

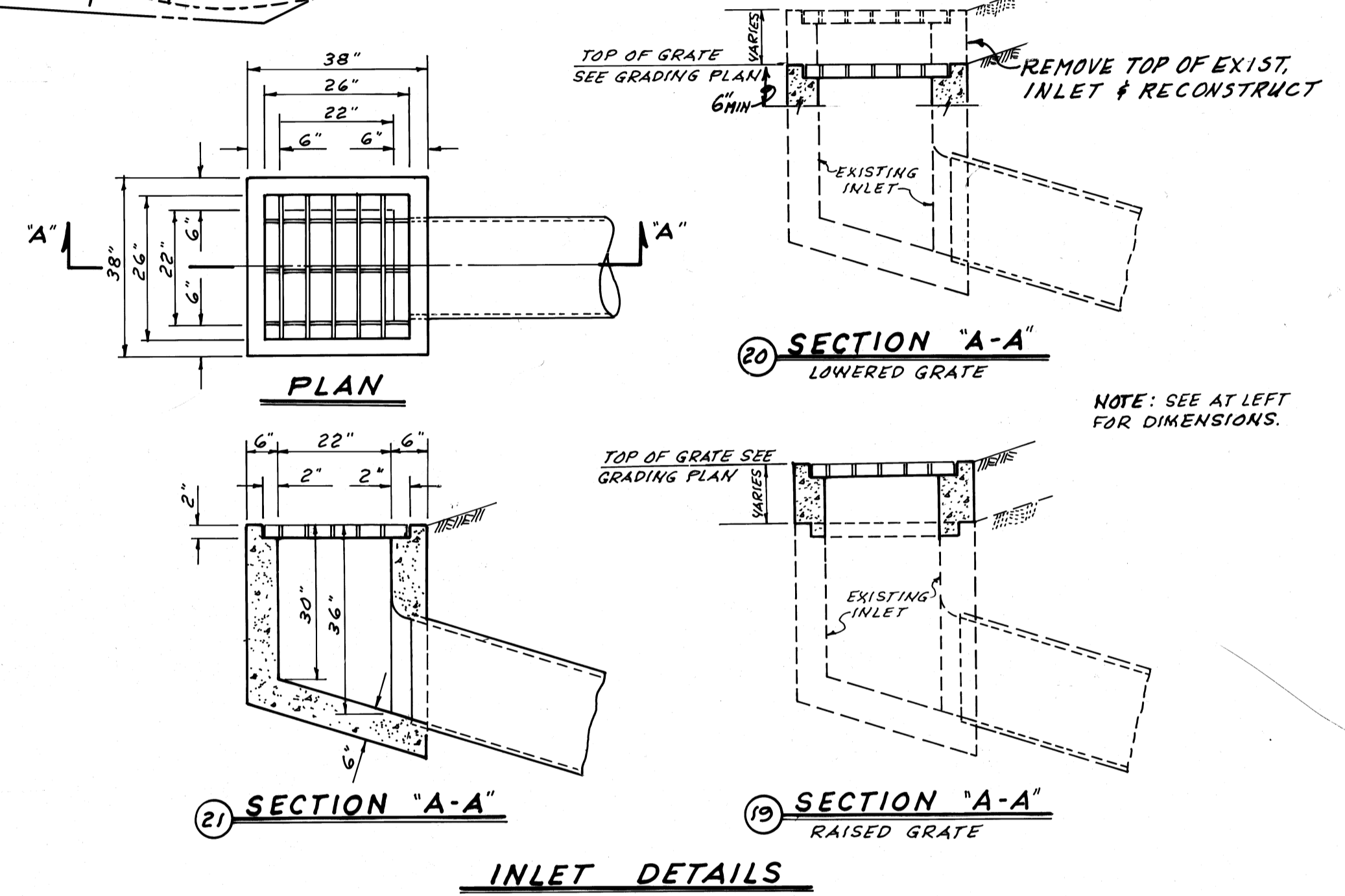
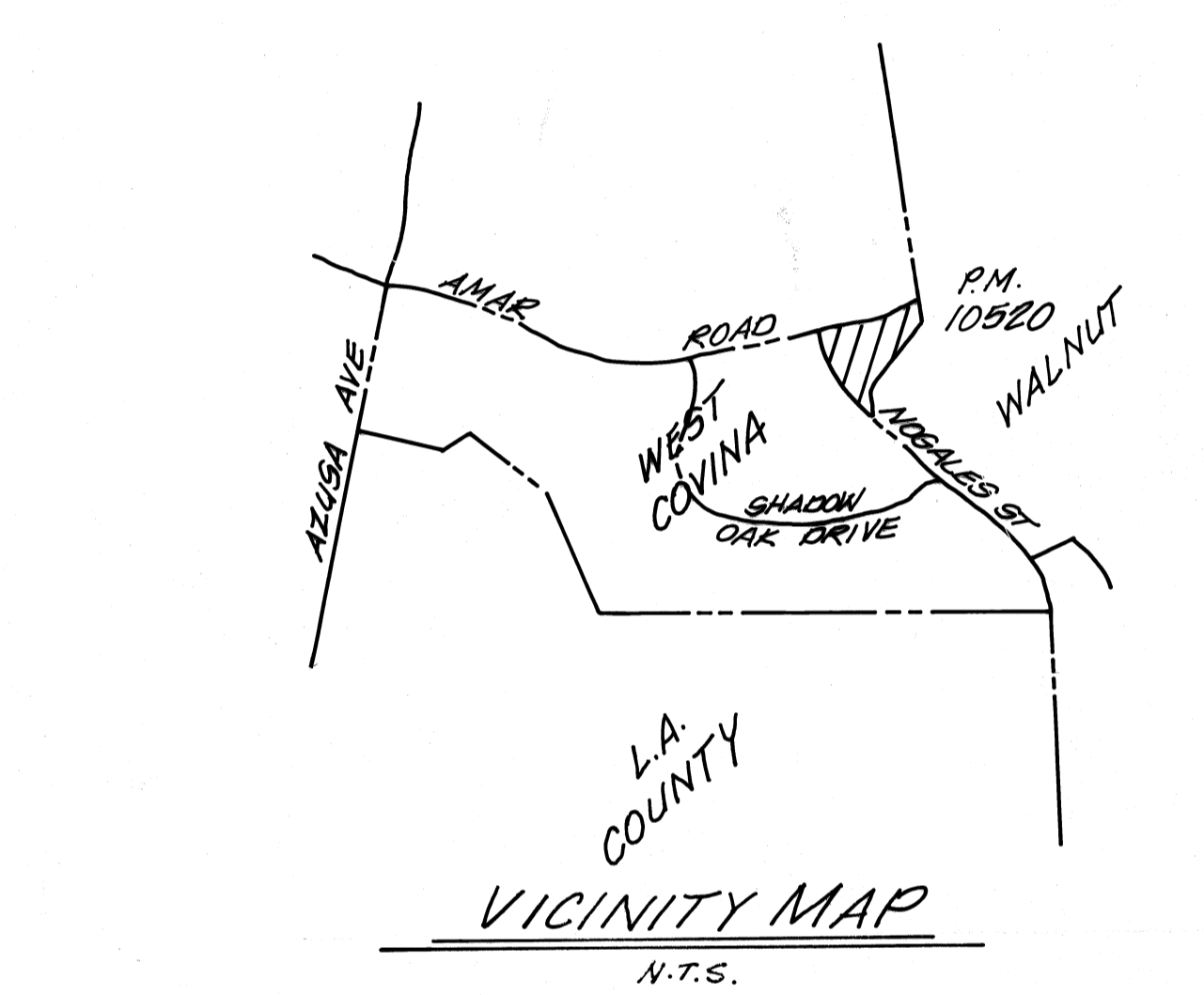
NOTE: QUANTITIES SHOWN ARE FOR BIDDING PURPOSE ONLY

| QUANTITY ESTIMATE | | |
|---------------------------------------|------|------|
| ITEM | QTY. | UNIT |
| EXIST. STRUCTURAL REMOVAL | 1 | L.S. |
| EXIST. S.D. REMOVAL, ABANDON OR CRUSH | 1 | L.S. |
| BRICK & MORTAR SEAL | 4 | EA. |
| M.H. N° 2 | 3 | EA |
| J.S. N° 2 | — | EA |
| J.S. N° 4 | 6 | EA |
| M.H. N° 3 | 2 | EA |
| T.S. N° 1 | 4 | EA |
| CONC. COLLAR | 6 | EA |
| 75" RCP | 894 | LF |
| 69" RCP | 486 | LF |
| 63" RCP | 300 | LF |
| 36" RCP | 12 | LF |
| 18" RCP | 66 | LF |
| RAISE GRATE TO FINISH SURFACE | 1 | EA |
| LOWER " " " | 2 | EA |
| CONST. INLET GRATE | 2 | EA |

INDEX TO STANDARD DRAWINGS

| L.A.C.F.C.D. STD. | DESCRIPTION |
|-------------------|--|
| 2-D 96 | STANDARD DROP STEP |
| 2-D 104 | MANHOLE NO. 3 |
| 2-D 107 | CONCRETE RINGS, REDUCER AND PIPE FOR MANHOLE SHAFT |
| 2-D 112 | JUNCTION STRUCTURE NO. 2 |
| 2-D 184 | MANHOLE NO. 2 |
| 2-D 193 | JUNCTION STRUCTURE NO. 4 |
| 2-D 235 | TRANSITION STRUCTURE NO. 1 |
| 2-D 393 | CONCRETE COLLAR FOR PIPE 12 INCHES THROUGH 66 INCHES |
| 2-D 472 | STANDARD 24-INCH MANHOLE FRAME AND COVER |
| 2-D 177 | PIPE BEDDING |

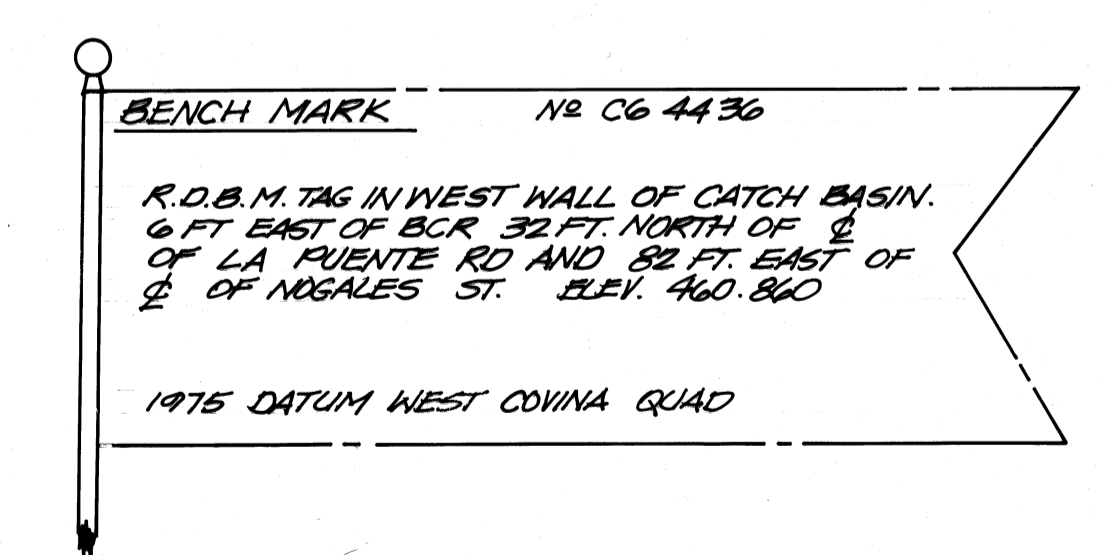
- GENERAL NOTES FOR STORM DRAIN CONSTRUCTION
- ALL PIPE LAID IN OPEN TRENCH SHALL BE BEDDED IN ACCORDANCE WITH LOS ANGELES COUNTY FLOOD CONTROL DISTRICT STANDARD NO. 2-D177 CASE III.
 - 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT INSPECTOR AT (213) 226-4206 AND WALNUT CITY ENGINEER AT (714) 594-9702.
 - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1982 EDITION WITH 1983 SUPPLEMENTS) AND TO THE SATISFACTION OF THE CITY ENGINEER.
 - ALL BACKFILL SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90%.
 - ALL STATE AND LOCAL TRENCH SAFETY RULES WILL BE RIGIDLY ENFORCED.
 - THE CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN AN ERECT, READILY DISCERNIBLE POSITION, FREE FROM OBSTRUCTIONS TO MOTORISTS VISION, AND SHALL RESET SAME IN THE PROPER POSITION UPON COMPLETION OF CONSTRUCTION.
 - EXISTING UTILITIES CROSSING STORM DRAIN SHALL BE SUPPORTED PER STD. 2-D 173.1.3, AS DIRECTED BY THE CITY ENGINEER.
 - THE CONTRACTOR SHALL FURNISH A LETTER OF CERTIFICATION FROM THE PIPE MANUFACTURER AS TO TEST RESULTS OF THE PIPE INSTALLED.
 - R.C.P. SHALL BE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH SECTION 207-2.7, 2.8 AND 2.9 OF STANDARD SPECIFICATIONS.
 - ALL PIPE LENGTHS SHOWN ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE NOTED.
 - ALL PIPE SHALL BE PLACED IN A TRENCH IN NATURAL GROUND AND/OR COMPACTED FILL. THE GROUND LEVEL BEFORE THE TRENCHING SHALL BE AT LEAST 3 FEET ABOVE TOP OF PIPE ELEVATION, OR AT FINISH SURFACE ELEVATION, WHICHEVER IS LESS.
 - THE ENGINEER HAS INVESTIGATED ALL AVAILABLE RECORDS OF THE CITY AND OF THE OTHER PUBLIC UTILITIES INVOLVED, AND ALL KNOWN SUBSTRUCTURES ARE SHOWN HEREON. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES, WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY SAID SUBSTRUCTURES DAMAGED BY HIS OPERATIONS IN CONNECTION WITH THE PROSECUTION OF SAID WORK.
 - ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEA LEVEL DATUM OF 1929.
 - THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTIL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT UP TO GRADE AND THE SYSTEM CLEANED TO THE SATISFACTION OF THE CITY ENGINEER.
 - THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION IN REGARD TO SAFETY ORDERS.



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 THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

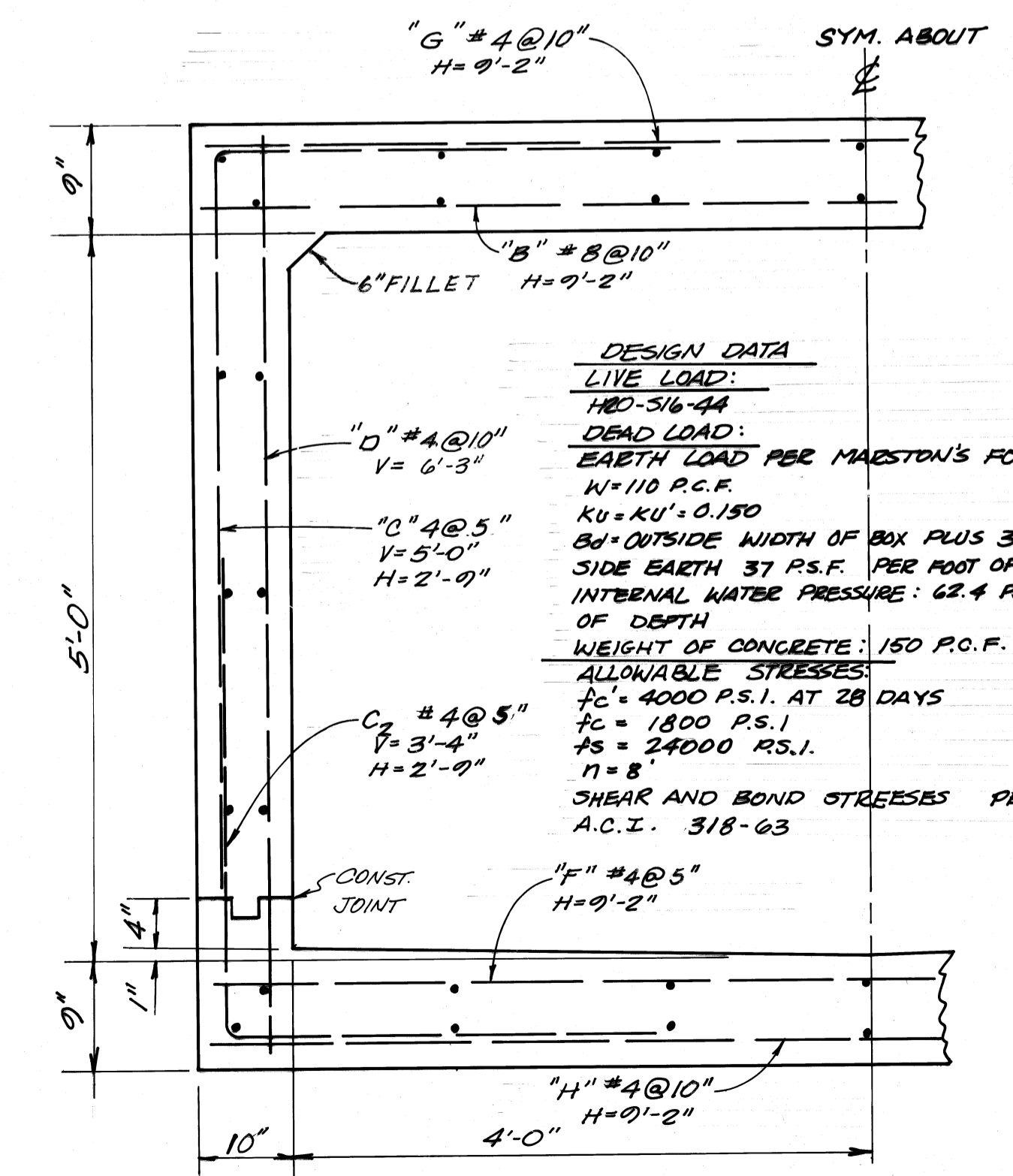
NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. APPROVAL OF THIS PLAN BY THE CITY OF WALNUT DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS TO PROTECT THE UTILITY LINES NOT OF RECORD OR NOT SHOWN ON THIS PLAN.



BASIS OF BEARINGS:

THE BEARING OF N 46° 43' 43" E FOR THE "PROPOSED" CENTERLINE OF AMAR ROAD AS SHOWN ON R.S. 85/10-12 WAS USED AS THE BASIS OF BEARINGS FOR THIS MAP.



DESIGN DATA

LIVE LOAD: HD-516-44

DEAD LOAD: EARTH LOAD PER MARSTON'S FORMULA: $K_1 = 110$ P.C.F. $K_2 = K_3 = 0.150$ $B_1 =$ OUTSIDE WIDTH OF BOX PLUS 3 FEET $SIDE EARTH 37$ R.S.F. PER FOOT OF DEPTH $INTERNAL WATER PRESSURE: 62.4$ R.S.F. PER FOOT OF DEPTH

WEIGHT OF CONCRETE: 150 P.C.F.

ALLOWABLE STRESSES: $f_c = 4000$ P.S.I. AT 28 DAYS $f_s = 1800$ P.S.I. $f_s = 24000$ R.S.I. $n = 8$

SHEAR AND BOND STRESSES PER A.C.I. 318-63

IF CONSTRUCTION OF IMPROVEMENTS AS SHOWN HEREON ARE NOT COMMENCED WITHIN 18 MONTHS OF APPROVAL DATE, THESE PLANS ARE SUBJECT TO REVIEW BY THE CITY.

| REVISIONS | | | | CITY OF WALNUT APPROVED | PLANS PREPARED BY: |
|-----------|-----------|---------|-----------|-------------------------|--|
| REVISIONS | RE. NO. | DATE | REVISOR | JACK LITTE 3/29/84 | H. Associates Inc. (714) 754-1011 |
| 1 | SEE SHT 3 | 6/13/84 | SEE SHT 3 | 3/29/84 | 3001 Red Hill Building VI, Suite 212, Costa Mesa, CA 92626 |

CITY OF WALNUT

STORM DRAIN PLANS

EXTENSION OF MISCELLANEOUS TRANSFER DRAIN NO 870

MTD 1040

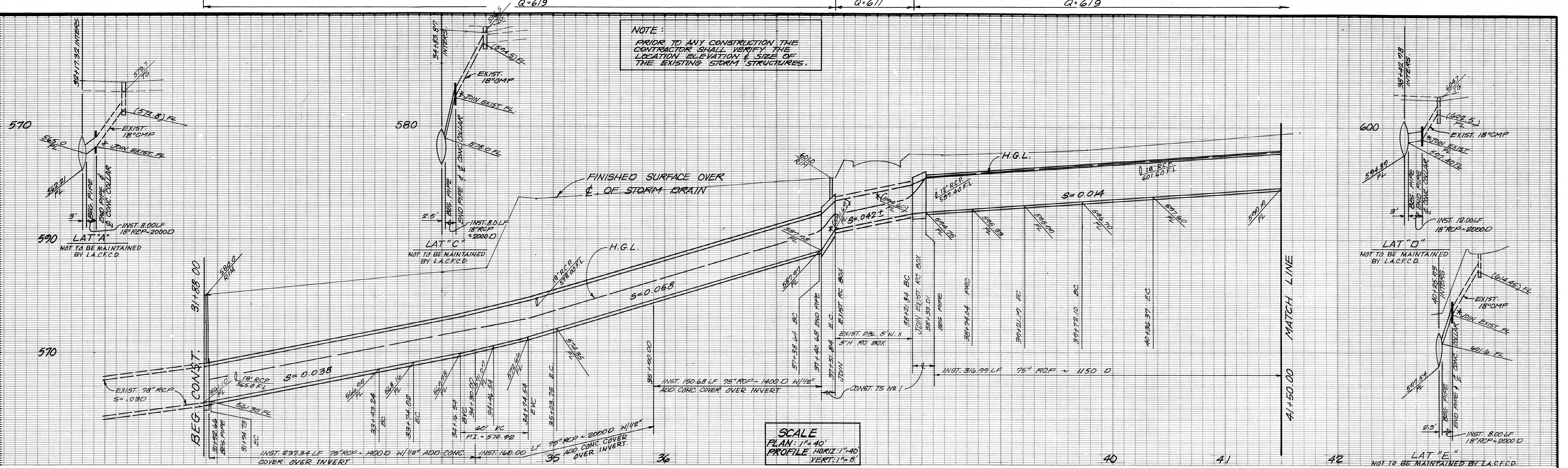
142A

P.M. 10520

STORM DRAIN IMPROVEMENTS

SHEET 1 OF 3

WALNUT W0210-1 B14 1/3-1



SCALE
 PLAN: 1"=40'
 PROFILE: HORIZ. 1"=40'
 VERT.: 1"=8'

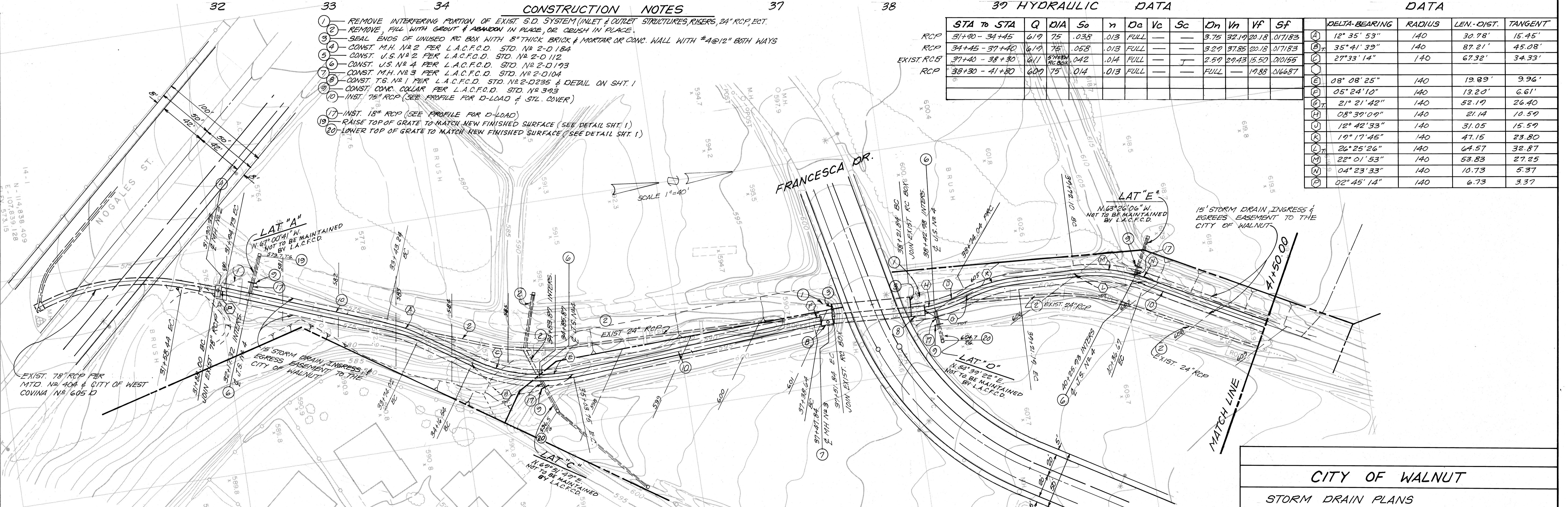
- CONSTRUCTION NOTES**
- REMOVE INTERFERING PORTION OF EXIST. S.D. SYSTEM (INLET & OUTLET STRUCTURES, RISERS, 24" RCP, ECT.
 - REMOVE, FILL WITH GROUT & ABANDON IN PLACE, OR CRUSH IN PLACE.
 - SEAL ENDS OF UNUSED RC BOX WITH 8" THICK BRICK & MORTAR OR CONC. WALL WITH #4@12" BOTH WAYS
 - CONST. M.H. NO 2 PER L.A.C.F.C.D. STD. NO 2-D 184
 - CONST. U.S. NO 2 PER L.A.C.F.C.D. STD. NO 2-D 112
 - CONST. U.S. NO 4 PER L.A.C.F.C.D. STD. NO 2-D 193
 - CONST. M.H. NO 3 PER L.A.C.F.C.D. STD. NO 2-D 104
 - CONST. T.S. NO 1 PER L.A.C.F.C.D. STD. NO 2-D 235 & DETAIL ON SHT. 1
 - CONST. CONC. COLLAR PER L.A.C.F.C.D. STD. NO 3-93
 - INST. 75" RCP (SEE PROFILE FOR D-LOAD & STL. COVER)
 - INST. 18" RCP (SEE PROFILE FOR D-LOAD)
 - RAISE TOP OF GRATE TO MATCH NEW FINISHED SURFACE (SEE DETAIL SHT. 1)
 - LOWER TOP OF GRATE TO MATCH NEW FINISHED SURFACE (SEE DETAIL SHT. 1)

HYDRAULIC DATA

| STA TO STA | Q | DIA | So | n | Da | Vc | Sc | On | Vn | Vf | Sf |
|--------------------------|-----|-----|------|------|------|----|----|------|-------|-------|--------|
| RCP 31+90 - 34+45 | 619 | 75 | .038 | .013 | FULL | — | — | 3.75 | 32.19 | 20.18 | .07183 |
| RCP 34+45 - 37+40 | 619 | 75 | .058 | .013 | FULL | — | — | 3.29 | 37.85 | 20.18 | .07183 |
| EXIST. RCB 37+40 - 38+30 | 611 | 54 | .042 | .014 | FULL | — | — | 2.59 | 29.43 | 15.50 | .01055 |
| RCP 38+30 - 41+30 | 609 | 75 | .014 | .013 | FULL | — | — | FULL | — | 19.88 | .06687 |

DATA

| | DELTA-BEARING | RADIUS | LEN.-DIST. | TANGENT |
|-----|---------------|--------|------------|---------|
| (A) | 12° 35' 53" | 140 | 30.98' | 15.45' |
| (B) | 35° 41' 39" | 140 | 87.21' | 45.08' |
| (C) | 27° 33' 14" | 140 | 67.32' | 34.33' |
| (D) | 08° 08' 25" | 140 | 19.89' | 9.96' |
| (E) | 05° 24' 10" | 140 | 13.20' | 6.61' |
| (F) | 21° 21' 42" | 140 | 52.19' | 26.40' |
| (G) | 08° 39' 09" | 140 | 21.14' | 10.59' |
| (H) | 12° 42' 33" | 140 | 31.05' | 15.59' |
| (I) | 19° 17' 45" | 140 | 47.15' | 23.80' |
| (J) | 26° 25' 26" | 140 | 64.57' | 32.87' |
| (K) | 22° 01' 53" | 140 | 53.83' | 27.25' |
| (L) | 04° 23' 33" | 140 | 10.73' | 5.37' |
| (M) | 02° 45' 14" | 140 | 6.73' | 3.37' |



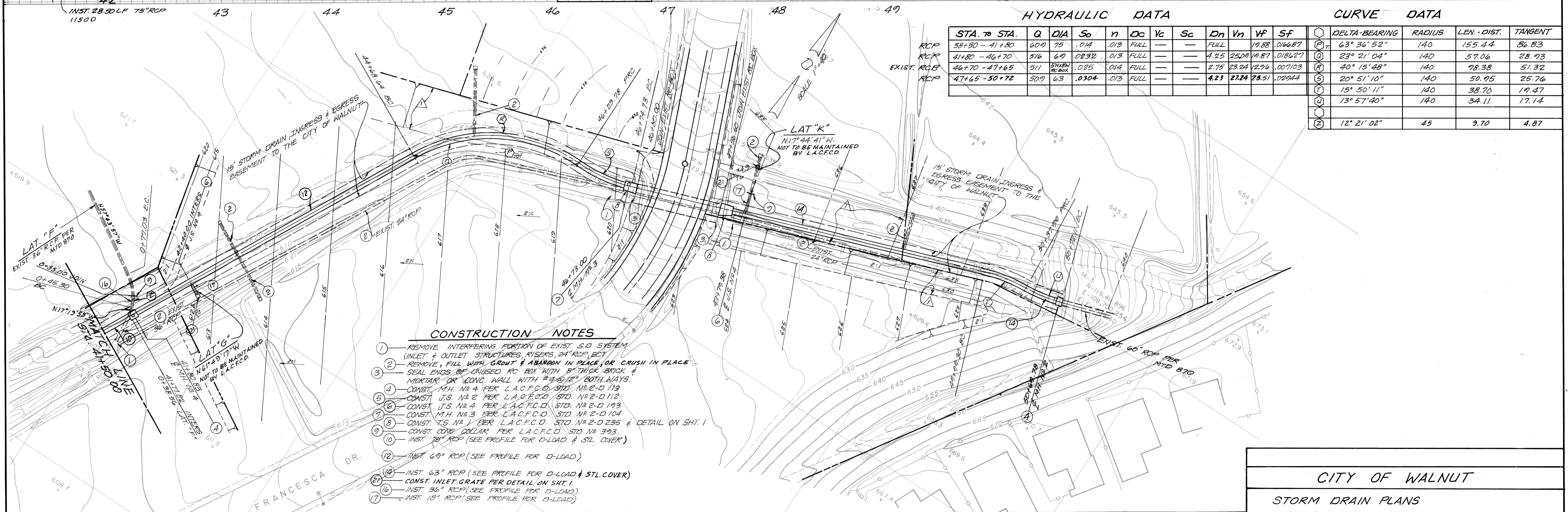
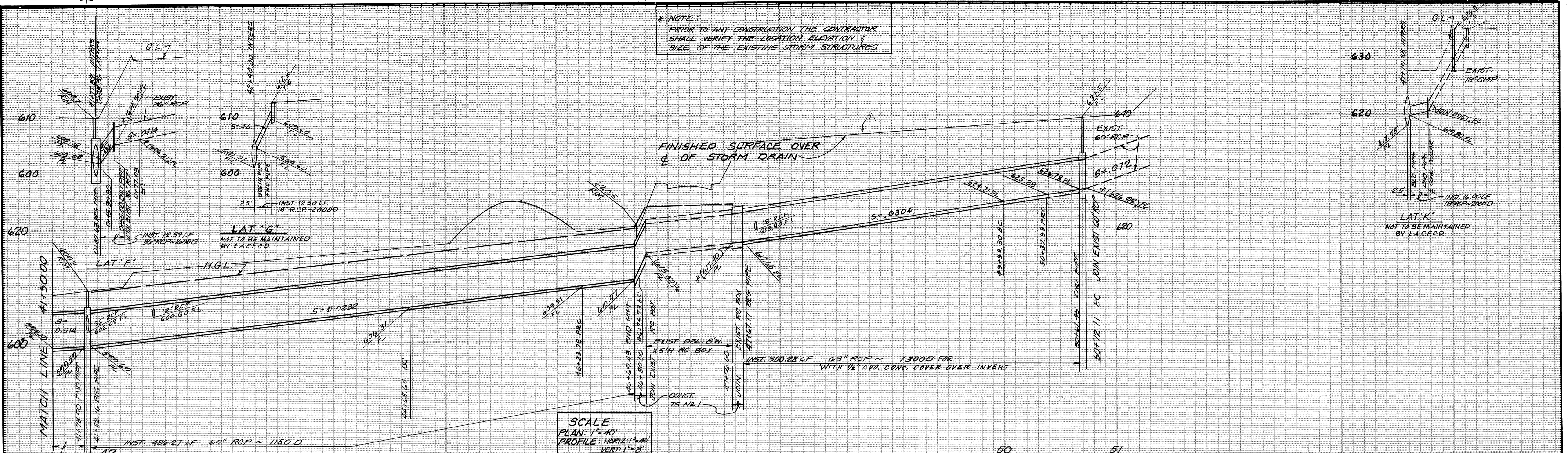
REVISIONS

| REVISED BY | RE. NO. | DATE | REVISED BY | RE. NO. | DATE | REVISED BY | RE. NO. | DATE |
|------------|---------|------|------------|---------|------|------------|---------|------|
| | | | | | | | | |

CITY OF WALNUT APPROVED
 Jack Istik 3/21/84
 ASST. CITY ENGINEER
 RE. 26558

PLANS PREPARED BY:
 Hunsaker Associates Inc.
 3001 Red Hill, Building VI, Suite 212, Costa Mesa, CA 92626
 (714) 754-1011

CITY OF WALNUT
 STORM DRAIN PLANS
 EXTENSION OF MISCELLANEOUS
 TRANSFER DRAIN NO 870
MTD 1040 142B
 P.M. 10520 STORM DRAIN IMPROVEMENTS SHEET 2 OF 3



REVISIONS

| REVISED BY | R.E. No. | DATE | REVISION |
|------------|----------|------|----------|
| | | | |
| | | | |

CITY OF WALNUT APPROVED

REVISION LOT LINES, GRADING & GROUND LINE TO REFLECT REVISIONS TO THE GRADING PLAN & PARCEL MAP

REVISOR: *[Signature]* DATE: 2/11/04

APPROVER: *[Signature]* DATE: 2/11/04

PLANS PREPARED BY:
[Signature]
Hunsaker & Associates, Inc.
 Planning, Engineering & Surveying
 3001 Red Hill, Building VI, Suite 212, Costa Mesa, CA 92626
 714) 754-1011

CITY OF WALNUT

STORM DRAIN PLANS
 EXTENSION OF MISCELLANEOUS
 TRANSFER DRAIN NO. 870
MTD 1040

142C

P.M. 10520 STORM DRAIN IMPROVEMENTS SHEET 3 OF 3