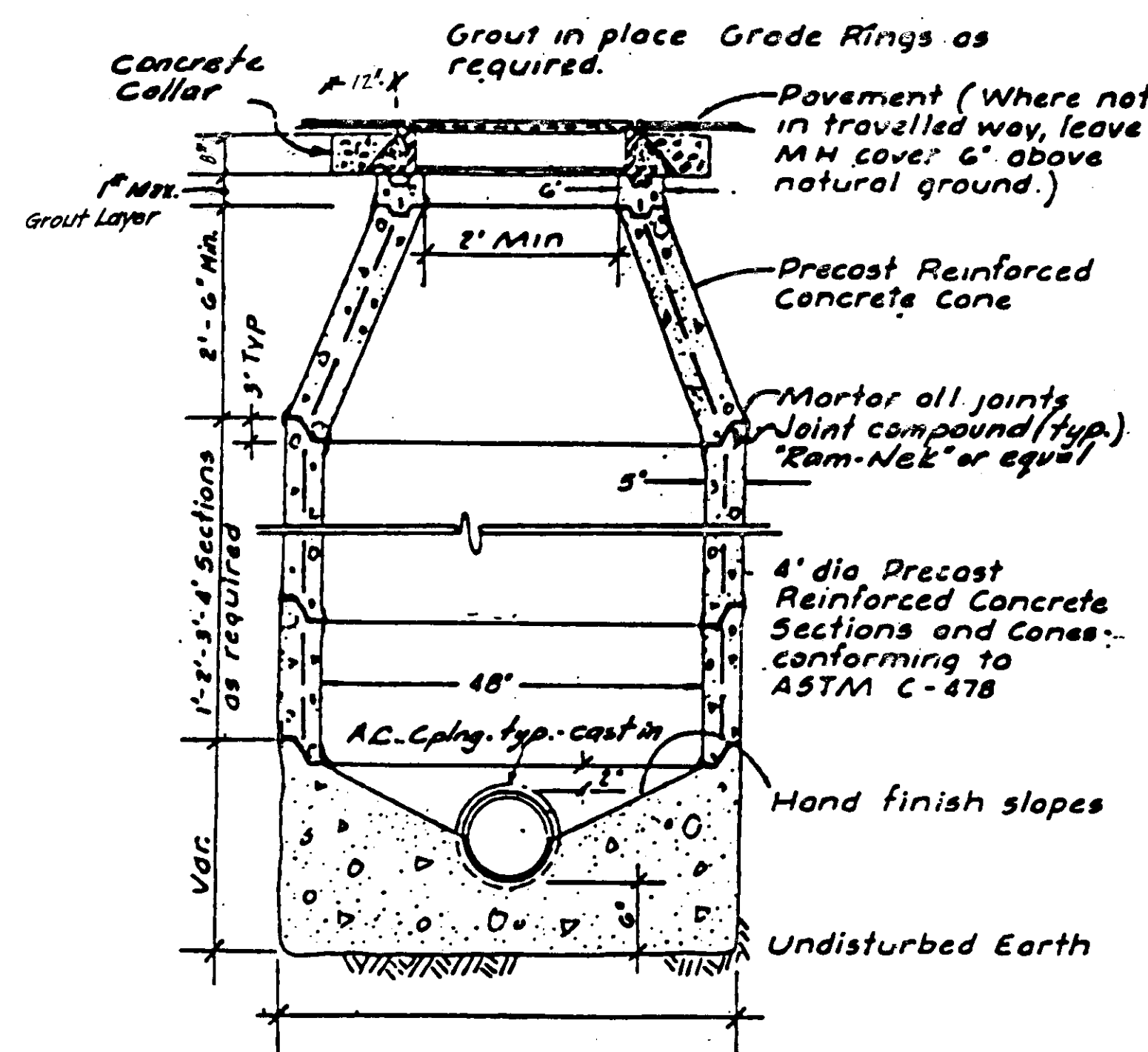
SHEET 8 OF 8
JOB NO.
FILE NO. G-924



FRAME & COVER
(SANITARY SEWER CLEANOUT)

FRAME & COVER
(MANHOLE)

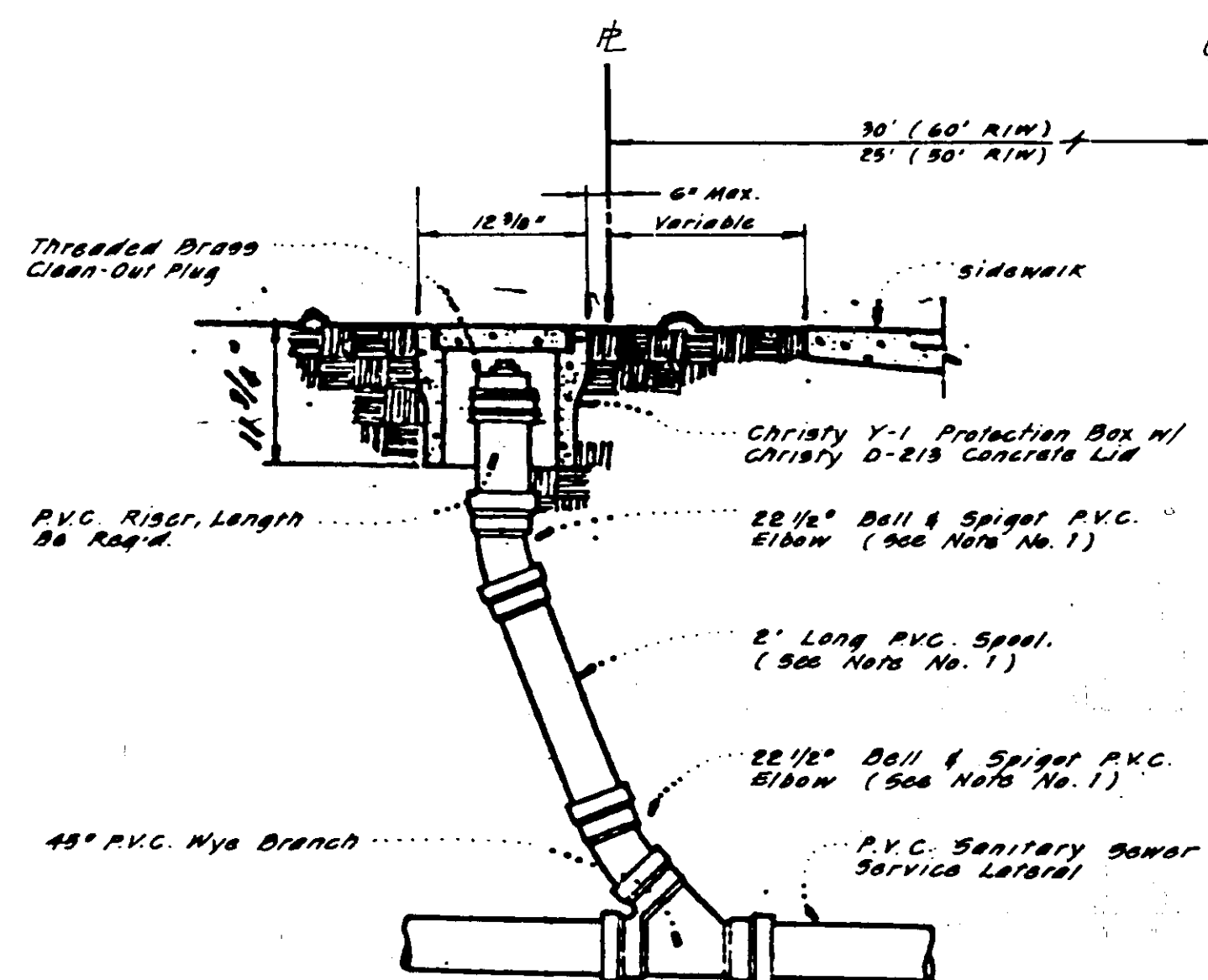
American Dutch Foundry / Pinkerton No. A-624 Frame and Cover Manhole Assembly with "Sanitary Sewer" on Cover.



Note: 1) Use Class "B" concrete for all sections.

2) TYPE II MANHOLE to have eccentric cones.

TYPE I
SANITARY SEWER MANHOLE

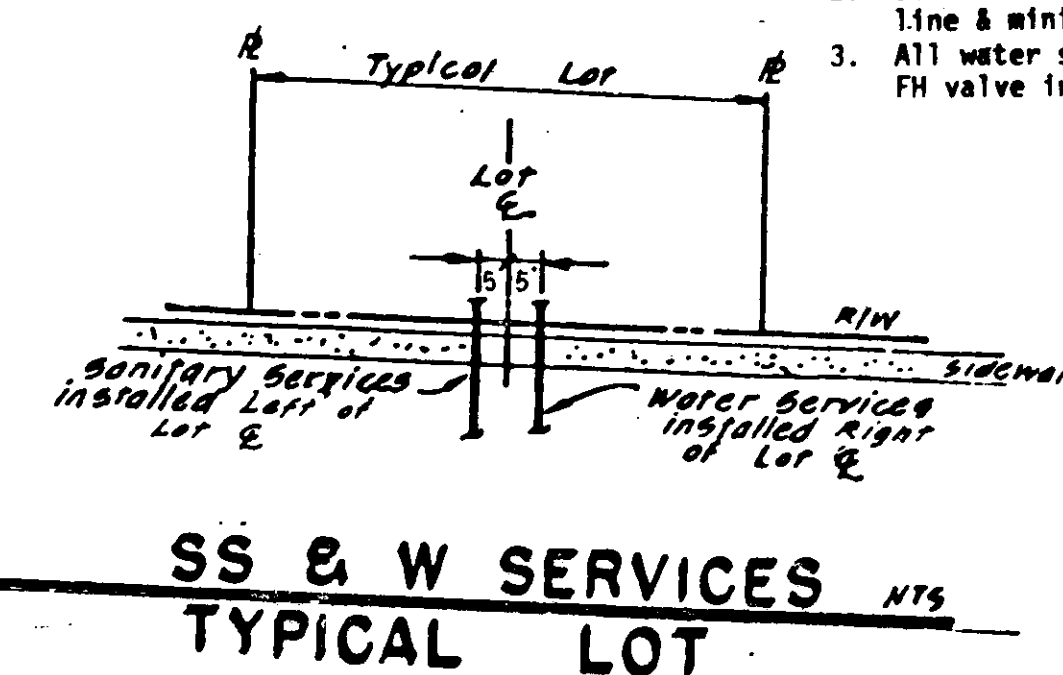


SERVICE LATERAL CLEAN-OUT

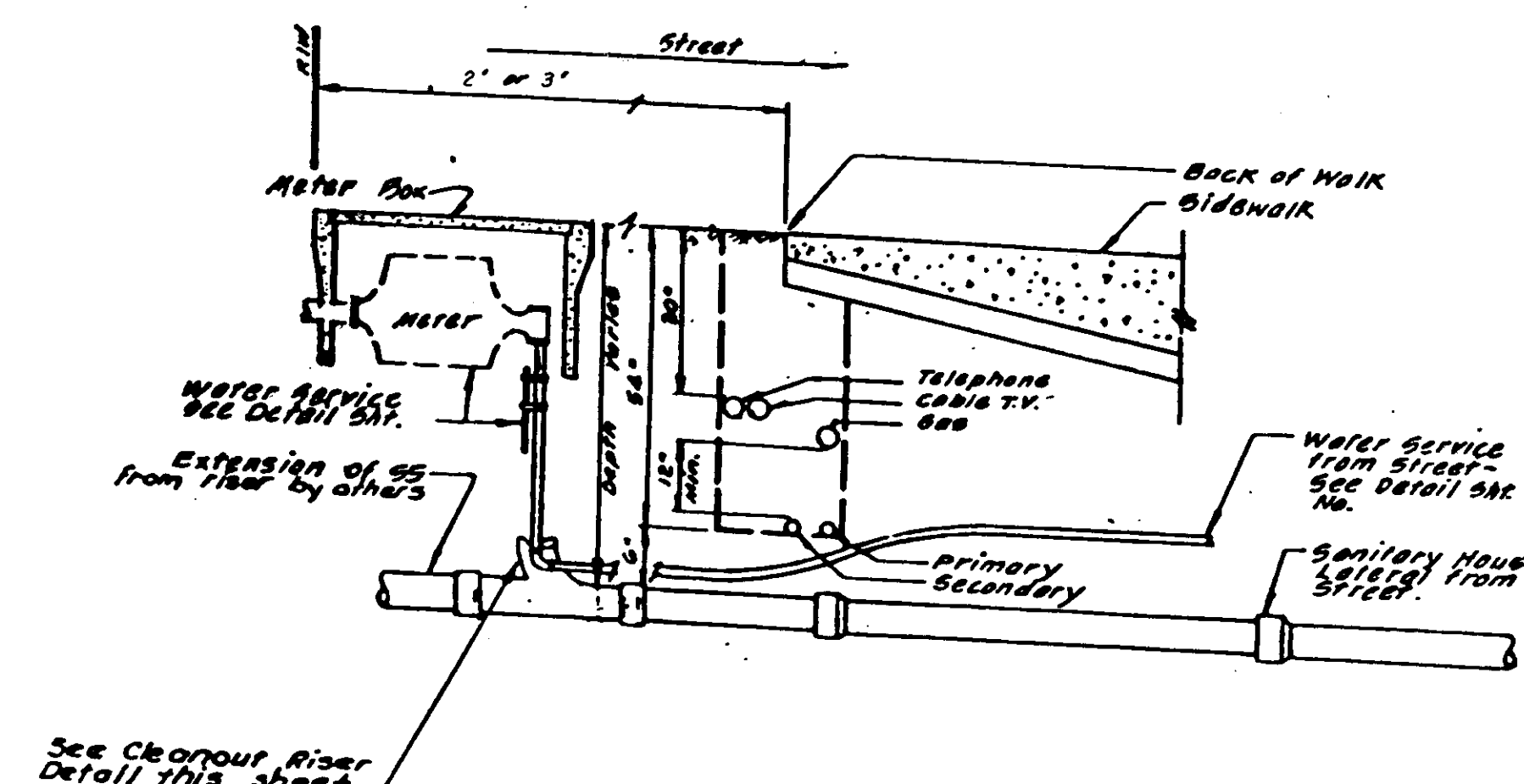
NOTES:

- Contractor may substitute long-radius P.V.C. bend, if available, for the two 22 1/2" elbows and 2' spool.
- Cleanouts shall be installed on all sewer service laterals at the edge of the right of way as shown.
- Cleanout riser and fittings shall be Polyvinyl Chloride (P.V.C.) pipe conforming to ASTM D 3034 - SDA 35 with rubber rings meeting the requirements of ASTM D - 3212.
- Cleanout riser and fittings shall be of the same diameter pipe as the service lateral.

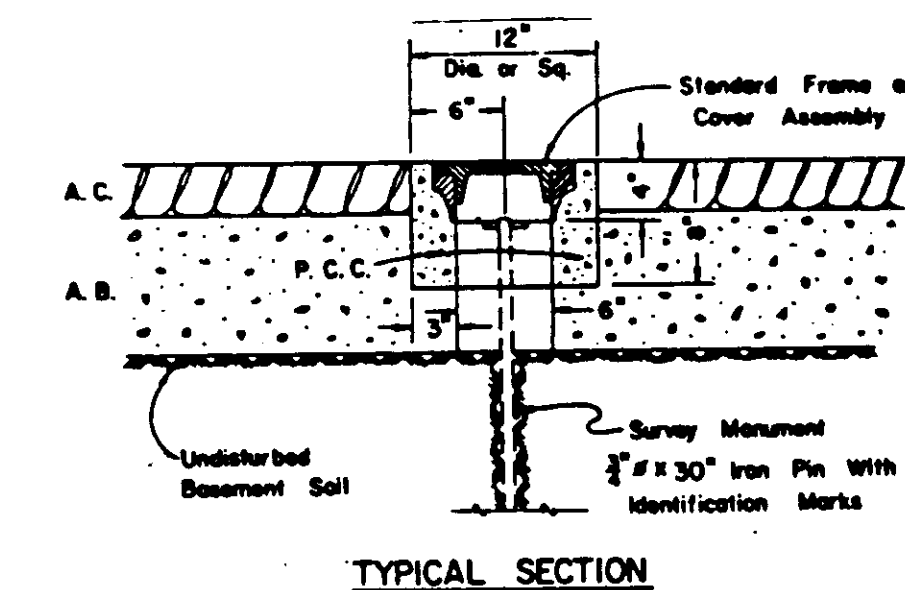
- NOTE: (Typ. All Lots)
- Unless otherwise noted, services to be at center of lots.
 - Services minimum of 5 feet apart on main line & minimum of 5 feet from valves.
 - All water services shall be upstream of FH valve in cul-de-sac.



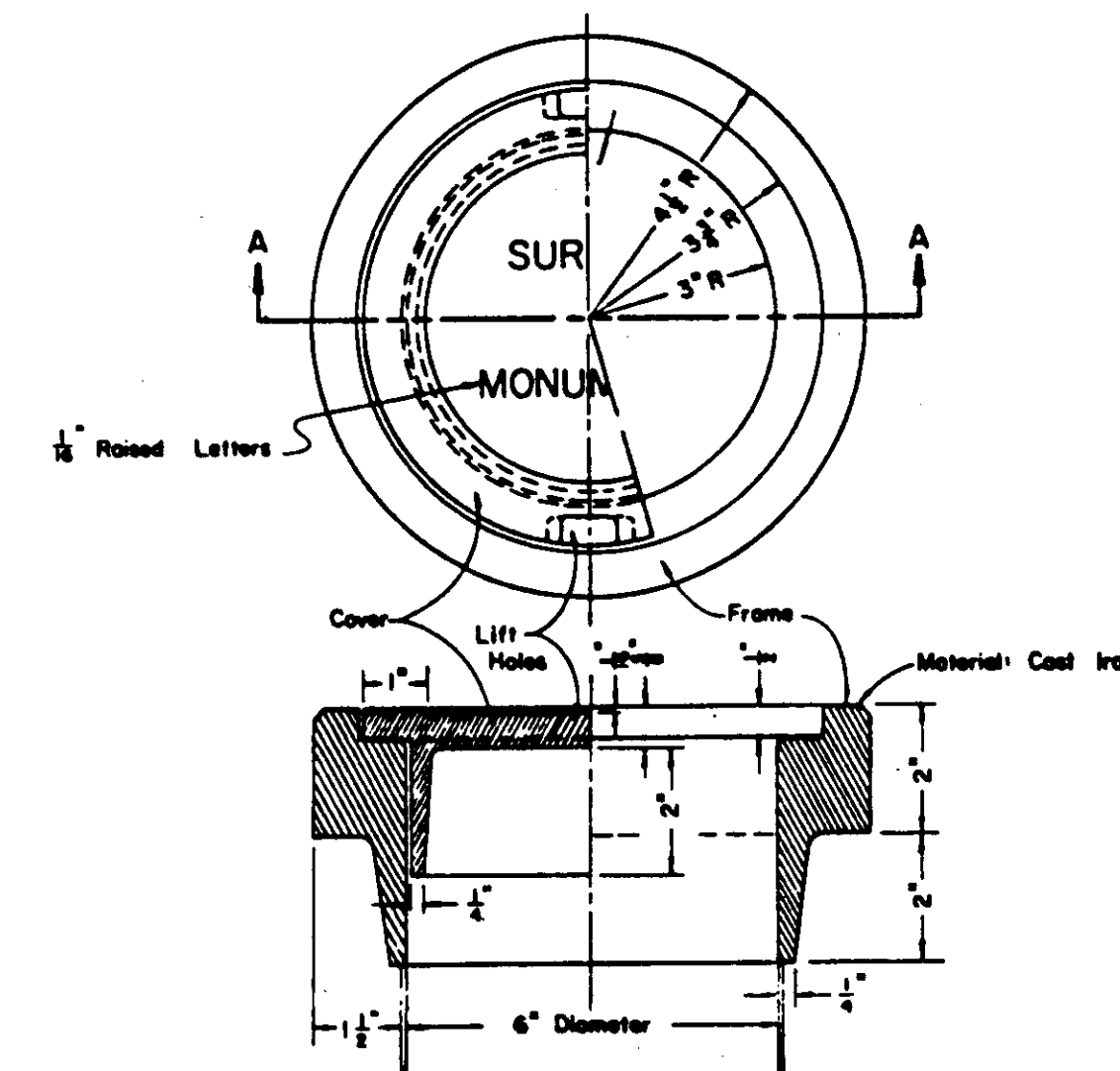
SS & W SERVICES
TYPICAL LOT



UNDERGROUND UTILITY LOCATION

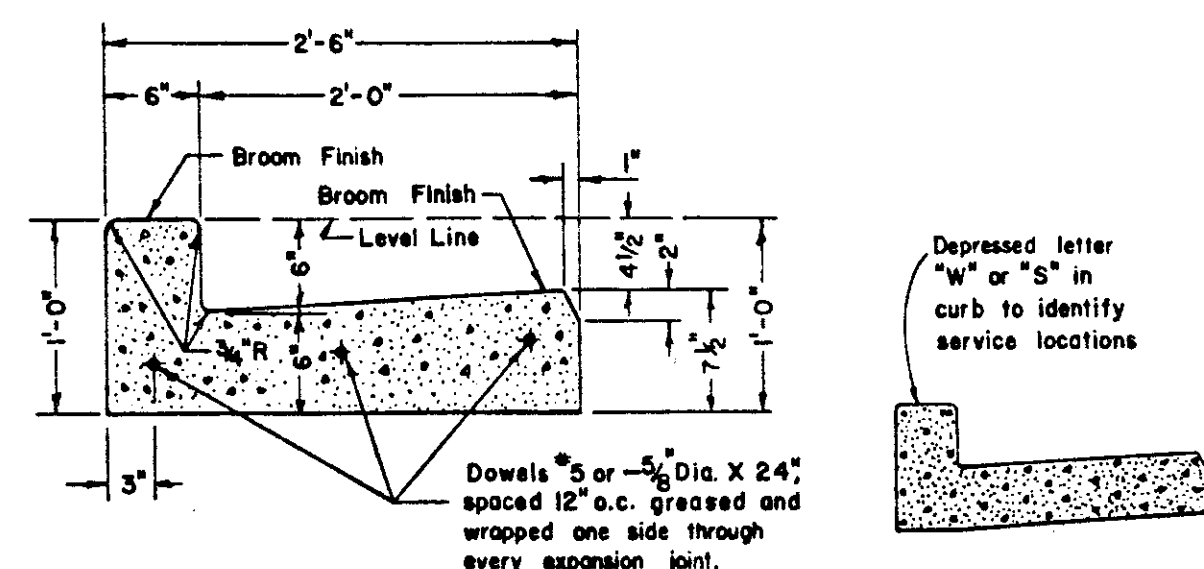


TYPICAL SECTION



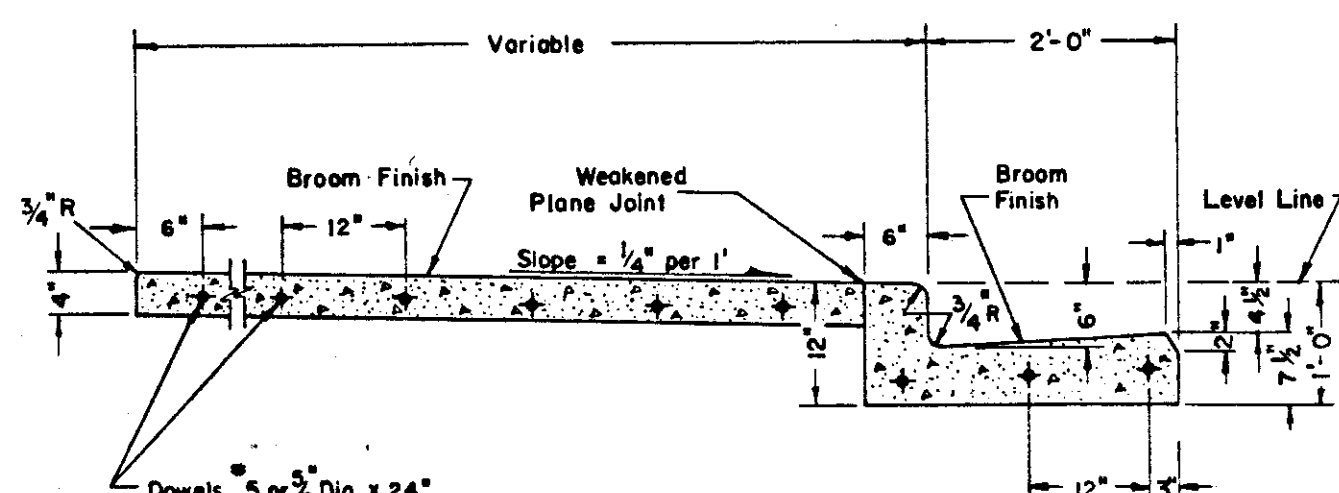
SECTION A-A

SURVEY MONUMENT
FRAME & COVER ASSEMBLY



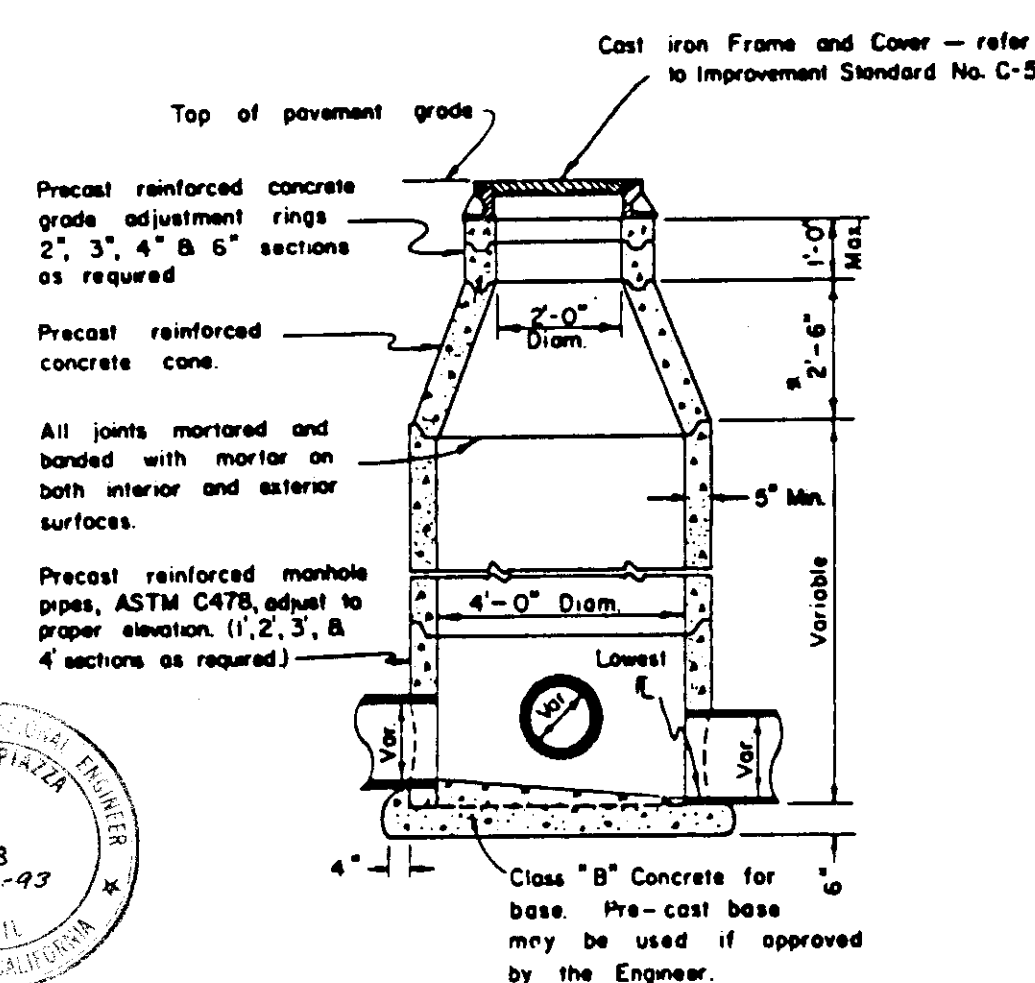
CURB & GUTTER

W - Water line
S - Sanitary Sewer line



CURB, GUTTER & SIDEWALK

- NOTES:
- Construct expansion joints @ 200' maximum and at returns, around light poles, hydrants and other fixed objects at sidewalk.
 - Transverse weakened plane joints shall be constructed @ 12' maximum intervals.



ELEVATION
STORM SEWER MANHOLE

NOTE: A f-6" concrete cone may be used if approved by the Engineer.

NO.	DATE	REVISIONS	BY	DESIGN	DRAWN BY	APPROVED	DATE
1	1963					Henry M. Hirata	1963
2	1968						1968
3	1970						1970

BAUMBACH & PIAZZA
CIVIL ENGINEERS
SURVEYORS
323 W. ELM ST. LODI, CALIF.
93240 PH: 208-288-0810

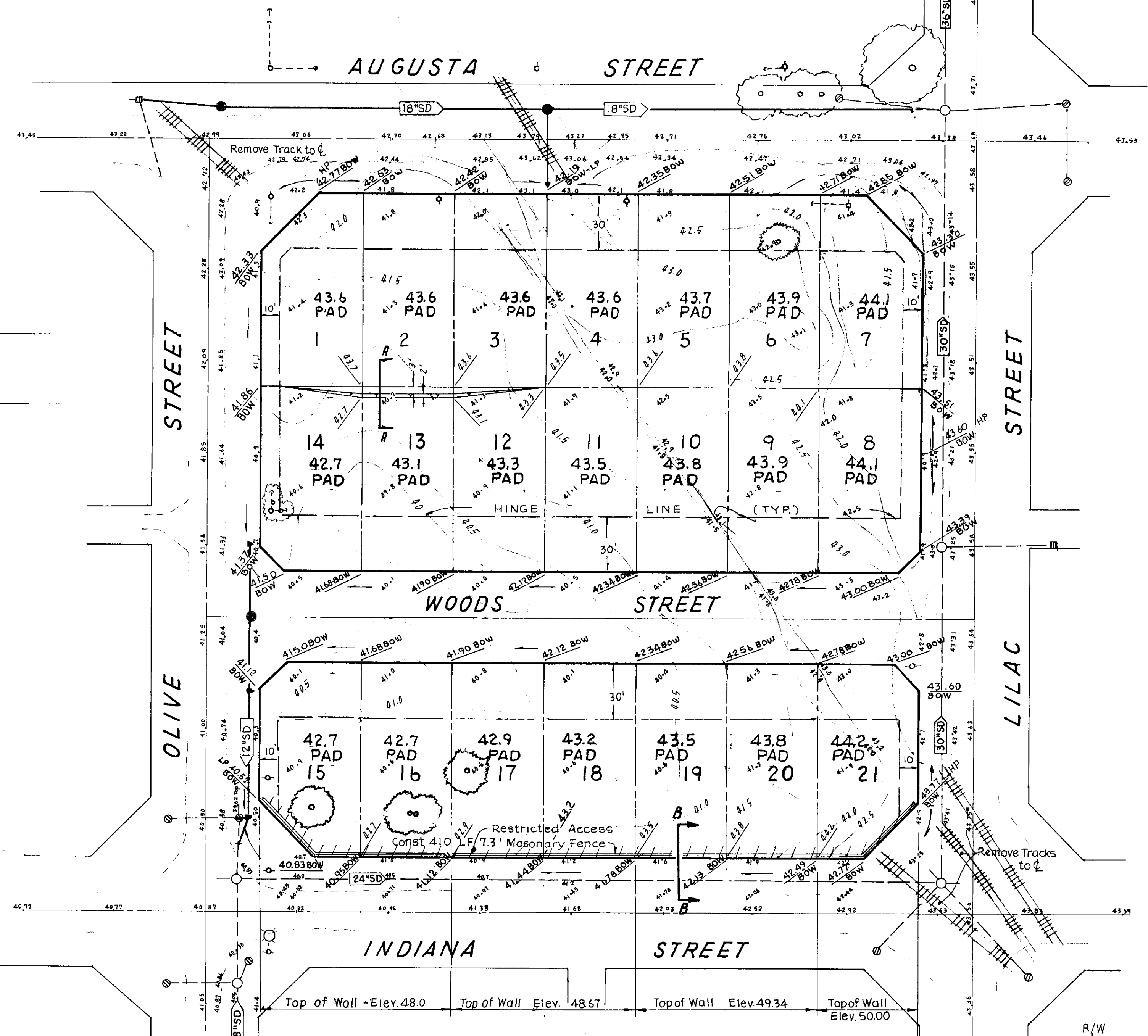
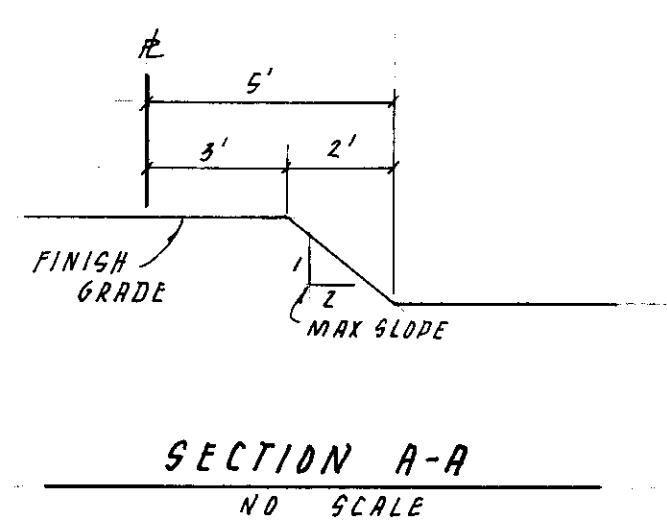
DETAIL SHEET

"TOWN SQUARE"

SUBDIVISION IMPROVEMENTS

SHEET 7 OF 8
JOB NO.
FILE NO. G-924

SCALE: 1"=40'



LEGEND:

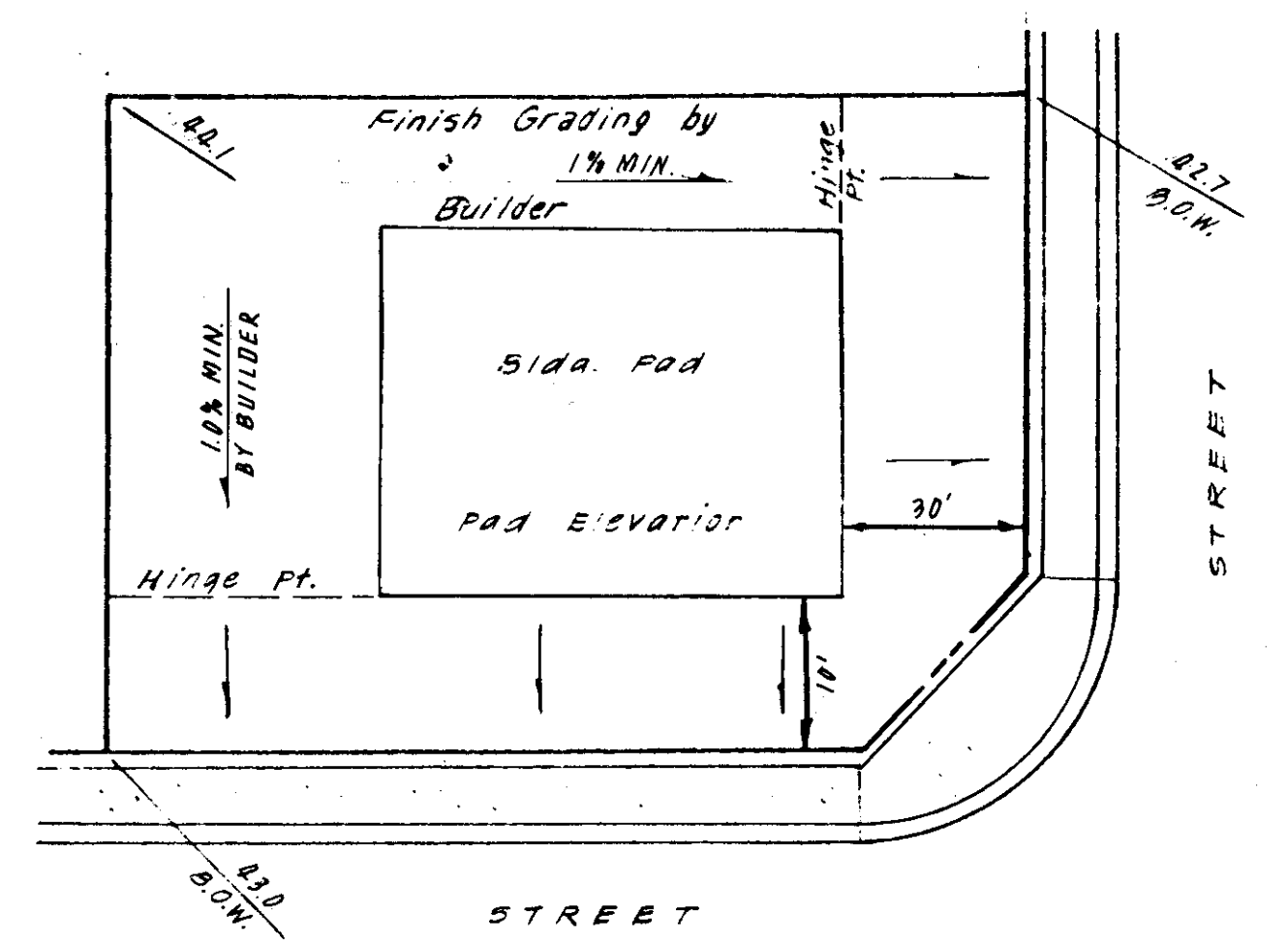
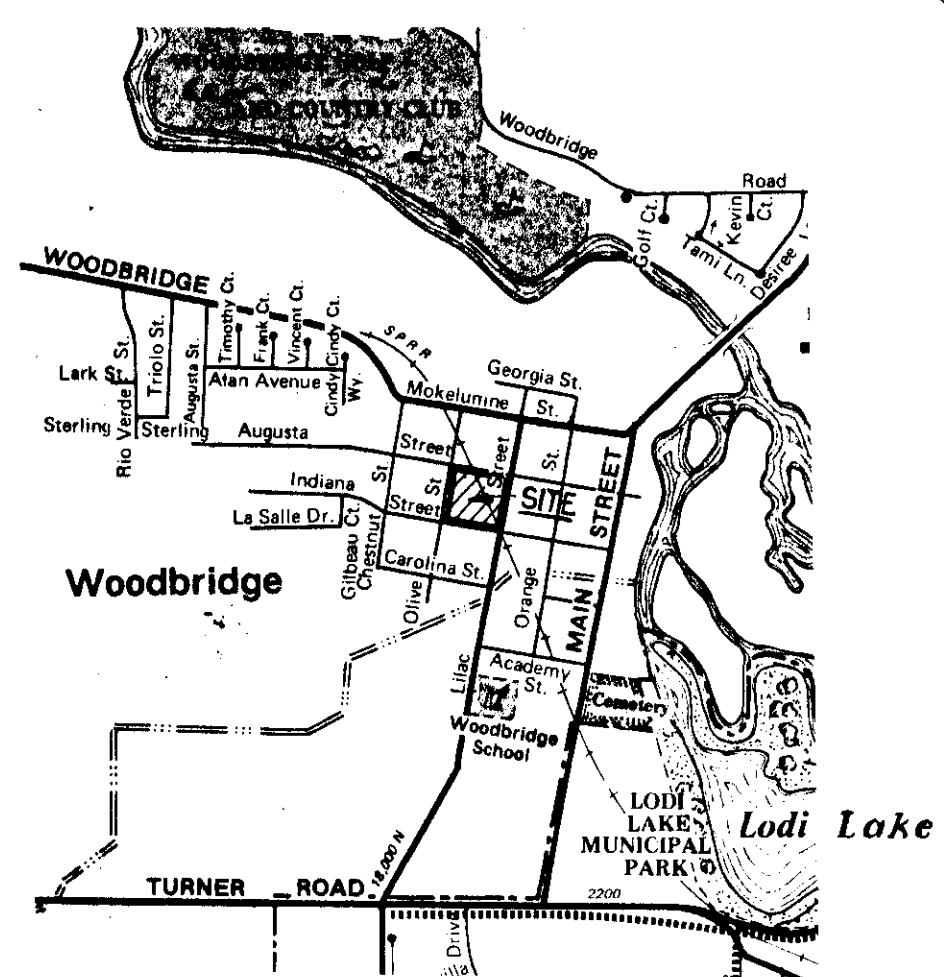
- EXISTING GROUND ELEVATION
- PROPOSED BACK OF WALK ELEVATION
- BUILDING PAD ELEVATION
- FINISHED GRADE ELEVATION
- EXISTING GROUND CONTOUR

ESTIMATED EARTHWORK: (FOR PERMIT FEE ONLY)

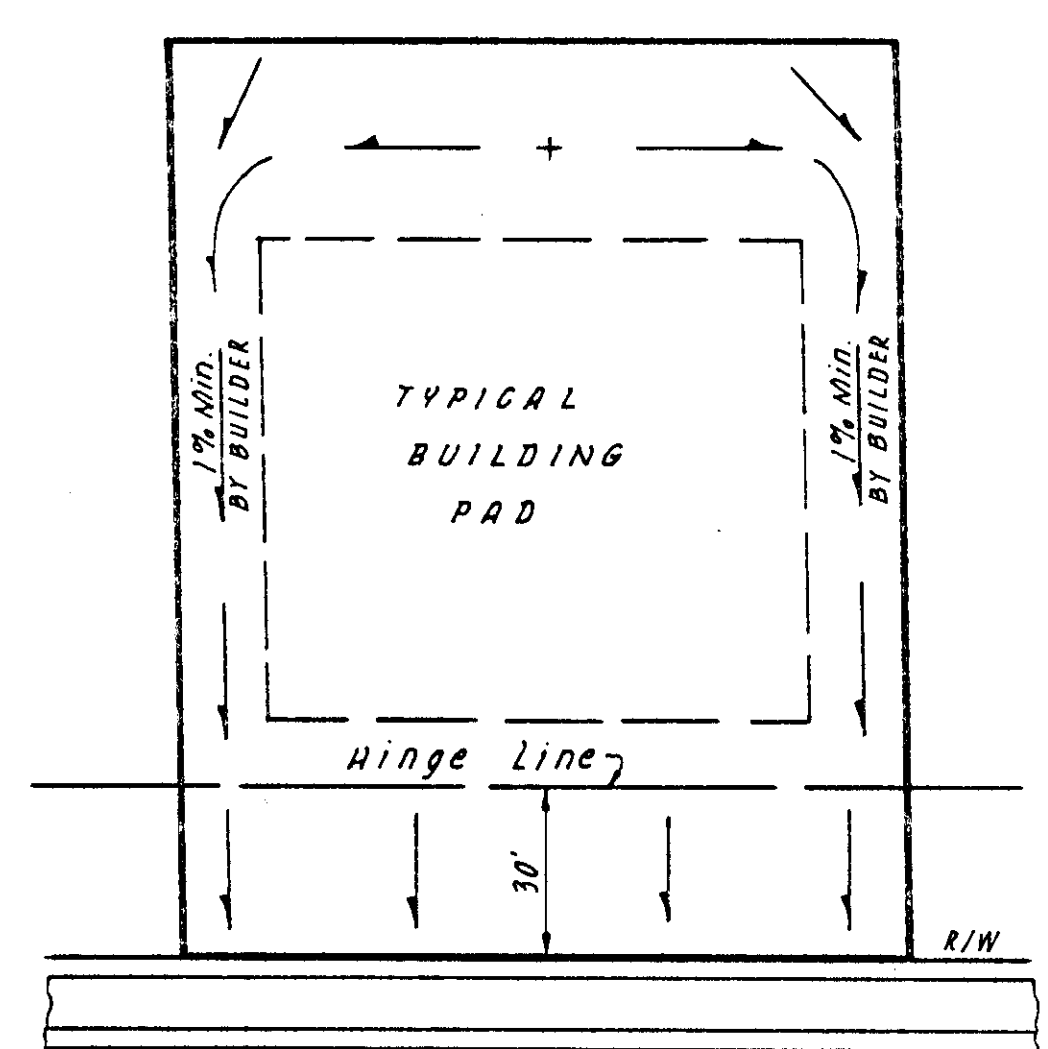
ROADWAY EXCAVATION (NET) 500 C.Y.±

LOT FILL 7400 C.Y.±

IMPORT REQUIRED 1900 C.Y.± (Compact in place)



TYPICAL CORNER LOT GRADING
NO SCALE

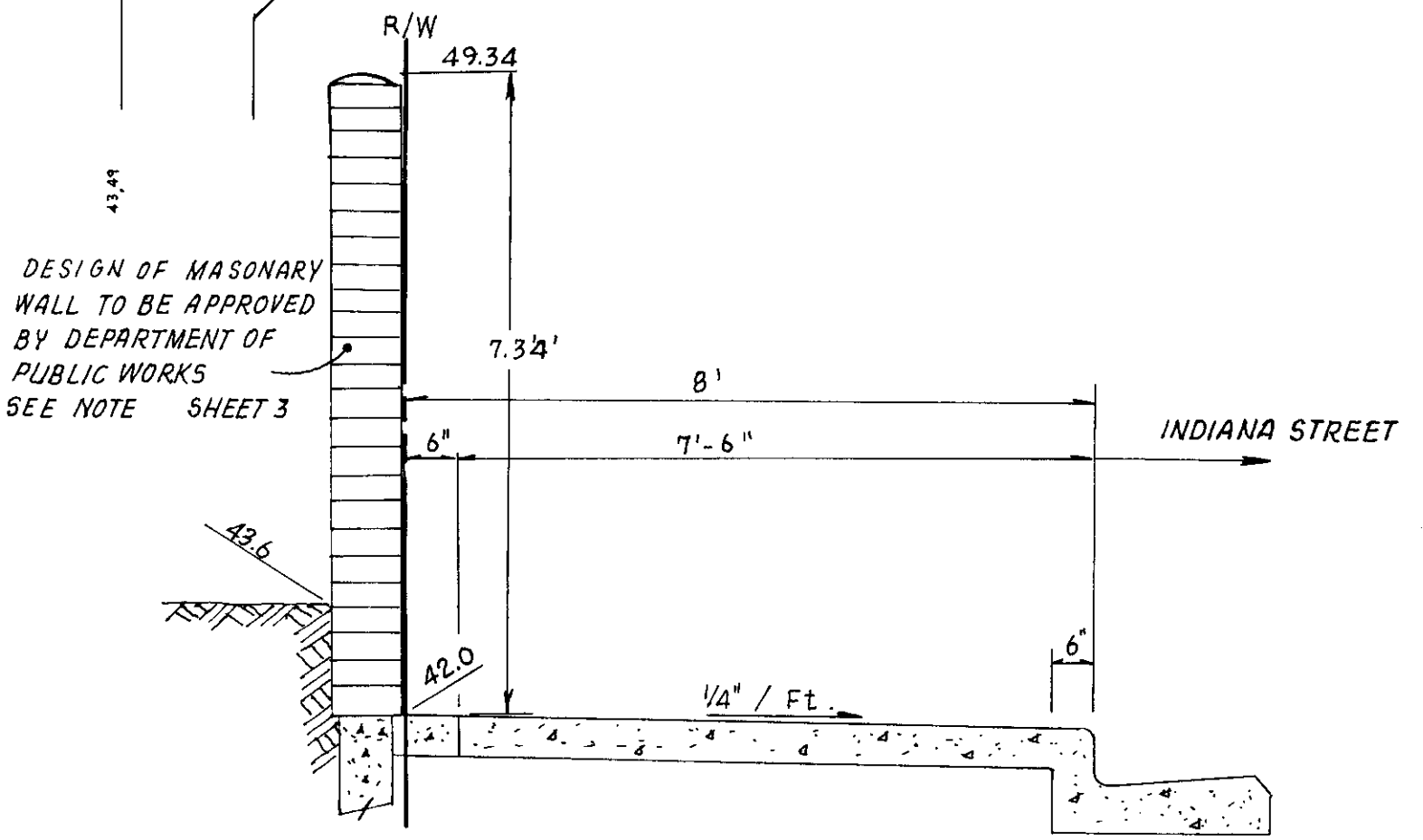


TYPICAL FINISHED LOT GRADING
NO SCALE

NOTE: Localized Finished Grading to be completed by Bldg. Contractor after dwelling is constructed.

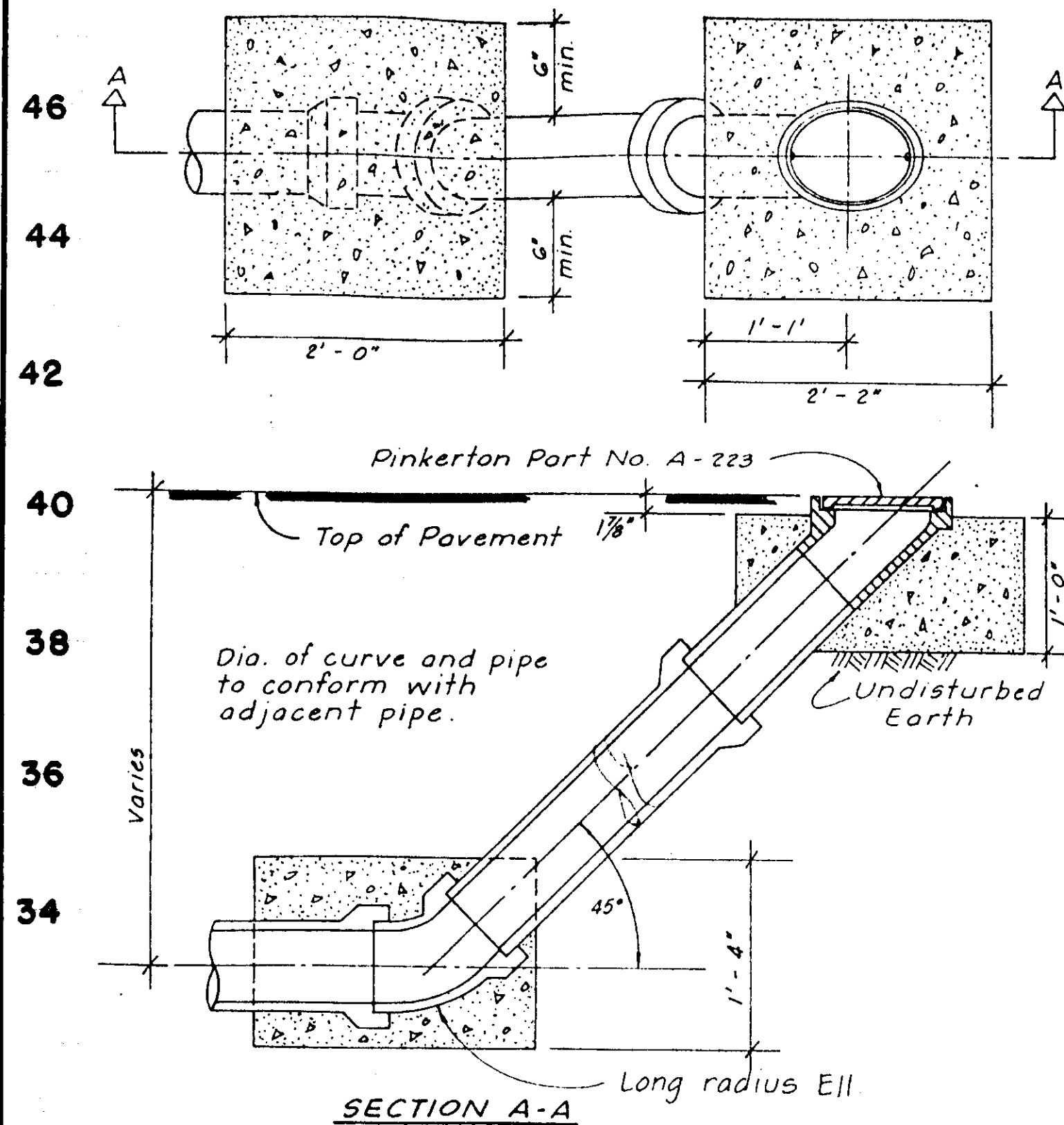
NOTES:

1. A grading permit shall be secured by the Developer from the San Joaquin County Building Inspection Division.
2. All lots having a fill of 6 inches or greater shall be compacted to 90% R.C. and tested by the Soils Engineer.
3. The Contractor shall coordinate his work with the Soils Engineer to insure adequate compaction tests are taken. The costs of retests shall be borne by the Contractor. The Soils Engineer is J. H. Kleinfelder and Associates.
4. Contractor shall submit compaction tests for all lots exceeding 6 inches of fill to San Joaquin County Building Inspection Department.
5. All earthwork, building pad grading and other construction to be done, as shown on these plans, shall be done in accordance with the geotechnical investigation report by J. H. Kleinfelder and Associates for the proposed subdivision, dated MAY 3, 1989, file no. 20-3230-01.
6. All lot drainage shall be contained on the lot and drained to street.
7. All subdivision grading shall conform to U.B.C. Section 7014 (C).
8. Estimated earthwork is for the engineer's use only. Contractor shall complete his own volumes and prepare lump sum bid.
9. The top foot of lot fill shall be equivalent in composition to native material.
10. Exist rail road ballast may be mixed with earth, compacted to 90% R.C. and used as fill to 18 inches below finish grade.
11. Remove all trees.
12. A building permit from the San Joaquin County Building Inspection Department shall be obtained by the Developer for the construction of the masonry wall.



SECTION B-B NOT TO SCALE

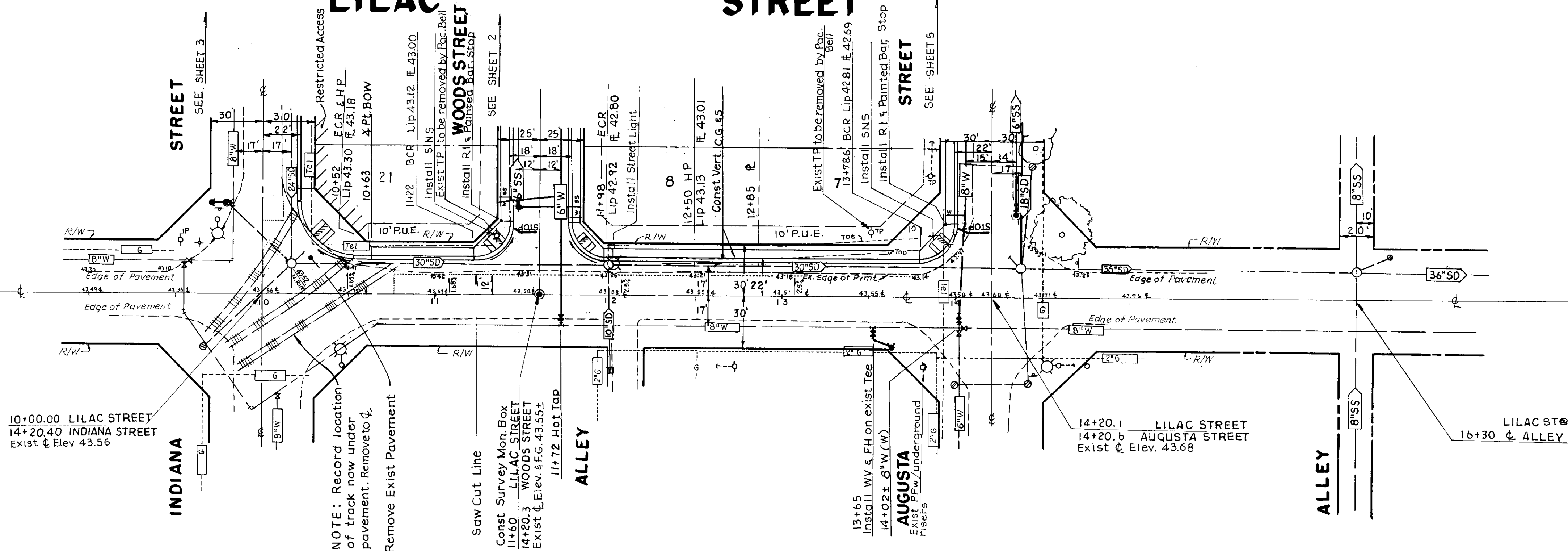
NO.	DATE	REVISIONS	BY	DESIGN	DRAWN BY	APPROVED BY: Henry M. Hirata RCE No. 21258	BAUMBACH & PIAZZA CIVIL ENGINEERS SURVEYORS 323 W. ELM. ST. LODI, CALIF. 95240 PH: 209-368-8818	GRADING PLAN PREPARED FOR: TOWN SQUARE ASSOCIATES P.O. BOX 1066 WOODBRIDGE, CA. 95258-1066	"TOWN SQUARE"	SHEET 6 OF 8
						SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS				JOB NO. 8941
RCE: 19638 DATE: 3-14-90										FILE NO. G-924



WOODBRIDGE SANITARY DISTRICT
TYPE I CLEANOUT
AT END OF LINE

9 +00 10+00 11+00 12+00 13+00 14+00 15+00 16+00

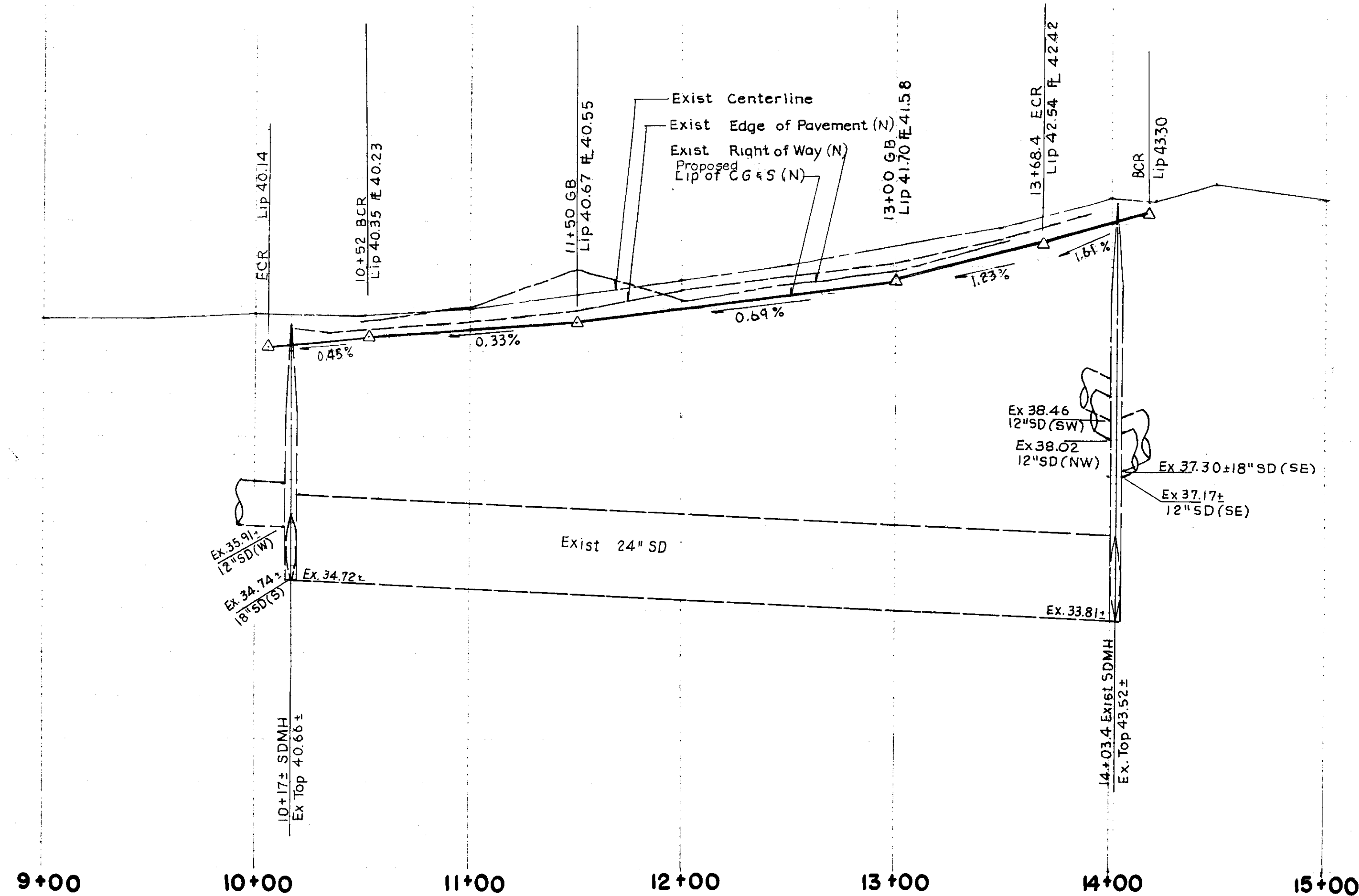
LILAC STREET



NO.	DATE	REVISIONS	BY	DESIGN	DRAWN BY	APPROVED BY: Henry M. Hirata RCE No. 21258	BAUMBACH & PIAZZA CIVIL ENGINEERS SURVEYORS 323 W. ELM. ST. LODI, CALIF. 95240 PH: 209-368-8616	LILAC STREET	"TOWN SQUARE"	SHEET 4 OF 8
										JOB NO. 8941
						SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS				FILE NO. G-924

SL-2350

44
42
40
38
36
34

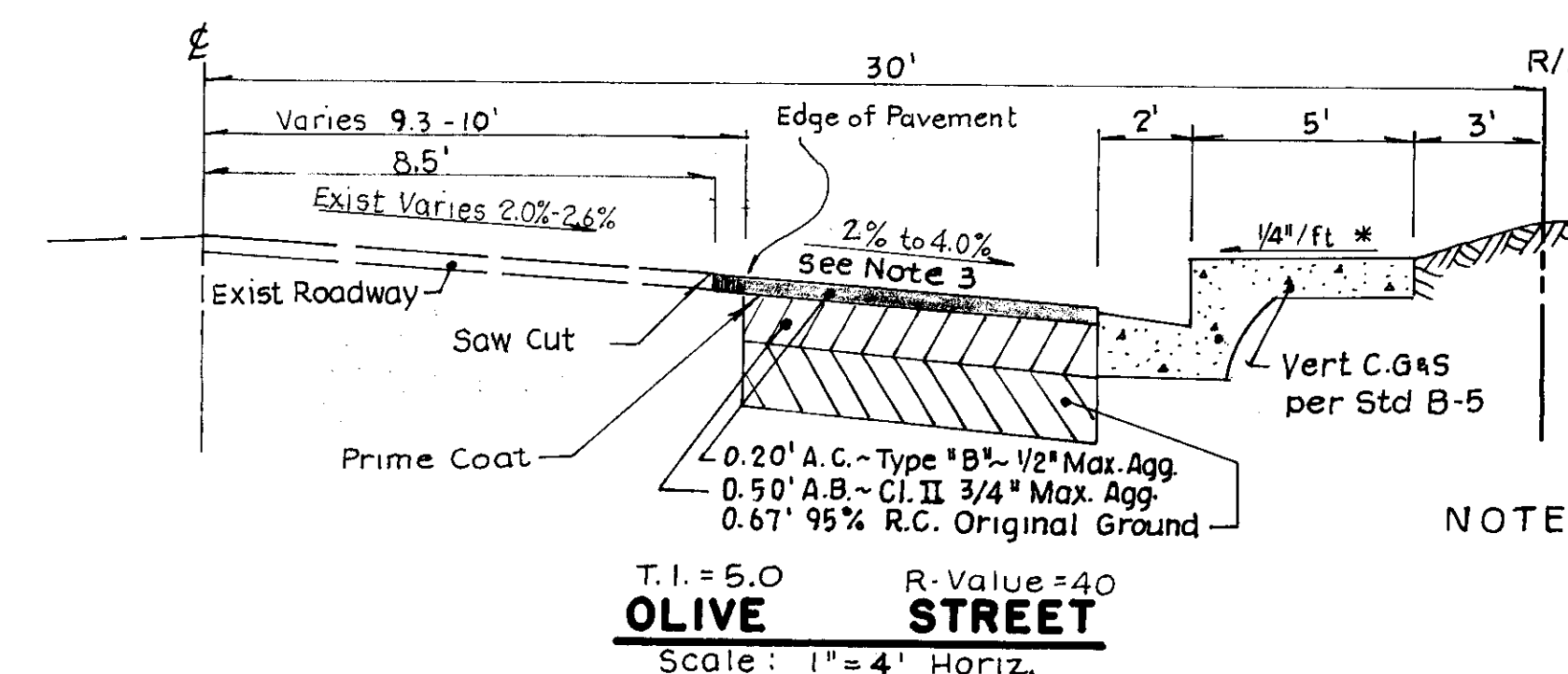
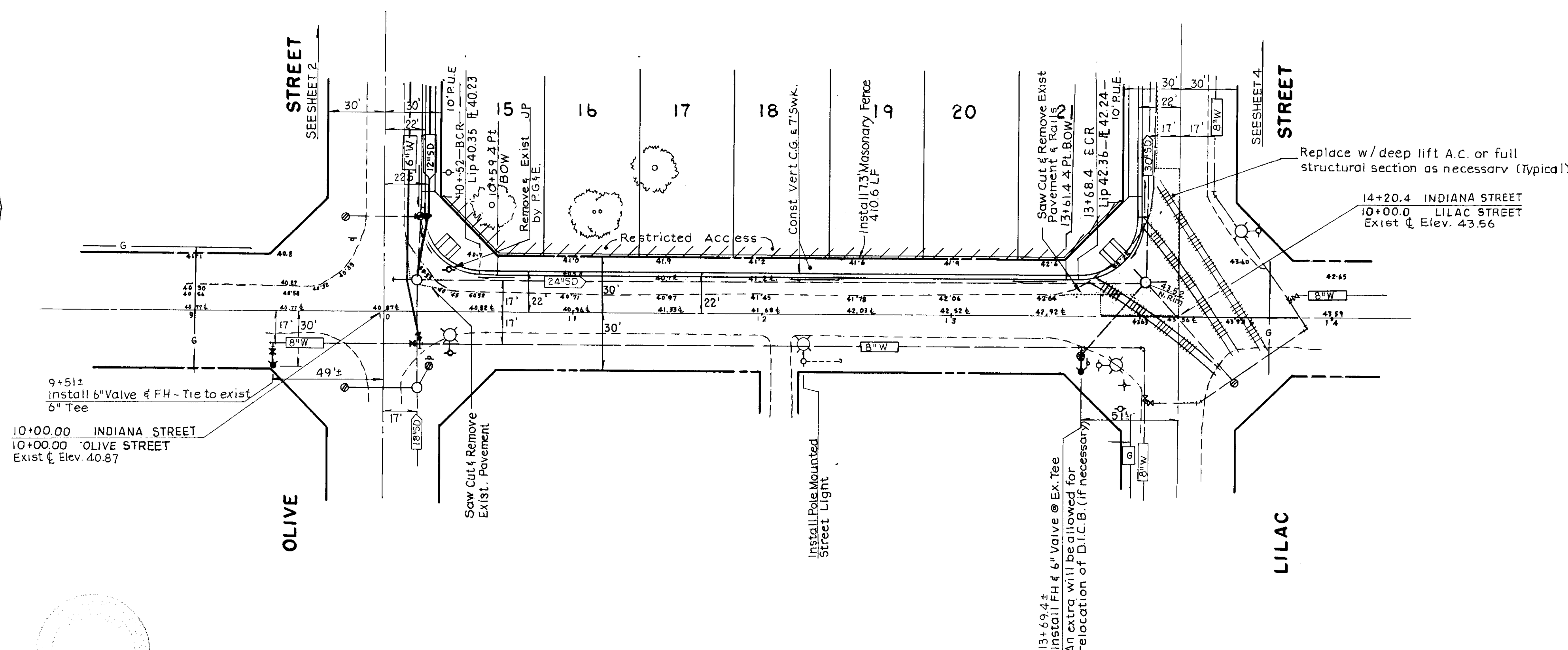


INDIANA STREET

CURB DATA
R = 30'
Δ = 89°58'08"
L = 47.11'

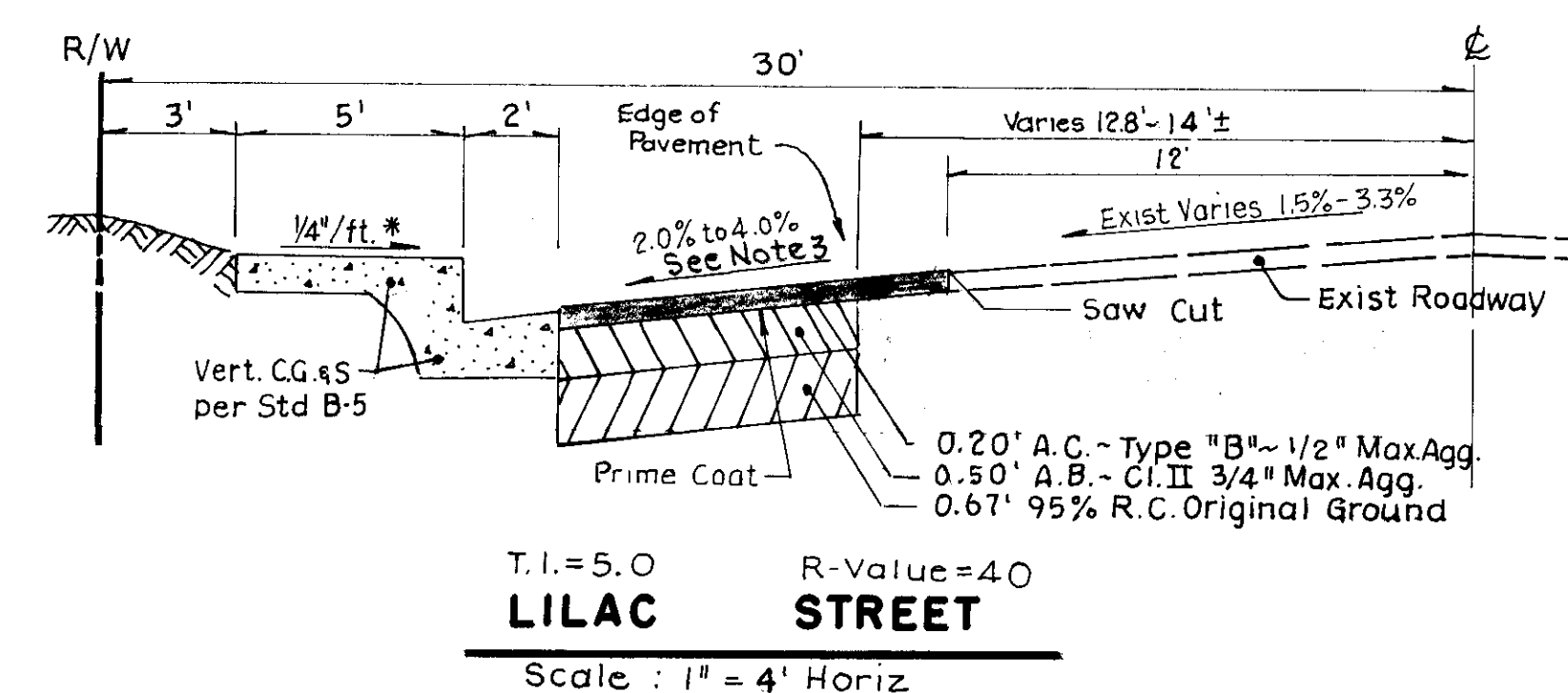
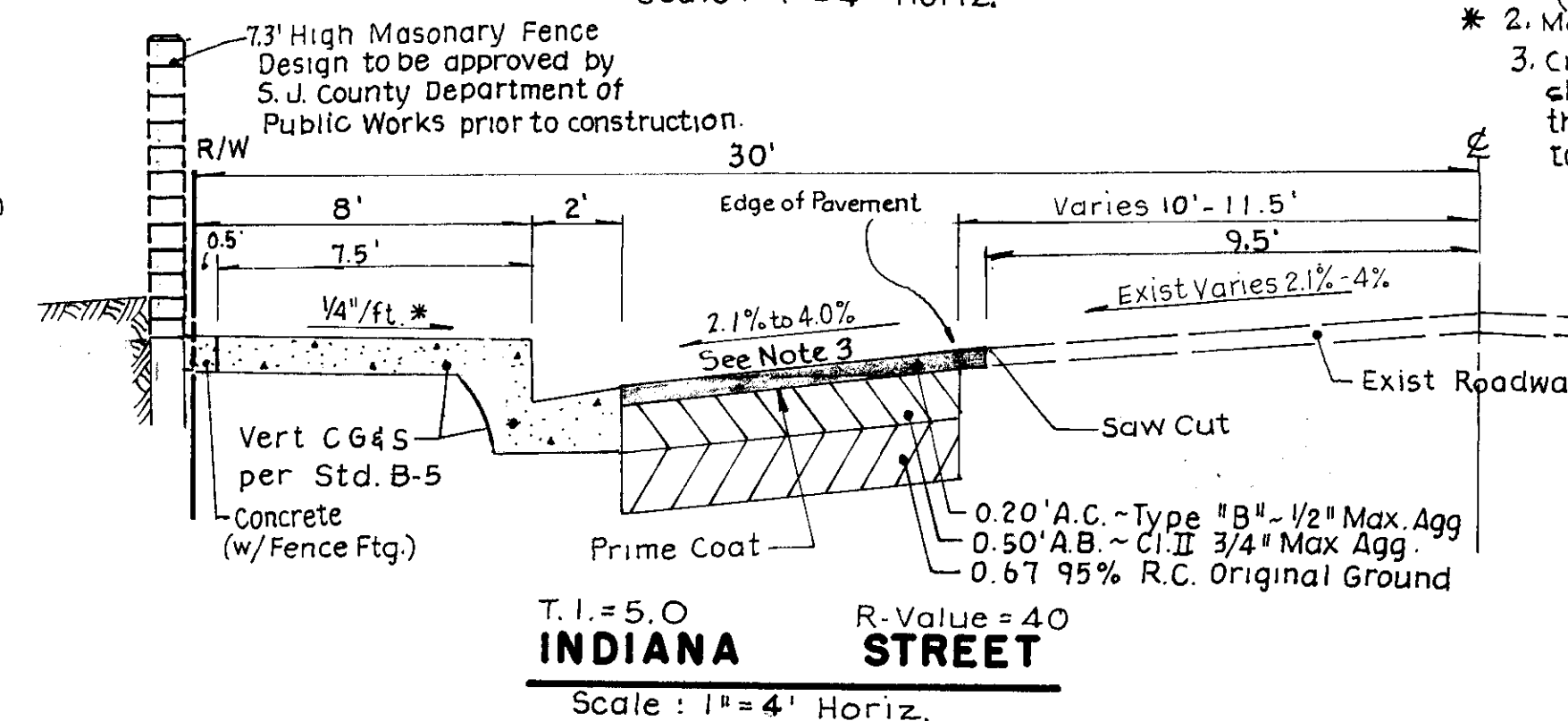
CURB DATA
R = 30'
Δ = 89°59'10"
L = 47.12'

SCALE: Horiz. = 1" = 40'
Vert. = 1" = 2'



NOTE: 1. For Olive, Indiana & Lilac St's:
G.E. Req'd. = 0.96
G.E. Provided = 1.05
(0.2' A.C. = 0.50)
(0.5' A.B. = 0.55)

- * 2. Maintain slope at Curb Return
- 3. Cross Slope of widening shall be equal to or greater than exist pavement but not to exceed 4%.



NO.	DATE	REVISIONS	BY	DESIGN	DRAWN BY
1	1/16/88				
2	2-14-90				

APPROVED BY: Henry M. Hirata RCE No. 21258

SAN JOAQUIN COUNTY DIRECTOR OF PUBLIC WORKS



BAUMBACH & PIAZZA
CIVIL ENGINEERS
SURVEYORS

323 W. ELM ST. LODI, CALIF.
95240 PH: 209-368-5518

INDIANA STREET

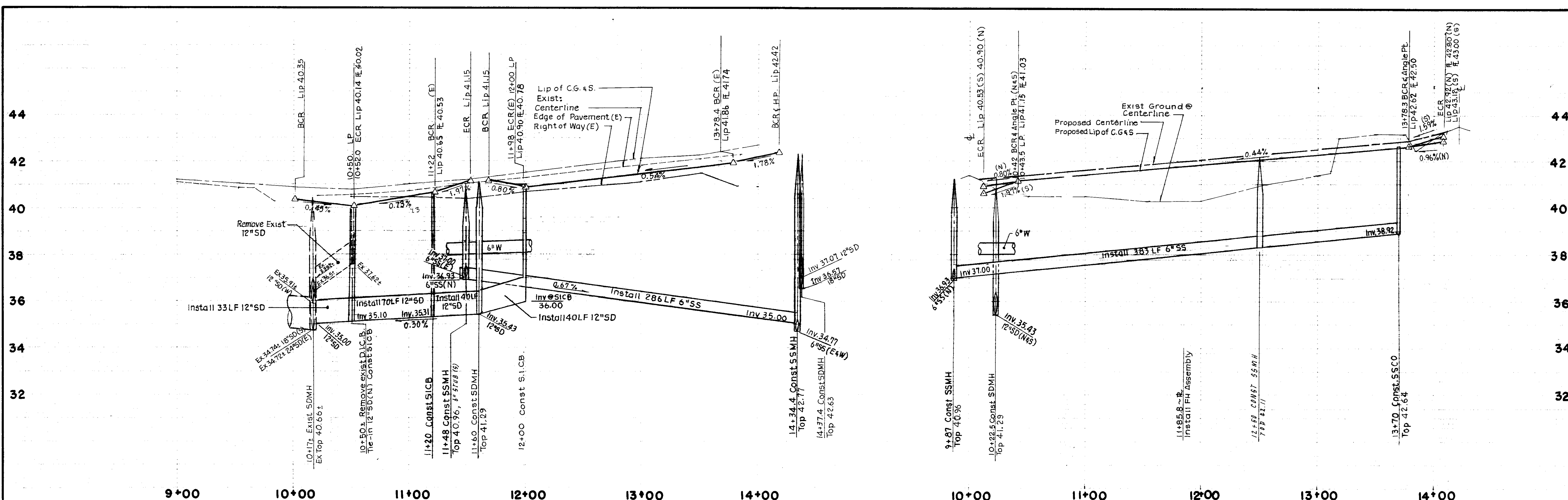
"TOWN

SQUARE"

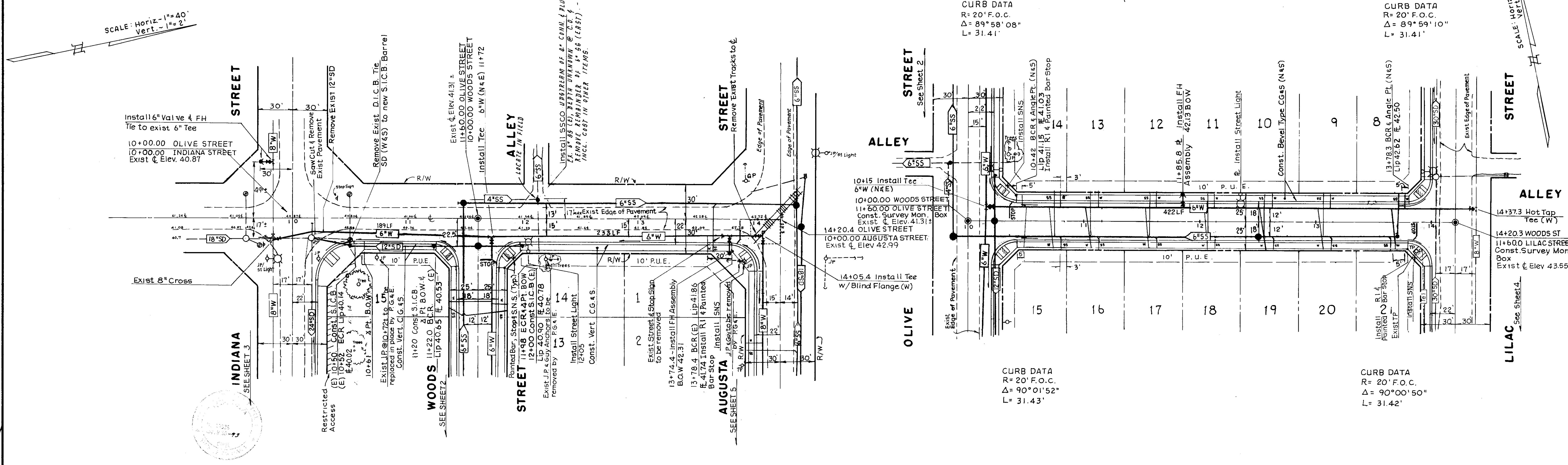
SHEET 3 OF 8

JOB NO. 8941

FILE NO. G-924



OLIVE STREET



NO.	DATE	REVISIONS	BY	DESIGN	DRAWN BY	APPROVED BY: Henry M. Hirata RCE No. 21258	BAUMBACH & PIAZZA CIVIL ENGINEERS SURVEYORS 323 W. ELM ST. LODI, CALIF. 95247 PH: 209-368-8818	OLIVE STREET WOODS STREET	" TOWN SQUARE "	SHEET 2 OF 6 JOB NO. 8941 FILE NO. G-924
						RCE 19608 DATE 3-14-90				

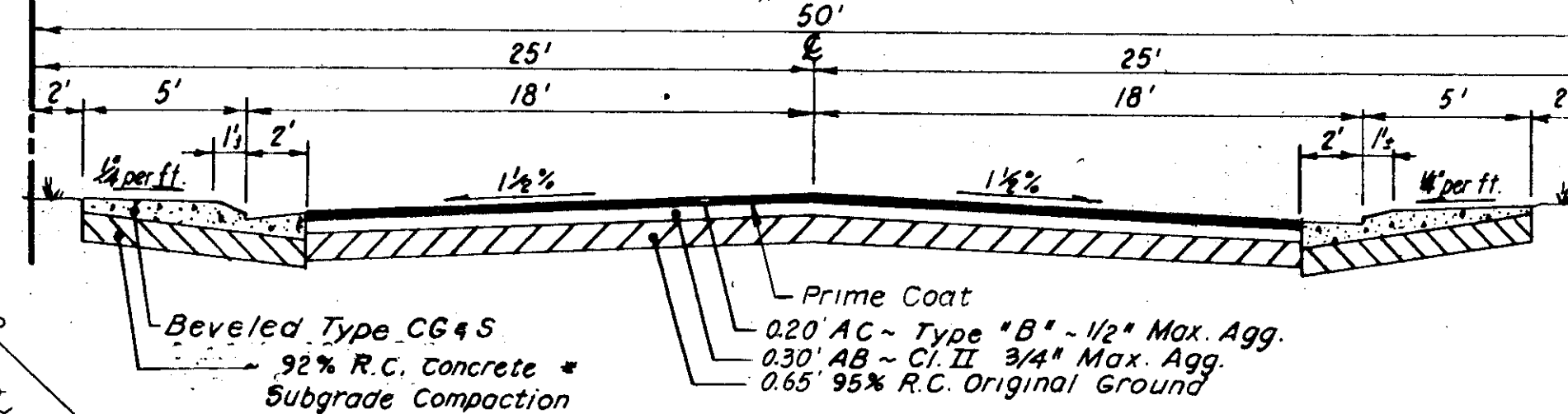
KEY MAP

SCALE: 1"=40'

STRUCTURAL SECTION

FOR ALL OTHER STREET SECTIONS

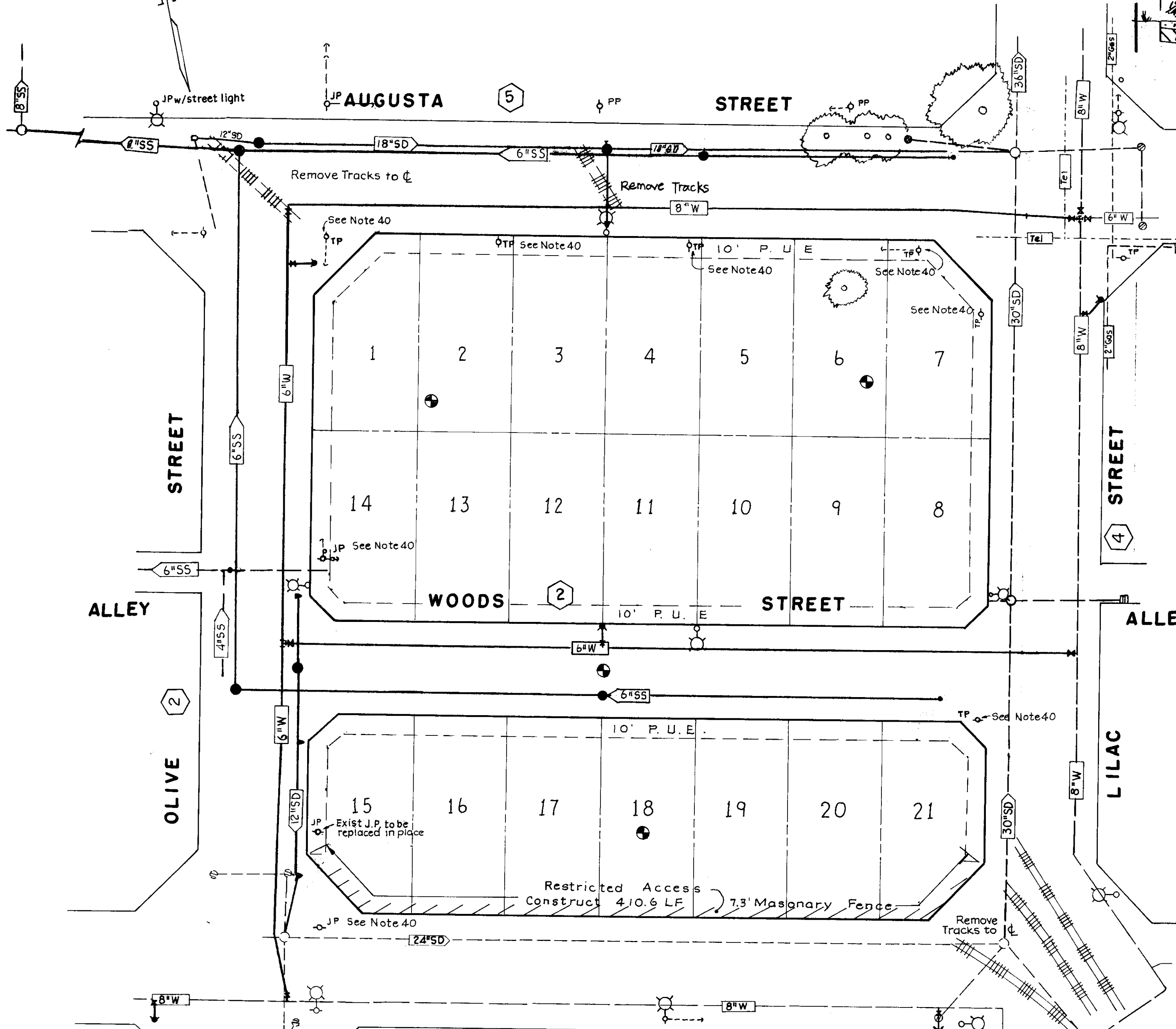
GENERAL NOTES



WOODS STREET
T.I. = 4.0
GE. Req'd. = 0.77
R-Value = 40
G.E. Provided = 0.83

- All work shall conform to these plans and any special provisions for this project.
- Refer to the final map of this subdivision for all center line and property line data.
- The street light system shall be installed by Pacific Gas & Electric Company.
- Contractor shall receive an approved set of plans and specifications prior to beginning construction.
- Baumbach & Piazza (Engineer) shall set all survey controls and construction stakes necessary for completion of work. The Contractor shall be responsible for the preservation of all survey and construction stakes. Survey and construction stakes that are lost or destroyed due to Contractor's negligence will be set by the Engineer at the Contractor's expense.
- The existing underground utilities were plotted from available records. The Contractor shall be responsible for contacting all utility agencies to mark their facilities in the field before any excavation. The Contractor shall notify and coordinate all work with any agency requiring removal or relocation of their utilities. Pacific Bell, P. G. & E., Lodi Cable T.V., Woodbridge Sanitary District and Mokelumne Acres Maintenance District. U.S.A. (800) 642-2444.
- House services, fire hydrant laterals, and street light conduit shall be installed prior to curb and gutter construction. All underground utilities within the street area, including gas and telephone lines, shall be installed prior to paving.
- All manholes to be set flush with the finish grade unless otherwise indicated.
- All water lines shall have a minimum cover of 30" BELOW THE STRUCTURAL SECTION.
- Water used in any phase of construction, such as backfill compaction, dust control, testing or other work herein required, shall be included in the unit price or lump sum bid for the respective item of construction.
- Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety for all persons and property; that this requirement shall apply continuously and not be limited to normal working hours and that Contractor shall defend, indemnify, and hold the Owner, County and the Engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the Owner or the Engineer.
- Contractor shall give Engineer a minimum of 48 hours notification prior to staking any utilities.
- Sanitary sewer services shall be marked by the curb & gutter contractor with an "S" stamped on the top of curb.
- Water services shall be marked by the curb and gutter Contractor with a "W" stamped on the top of curb. Location of water markings shall be verified in the field by the Engineer.
- Lot grading shall be completed before starting any underground construction. Refer to attached grading plan.
- Separation of water and sewer mains (including crossings) and sewer laterals crossing over water mains shall meet or exceed the latest standards of the State of California Department of Health Services.
- Contractor shall be responsible for notifying and co-ordinating all work with any agency requiring removal or relocation of utilities, such as Pacific Bell, P. G. & E., etc.
- All off-site water lines shall be pressure tested, disinfected, flushed and tested for bacteria in conformance with the San Joaquin County Health Code Requirements prior to connecting to existing water line.
- All off-site storm drains shall be cleaned prior to final acceptance.
- Contractor shall visit site prior to bidding. Specifications are a separate document.
- New traffic striping and the restoration of any damaged existing painted legends or signs is the responsibility of the Contractor and shall be included in his bid price.
- Where water crosses SD or SS use an "X" 20 ft. length of C.I. 200 pipe, centered over the SS or SD if: a) The water is under the SS or SD, b) The clearance is less than 1 foot. ALSO APPLIES TO CATCH BASINS AND SEWER.
- No materials resulting from tapping procedures may enter District sewer.
- All work will be required to be inspected by the Department of Public Works. They shall be notified not less than 48 hours in advance of commencement of work.
- Each SS service to have C.O. at property line. SEE DETAIL SHEET.
- It is agreed that field conditions may require changes to these plans. It is further agreed that the Director of Public Works may require changes, alterations or additions to these plans, when the Director deems them to be necessary or desirable for the proper completion of the work, provided that such changes, alterations or additions shall not exceed 10% of the original estimate of the cost for the improvements without prior approval of the surety.
- Fire hydrant bid shall include the following: 6" Lateral, 6" Valve and complete fire hydrant assembly, AND "FEE" WHERE "FEE" IS NOT EXISTING.
- Prior to performing any work in EXIST. COUNTY R/W, the Contractor shall obtain an Encroachment Permit from the San Joaquin County Department of Public Works.
- Contractor shall notify Mokelumne Acres Maintenance District for approval prior to connecting water line to existing water main.
- Installation of all sanitary sewer improvements shall conform to the standards of the Woodbridge Sanitary District. All such work is subject to inspection by the District Engineer. The Contractor shall notify District Engineer 48 hours prior to the commencement of any work on the sanitary system. (209) 946-0268.
- Contractor shall obtain a grading permit from the San Joaquin County Building Division. (Fee By Owner)
- Pipe type and strengths allowed for underground utilities, unless otherwise specified on plans, are as follows: Storm Drain (SD) - RCP or ACP, C.I. 111; Sanitary Sewer (SS) - PVC, per ASTM D3034, SDR35; Water (W) - PVC, C.I. 150 or greater per AWWA Std. C-900 or ACP, C.I. 150 or greater per ASTM C296, Type 11.
- All traffic signs and markings shall conform to San Joaquin County Standards and to the "Manual of Uniform Traffic Control Devices".
- Any changes to the approved Improvement Plans and Specifications must be prepared and certified by the "Civil Engineer" and shall be approved by the "Director" prior to implementation.
- Install a reflective, blue marker near center line of street to denote the fire hydrant location.
- Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify and hold harmless the County of San Joaquin, its elected officials, officers, employees, and agents from any and all claims, costs of litigation, damages and attorney's fees, for personal injury or property damage of whatever nature which are claimed to have occurred during the term of this project.

- The owner shall have compaction tests taken for street subgrade, utility trenches and lot fill. Any required retests will be at the contractor's expense. Sanitary sewer trench compaction tests shall be done by a qualified soils testing laboratory as required by the county. Contractor shall call for the tests and submit the results to the engineer and County as soon as possible.
- Import material sampling and testing shall be the responsibility of the contractor. All results shall be sent to the Engineer and the County Inspector. Approval required from J.H. Kleinfelder & Associates.
- Sanitary Sewers shall have laying grade established by layer control. Video inspection will be required (see specifications). Deflection test and air test will be required after lines are balled and flushed according to the specifications.
- All utilities shall be underground. Existing telephone poles to be removed by Pacific Bell. Joint poles to be removed by P. G. & E.



LEGEND

- Side Inlet Catch Basin
- Low Point
- High Point
- Top of Curb
- Clean Out to Grade
- Storm Drain Line Indicating direction of flow
- Sanitary Sewer Line Indicating direction of flow
- Water Line & Valve
- Fire Hydrant
- Street Light (100 Watt High Pressure Sodium Vapor 120 Volt)
- Utility Service
- Fire Alarm
- Police Alarm
- Gas Alarm
- Location of Soil Test per J.H. Kleinfelder Project
- Existing Joint Pole, Existing Telephone Pole

SERVICES:

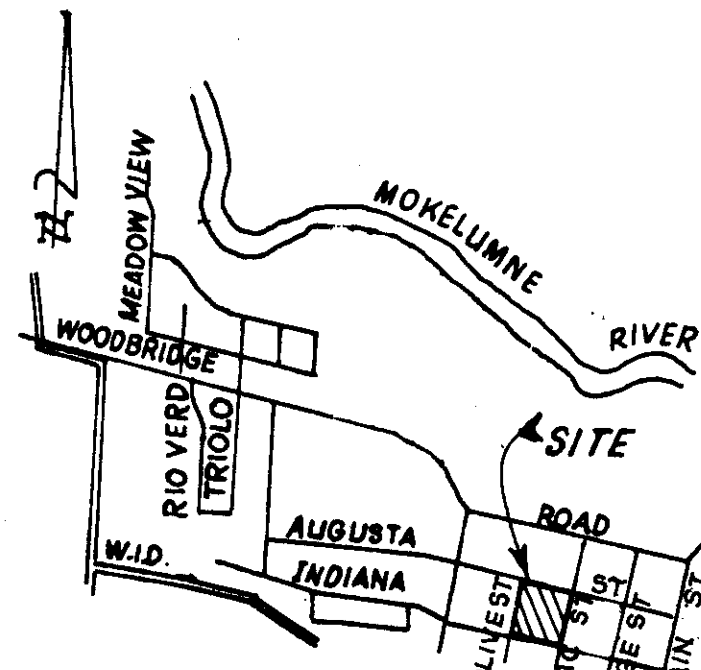
- Street Lights: Woodbridge Lighting District
- Sewage: Woodbridge Sanitary District
- Natural Gas & Electric: P. G. & E.
- Telephone: Pacific Bell
- Television Cable: Lodi Cable T.V.
- Water: Lodi Cable T.V.
- Storm Drainage: Mokelumne Acres Maintenance District

SHEET INDEX

- 1 KEY SHEET
- 2 PLAN PROFILE
- 3 DETAILS
- 4 GRADING PLAN
- 5 CONSTRUCTION QUANTITIES

APPROVED BY

APPROVED BY: Henry M. Hirata RCE No. 21258
DATE: 3-2-90
APPROVED BY: [Signature] DATE: 2-27-90
APPROVED BY: [Signature] DATE: 3-7-90



VICINITY MAP
NOT TO SCALE

These Plans are "As-Built"
no change
10-15-90

BENCHMARK DATUM per U.S.C.S. B.M. 19-3 1907-45. Location N.W. corner of Masonic Building in the town of Woodbridge. Elevation: 45.85



CONSTRUCTION STAKING LIABILITY WAIVER

These improvement plans have been prepared with the intent that the firm of Baumbach & Piazza, Inc. will be performing the construction staking for the complete project. If, however, another engineering and/or surveying firm should be employed to use these plans for the purpose of construction staking, notice is hereby given that the firm of Baumbach & Piazza, Inc. will not assume any responsibility for errors or omissions, if any, which might occur and which could have been avoided, corrected or mitigated if Baumbach & Piazza, Inc. had performed the staking work.

NO.	DATE	REVISIONS	BY
1	1-14-90		

DESIGN TP SEP DRAWN BY E.S.
APPROVED BY: Henry M. Hirata RCE No. 21258
DATE: 3-2-90
APPROVED BY: [Signature] DATE: 2-27-90
APPROVED BY: [Signature] DATE: 3-7-90

BAUMBACH & PIAZZA
CIVIL ENGINEERS
SURVEYORS
323 W. ELM ST. LODI, CALIF.
95240 PH: 209-388-6818

KEY SHEET

"TOWN SQUARE"

SHEET 1 OF 6
JOB NO. 8941
FILE NO. G-924