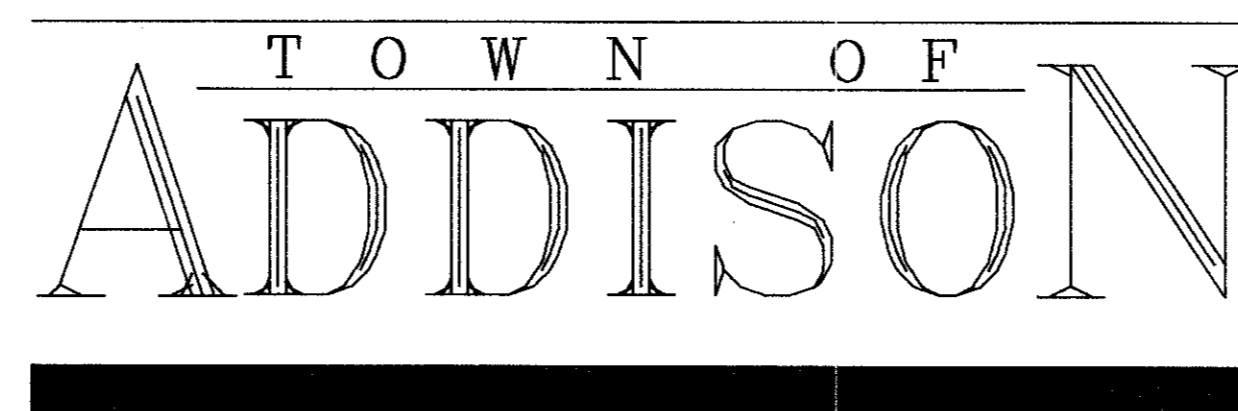


# DRAINAGE IMPROVEMENTS

FOR

# WINNWOOD/BELLBROOK ESTATES



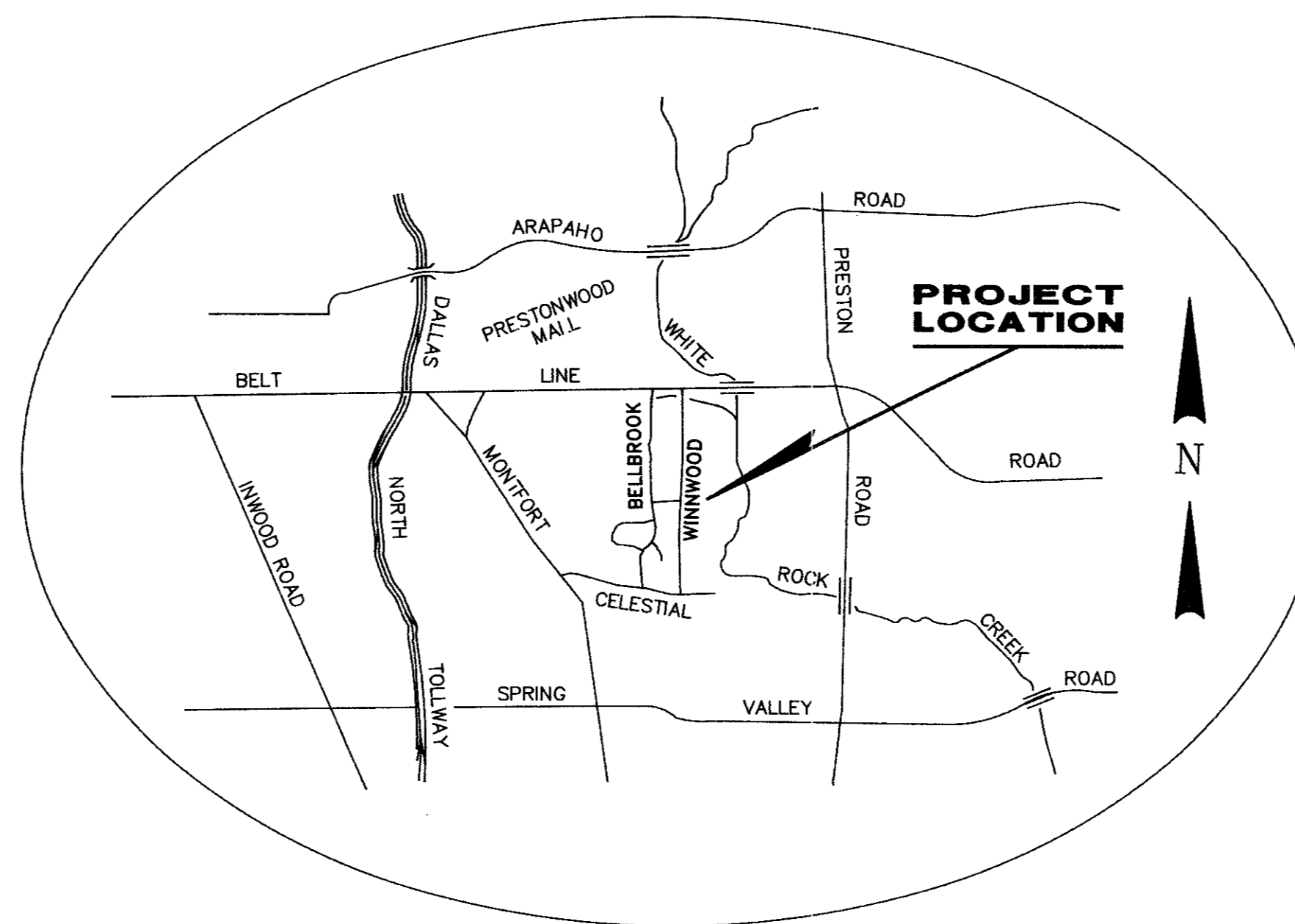
## ADDISON COUNCIL

LYNN SPRUILL  
MAYOR

RON WHITEHEAD  
CITY MANAGER

### CITY COUNCIL

JOHN BRANCH  
MARY DOLAN  
JIM DUFFY  
DAVID GRANOFF  
RILEY REINKER



LOCATION MAP

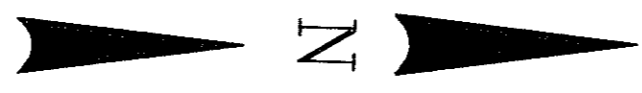
N.T.S.

## SHEET INDEX

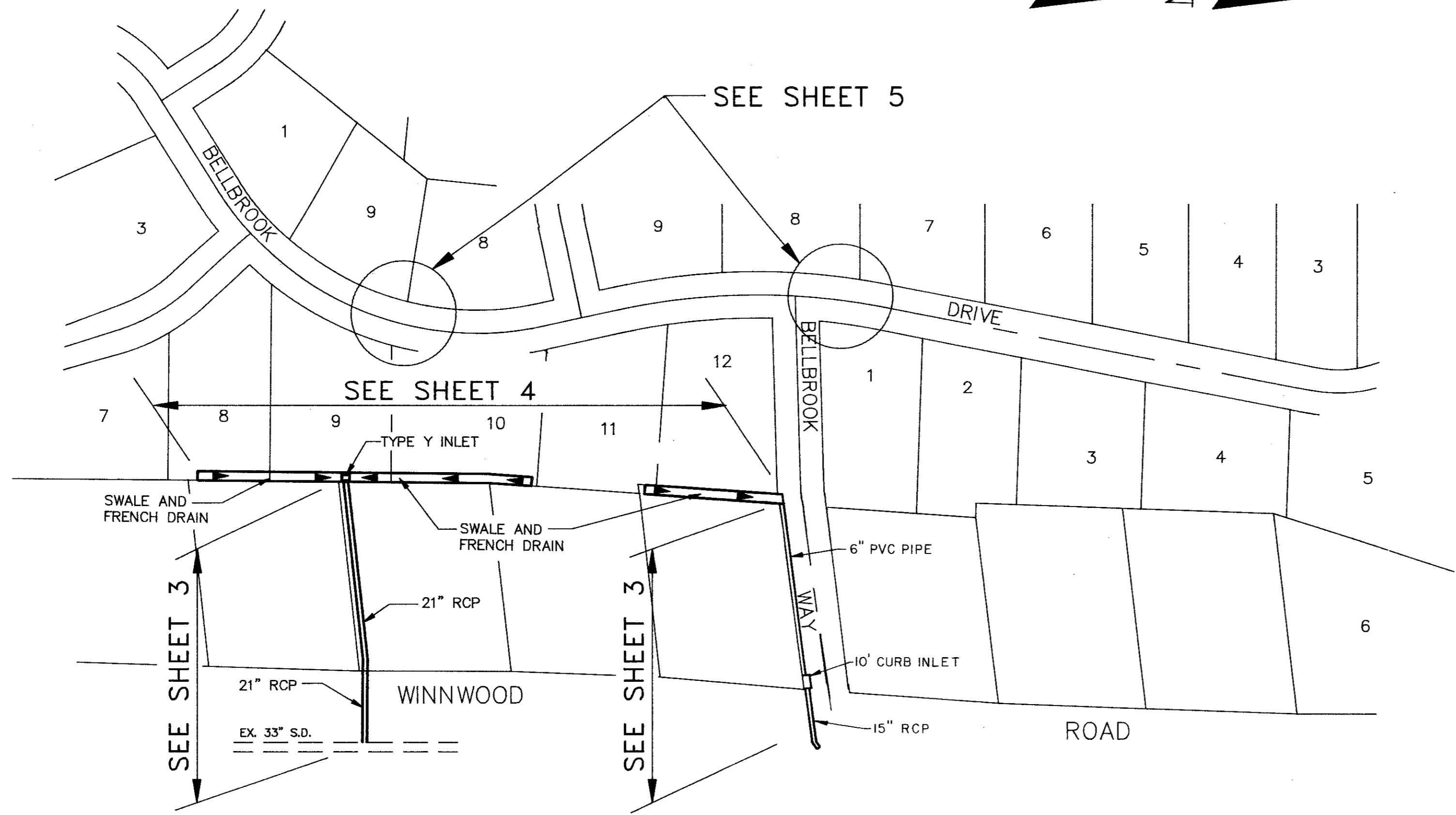
1	COVER SHEET
2	PROJECT LAYOUT/NOTES
3 - 5	PLAN AND PROFILES
6	CONSTRUCTION DETAILS



ESPEY, HUSTON & ASSOCIATES, INC.  
Engineering & Environmental Consultants  
17811 Waterview Parkway Dallas, Texas 75252  
(214) 669-9600



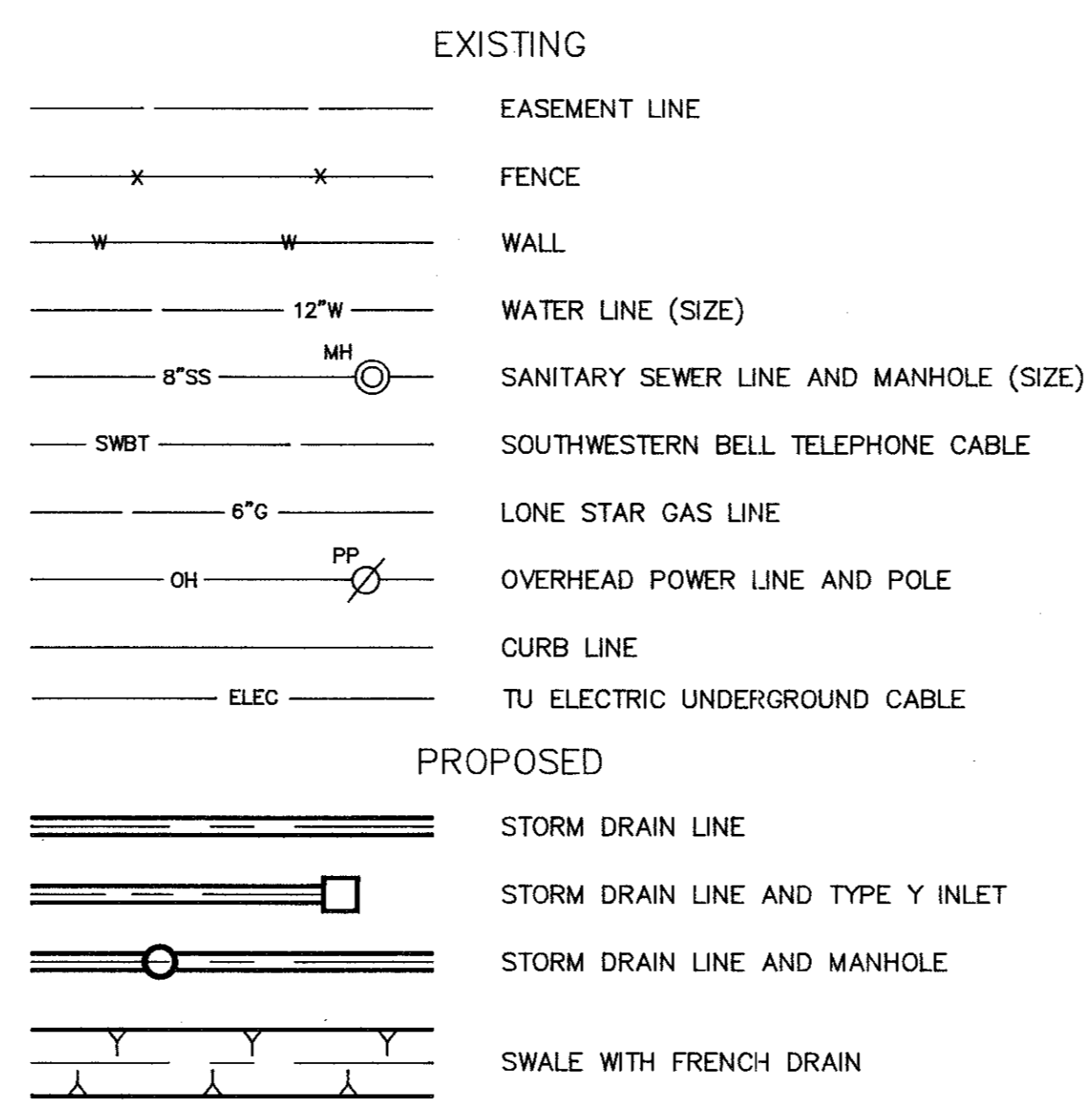
# GENERAL NOTES



### PROJECT LAYOUT

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF DALLAS 251-D STANDARDS AND SPECIFICATIONS. USE TOWN OF ADDISON STANDARD INLET FRAME & COVER ON ALL MANHOLES AND INLETS.
- CONTRACTOR SHALL NOT PLACE FILL OR WASTE MATERIAL ON ANY PRIVATE PROPERTY WITHOUT PRIOR WRITTEN AGREEMENT WITH THE PROPERTY OWNER. NO EXCESS EXCAVATED MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG NATURAL DRAINAGE WAY WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. IF THE CONTRACTOR PLACES EXCESS MATERIAL IN AREAS WITHOUT WRITTEN PERMISSION, HE WILL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL AND HE SHALL REMOVE THE MATERIAL AT HIS OWN COST IF THE TOWN SO DIRECTS.
- NO TREES SHALL BE CUT EXCEPT ON SPECIFIC AUTHORITY OF THE TOWN.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED.
- ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORT.
- THE CONTRACTOR SHALL NOTIFY THE DALLAS WATER UTILITIES DISTRIBUTION DIVISION, 670-8543, AND THE WASTEWATER COLLECTION DIVISION, 670-7440, AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION THAT MIGHT AFFECT THEIR FACILITIES.
- THE CONTRACTOR SHALL CONSTRUCT UTILITY SUPPORTS FOR EXISTING WATER MAINS AND SANITARY SEWERS WHERE DIRECTED BY THE ENGINEER. ALL SUCH UTILITY SUPPORTS SHALL BE INCIDENTAL ON THIS PROJECT. NO PAY ITEMS WILL BE PROVIDED.
- STANDARD DEPTH OF INLETS IS 4.0 FEET, EXCEPT AS SHOWN OTHERWISE. DEPTH MAY BE VARIED TO CLEAR UTILITIES.
- LOCATION OF ALL UNDERGROUND UTILITIES IN THE AREA OF SWALE, FRENCH DRAIN AND STORM DRAIN CONSTRUCTION AND OTHER AREAS OF POSSIBLE CONFLICT WILL BE UNCOVERED TO DETERMINE EXACT LOCATIONS PRIOR TO START OF CONSTRUCTION.
- ALL STORM DRAIN PIPE WILL BE INSTALLED ACCORDING TO THE REQUIREMENTS OF THE SPECIFICATIONS.
- ALL BARRICADES, WARNING SIGNS, LIGHTS, DEVICES, ETC., FOR THE GUIDANCE AND PROTECTION OF TRAFFIC AND PEDESTRIANS MUST CONFORM TO THE INSTALLATION SHOWN IN THE 1980 TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS CURRENTLY AMENDED, TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND SIDEWALKS ADJACENT TO PROJECT FREE OF MUD AND DEBRIS FROM CONSTRUCTION ON A DAILY BASIS.
- HAND FINISH OF CONCRETE PAVEMENT SHALL NOT BE A SEPERATE PAY ITEM ON THIS PROJECT.
- ACCESS TO ABUTTING PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT MUST BE MAINTAINED FOR EMERGENCY TRAFFIC.
- NO STOP OR YIELD SIGN IS TO BE RELOCATED OR REMOVED WITHOUT PRIOR APPROVAL BY THE TOWN.
- ADJUSTMENT OF UNPAVED SURFACES TO GRADE AND RESTORATION OF THE SURFACE TO EQUAL OR BETTER THAN THE ORIGINAL WILL BE INCIDENTAL ON THIS PROJECT. NO PAY ITEMS WILL BE PROVIDED.
- VERIFY LOCATIONS OF TU ELECTRIC COMPANY UNDERGROUND FACILITIES BEFORE BEGINNING EXCAVATION. CONTACT TU ELECTRIC AT 323-8910 48 HOURS PRIOR TO BEGINNING CONSTRUCTION SO THAT THE LOCATION OF UNDERGROUND LINES CAN BE MARKED.
- PRIOR TO BEGINNING CONSTRUCTION IN THE AREA OF SOUTHWESTERN BELL TELEPHONE UNDERGROUND FACILITIES, CALL 998-4102 48 HOURS IN ADVANCE OF WORK. IF NECESSARY, TEST DITCHES WILL BE DUG TO VERIFY ACTUAL LOCATIONS AND CONDITIONS.
- CONTACT STORER CABLE AT 840-2388 48 HOURS PRIOR TO BEGINNING CONSTRUCTION SO THAT THE LOCATION OF UNDERGROUND LINES CAN BE MARKED.
- CONTACT LONE STAR GAS COMPANY AT 263-DIGG 48 HOURS PRIOR TO BEGINNING CONSTRUCTION SO THAT THE LOCATION OF UNDERGROUND LINES CAN BE MARKED.
- STREET NAME SIGNS WILL BE RELOCATED BY THE CONTRACTOR. THE CONTRACTOR WILL BE REQUIRED TO GIVE 5 DAYS NOTICE IN ADVANCE OF THE TIME A STREET SIGN MUST BE RELOCATED TO CLEAR CONSTRUCTION OPERATIONS.
- REMOVAL AND REPLACEMENT OF FENCE WILL BE INCIDENTAL ON THIS PROJECT. NO PAY ITEMS WILL BE PROVIDED. ANY DAMAGE TO EXISTING FENCING SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- THE CEMENT CONTENT FOR PAVEMENT WILL BE INCREASED TO 6 BAGS PER CUBIC YARD TO ENABLE EARLIER OPENING OF THE STREET TO TRAFFIC, IF NECESSARY. NO SEPERATE OR ADDITIONAL PAY WILL BE PROVIDED.
- WHEN EXCAVATING NEAR POWER POLES, CONTRACTOR SHALL ARRANGE AND PAY FOR HAVING POLES SUPPORTED IN PLACE. NO SEPERATE OR ADDITIONAL PAY WILL BE PROVIDED.
- LOCATION OF ALL UTILITIES IS APPROXIMATE. CONTRACTOR TO LOCATE, PROTECT AND REPAIR AT HIS EXPENSE ALL UTILITIES.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION.
- CONTRACTOR SHALL EXERCISE REASONABLE CARE TO PREVENT UNNECESSARY DAMAGE TO TREES AND SHRUBS. WHERE REQUIRED, REPLACEMENT OR RESTORATION OF TREES AND SHRUBS SHALL BE PERFORMED BY THE TOWN OF ADDISON.

### LEGEND



### LIST OF BENCHMARKS

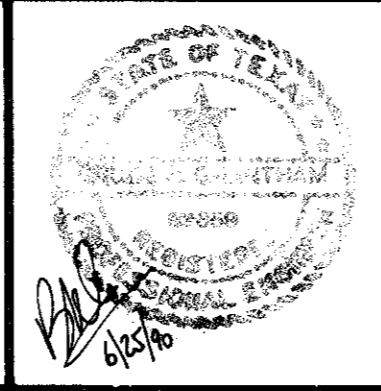
B.M. #6:  
RAILROAD SPIKE FOUND IN A POWER POLE ON THE SOUTH SIDE OF CELESTIAL ROAD 400'± EAST OF THE SOUTHWEST PROPERTY CORNER, FIRST POLE EAST OF BELLBROOK DRIVE. ELEVATION = 603.83

B.M. #10:  
RAILROAD SPIKE FOUND IN A POWER POLE 20'± WEST OF THE SOUTHEAST LOT CORNER OF NAN'S LITTLE ACRE ADDITION; SAME CORNER BEING 57'± SOUTH OF THE NORTHEAST CORNER OF LOT 9 OF BELLBROOK ESTATES. ELEVATION = 567.28

B.M. #11:  
BOX SET IN THE NORTH RIM OF A SANITARY SEWER MANHOLE 5' SOUTH OF THE SOUTH CURB LINE OF BELLBROOK WAY, NEAR THE NORTHEAST CORNER OF LOT 12 OF BELLBROOK ESTATES. ELEVATION = 567.70

NO	REVISION	BY	DATE

DESIGNED BY: E.H.&A.  
 DRAWN BY: E.H.&A.  
 CHECKED BY: B. GRANTHAM  
 SCALE: 1" = 100'  
 DATE: MAY 1990



**ESPEY, HUSTON & ASSOCIATES, INC.**  
 Engineering & Environmental Consultants  
 17811 Waterview Parkway Dallas, Texas 75252  
 (214) 669-9600

**PROJECT LAYOUT/NOTES**  
 WINNWOOD/BELLBROOK DRAINAGE  
 for  
 THE TOWN OF ADDISON

SHEET NO. 2  
 OF 6 SHEETS  
 JOB NO. 12552



C/L STORM SEWER CURVE DATA

NO.	DELTA	RADIUS	TANGENT	LENGTH
①	11°40'40"	130.00'	13.29'	26.50'
②	14°27'48"	70.00'	8.88'	17.67'
③	06°48'31"	110.00'	6.54'	13.07'
④	04°06'10"	200.00'	7.16'	14.32'

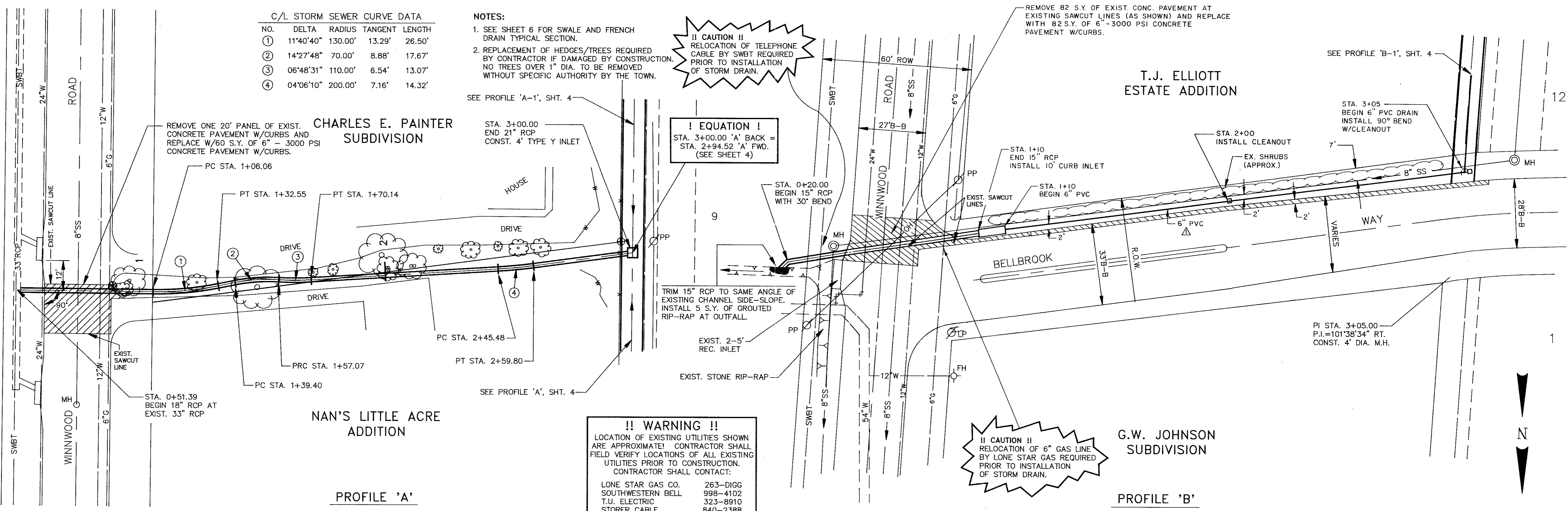
- NOTES:
- SEE SHEET 6 FOR SWALE AND FRENCH DRAIN TYPICAL SECTION.
  - REPLACEMENT OF HEDGES/TREES REQUIRED BY CONTRACTOR IF DAMAGED BY CONSTRUCTION. NO TREES OVER 1" DIA. TO BE REMOVED WITHOUT SPECIFIC AUTHORITY BY THE TOWN.

**!! CAUTION !!**  
RELOCATION OF TELEPHONE CABLE BY SWBT REQUIRED PRIOR TO INSTALLATION OF STORM DRAIN.

**! EQUATION !**  
STA. 3+00.00 'A' BACK = STA. 2+94.52 'A' FWD. (SEE SHEET 4)

**!! CAUTION !!**  
RELOCATION OF 6" GAS LINE BY LONE STAR GAS REQUIRED PRIOR TO INSTALLATION OF STORM DRAIN.

**!! WARNING !!**  
LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE! CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT:  
LONE STAR GAS CO. 263-DIGG  
SOUTHWESTERN BELL 998-4102  
T.U. ELECTRIC 323-8910  
STORER CABLE 840-2388



CHARLES E. PAINTER SUBDIVISION

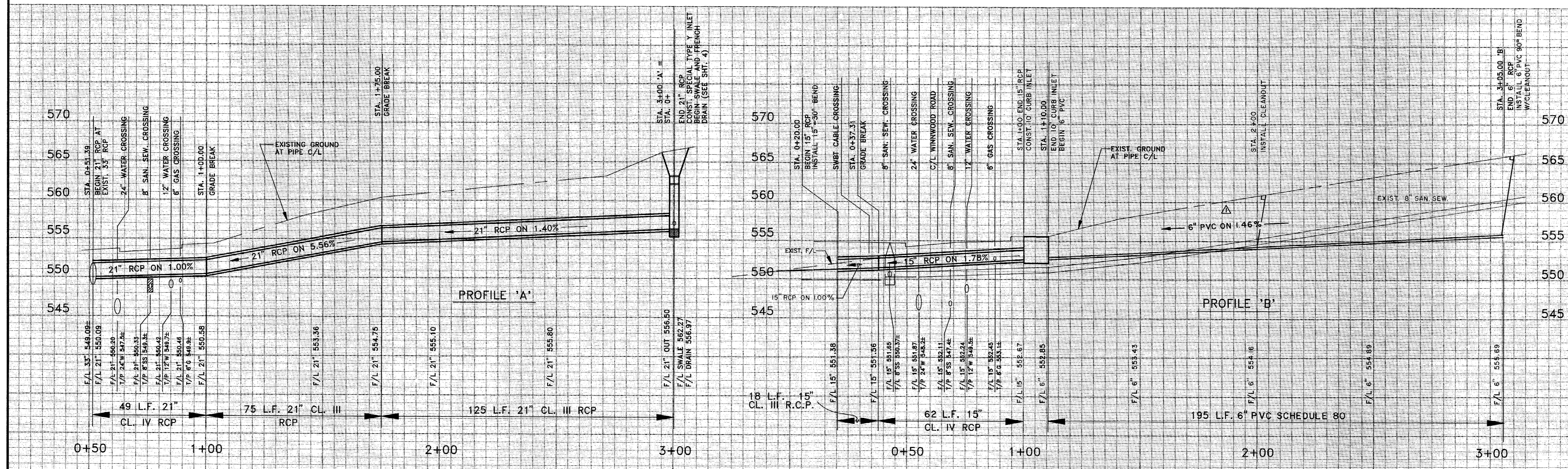
T.J. ELLIOTT ESTATE ADDITION

NAN'S LITTLE ACRE ADDITION

G.W. JOHNSON SUBDIVISION

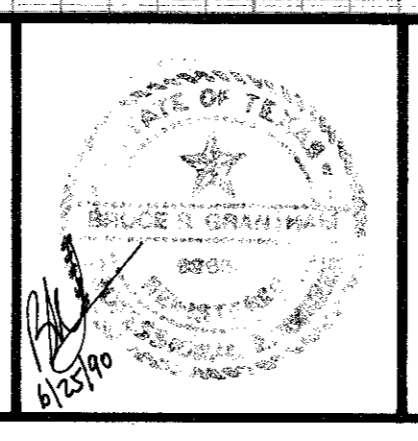
PROFILE 'A'

PROFILE 'B'



NO.	REVISION	BY	DATE
1	ADD 6" PVC	B.G.	7/30/90

DESIGNED BY: E.H.&A.  
DRAWN BY: E.H.&A.  
CHECKED BY: B. GRANTHAM  
SCALE: 1"=6' V: 1"=20' H  
DATE: MAY 1990



**ESPEY, HUSTON & ASSOCIATES, INC.**  
Engineering & Environmental Consultants  
17811 Waterview Parkway Dallas, Texas 75252  
(214) 669-9600

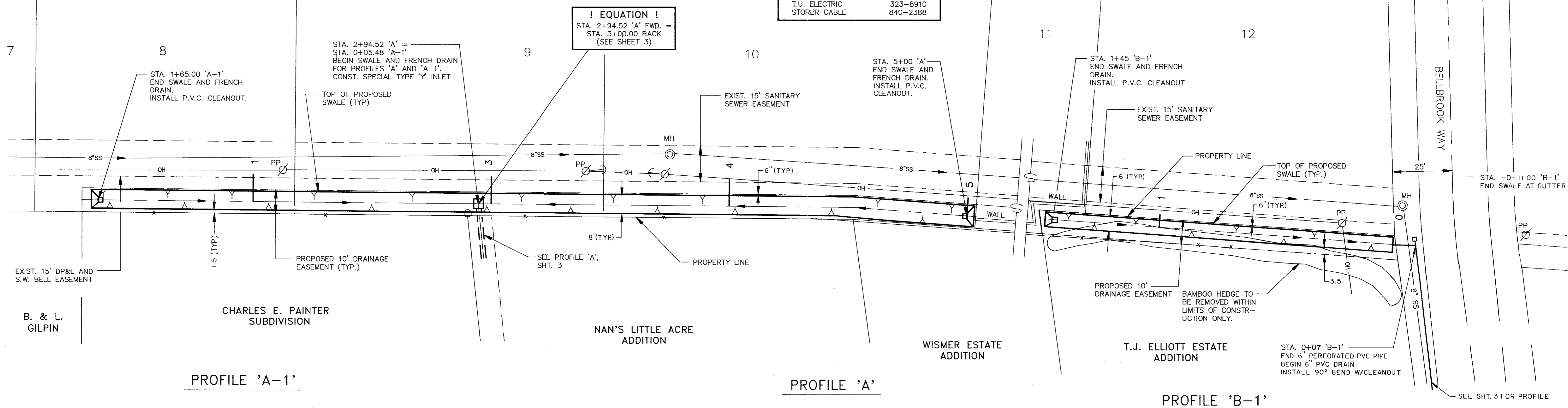
**PLAN & PROFILE**  
WINNWOOD/BELLBROOK DRAINAGE  
for  
THE TOWN OF ADDISON

SHEET NO. 3  
OF 6 SHEETS  
JOB NO. 12552

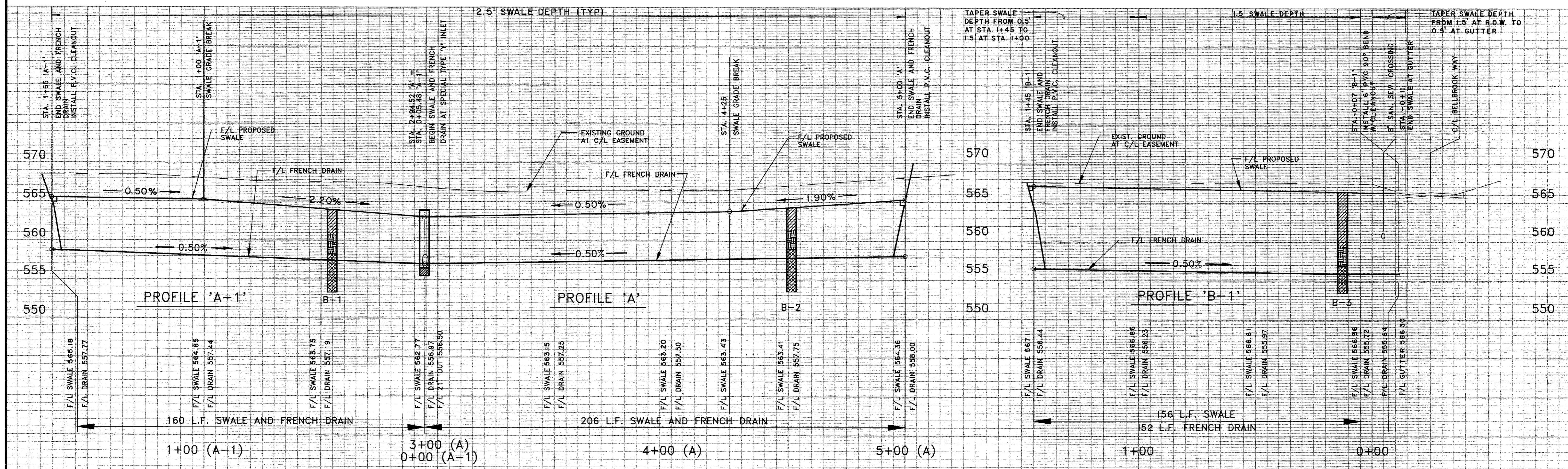
NOTES:  
1. SEE SHEET 6 FOR SWALE AND FRENCH DRAIN TYPICAL SECTION.

**!! WARNING !!**  
LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE! CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT:  
LONE STAR GAS CO. 263-4102  
SOUTHWESTERN BELL 993-4102  
T.U. ELECTRIC 323-8910  
STORER CABLE 840-2388

BELLBROOK ESTATES

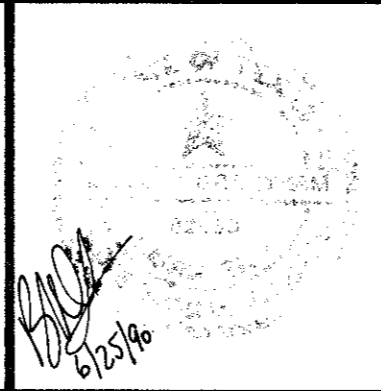


**! EQUATION !**  
STA. 2+94.52 'A' FWD. =  
STA. 3+00.00 BACK  
(SEE SHEET 3)



NO.	REVISION	BY	DATE

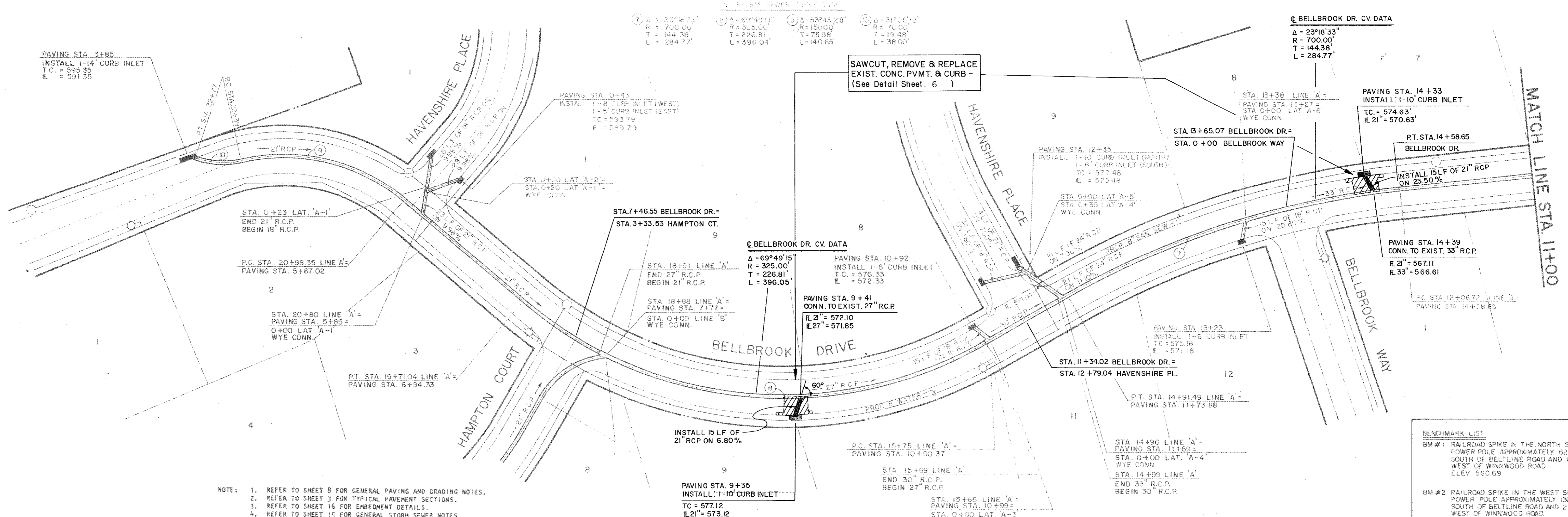
DESIGNED BY: E.H.&A.  
DRAWN BY: E.H.&A.  
CHECKED BY: B. GRANTHAM  
SCALE: 1"=6'V; 1"=20'H  
DATE: MAY 1990



**ESPEY, HUSTON & ASSOCIATES, INC.**  
Engineering & Environmental Consultants  
17811 Waterview Parkway Dallas, Texas 75252  
(214) 669-9600

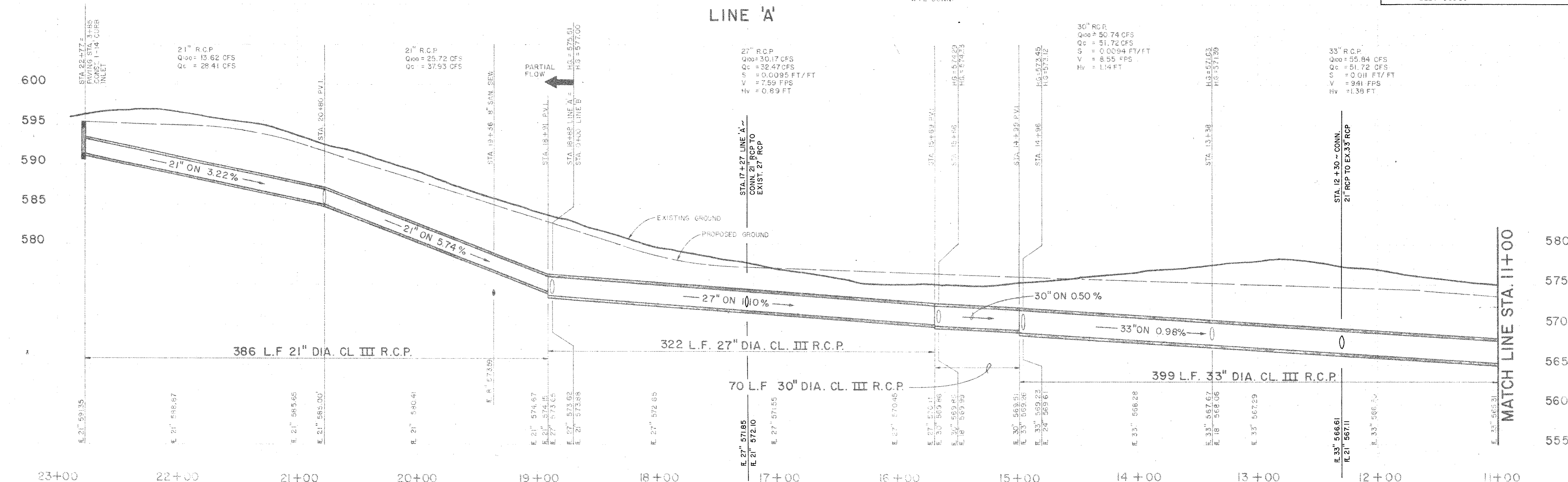
**PLAN & PROFILE**  
WINNWOOD/BELLBROOK DRAINAGE  
for  
THE TOWN OF ADDISON

SHEET NO. 4  
OF 6 SHEETS  
JOB NO. 12552

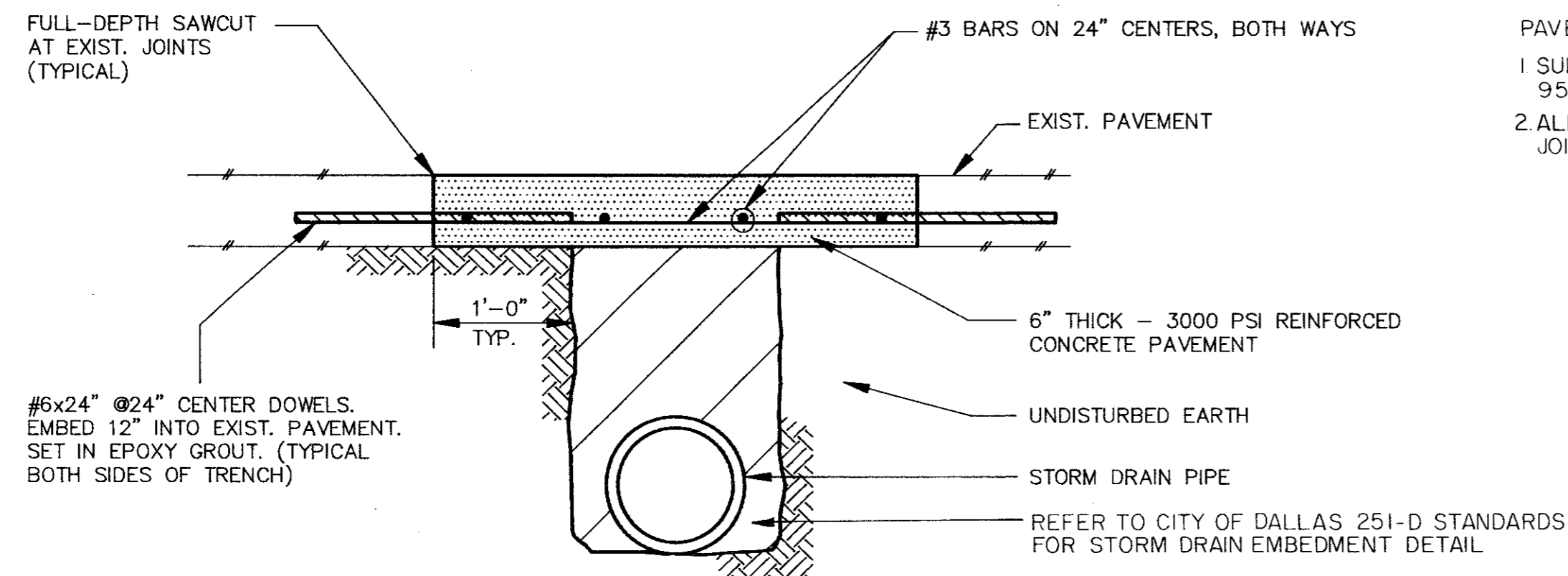


NOTE: 1. REFER TO SHEET 8 FOR GENERAL PAVING AND GRADING NOTES.  
 2. REFER TO SHEET 3 FOR TYPICAL PAVEMENT SECTIONS.  
 3. REFER TO SHEET 16 FOR EMBEDMENT DETAILS.  
 4. REFER TO SHEET 15 FOR GENERAL STORM SEWER NOTES.

BENCHMARK LIST  
 BM #1 RAILROAD SPIKE IN THE NORTH SIDE OF A POWER POLE APPROXIMATELY 1300 FEET SOUTH OF BELLINE ROAD AND 150 FEET WEST OF WINNWOOD ROAD ELEV 560.69  
 BM #2 RAILROAD SPIKE IN THE WEST SIDE OF A POWER POLE APPROXIMATELY 1300 FEET SOUTH OF BELLINE ROAD AND 230 FEET WEST OF WINNWOOD ROAD ELEV 569.89



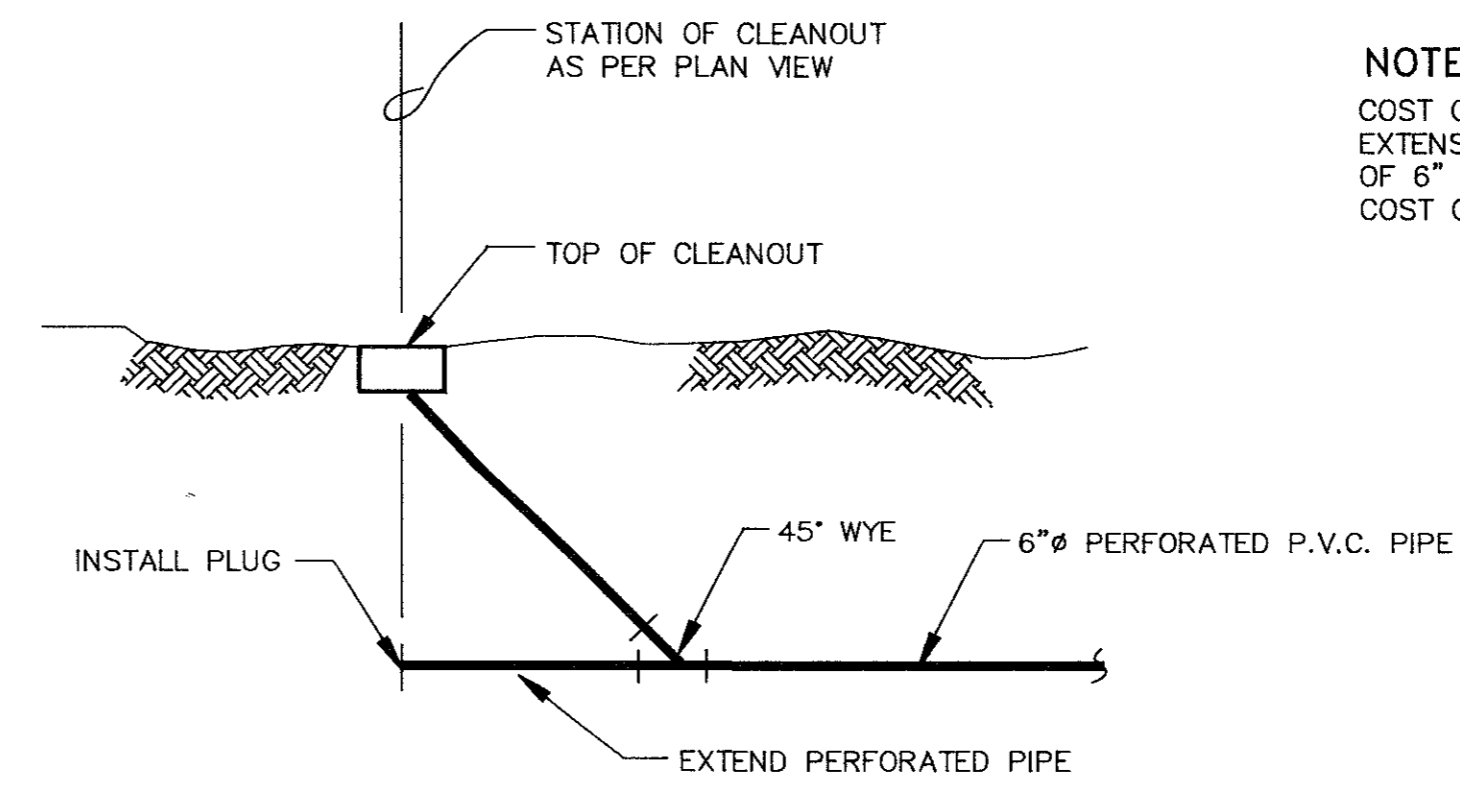
	DESIGNED BY: E.H.&A.		<b>ESPEY, HUSTON &amp; ASSOCIATES, INC.</b> Engineering & Environmental Consultants 17811 Waterview Parkway Dallas, Texas 75252 (214) 669-9600	<b>PLAN &amp; PROFILE</b> WINNWOOD/BELLBROOK DRAINAGE for THE TOWN OF ADDISON	SHEET NO. <b>5</b> OF <b>6</b> SHEETS JOB NO. <b>12552</b>	
	DRAWN BY: E.H.&A.					
	CHECKED BY: B. GRANTHAM					
	SCALE: 1"=6V/1"=40H					
	DATE: MAY 1990					
NO	REVISION	BY	DATE			



CONCRETE PAVEMENT REPLACEMENT DETAIL

N.T.S.

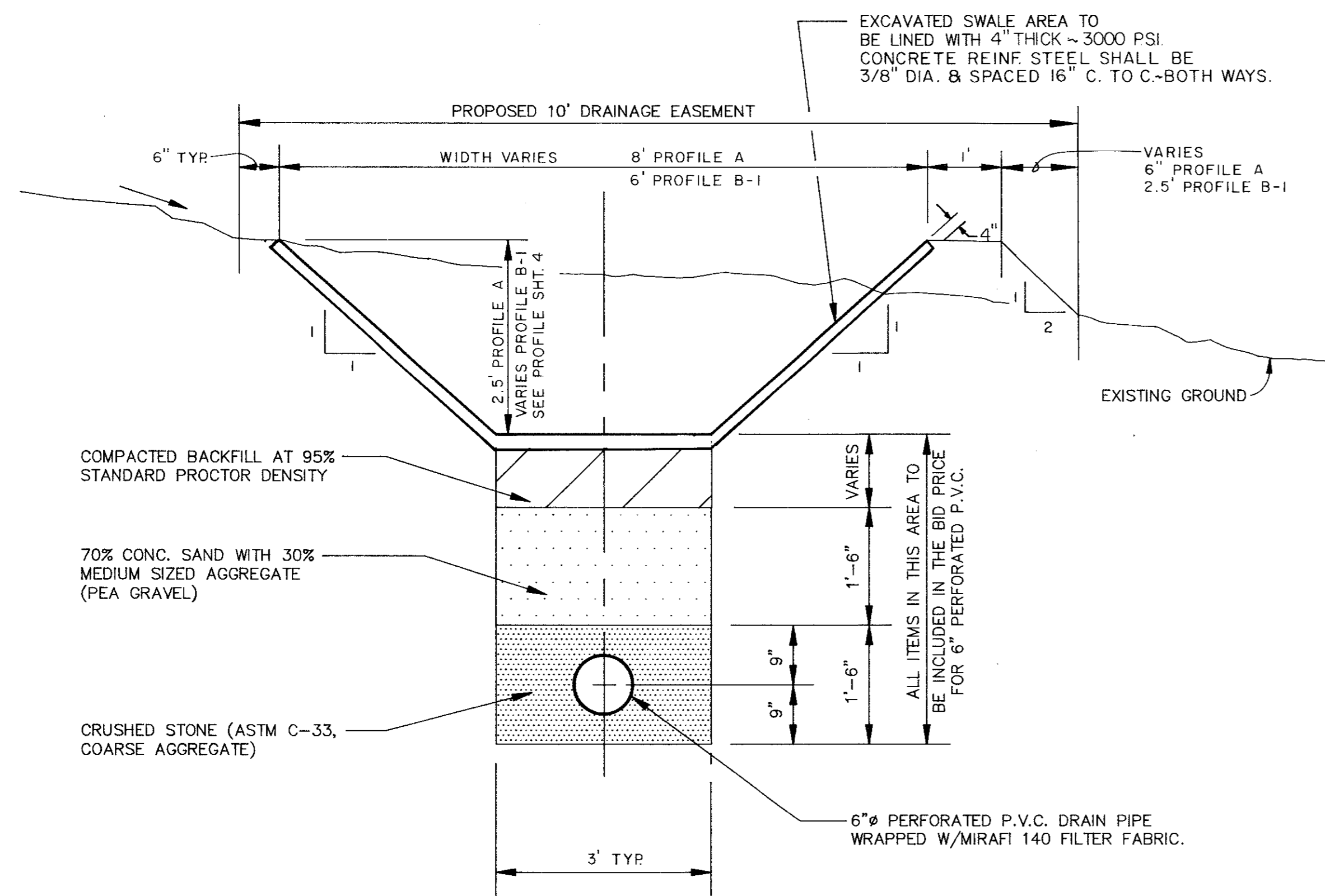
PAVEMENT REPLACEMENT NOTES:  
 1. SUBGRADE SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.  
 2. ALL CONCRETE SHALL BE CUT AT EXISTING JOINTS AS DIRECTED BY THE OWNER.



FRENCH DRAIN CLEANOUT DETAIL

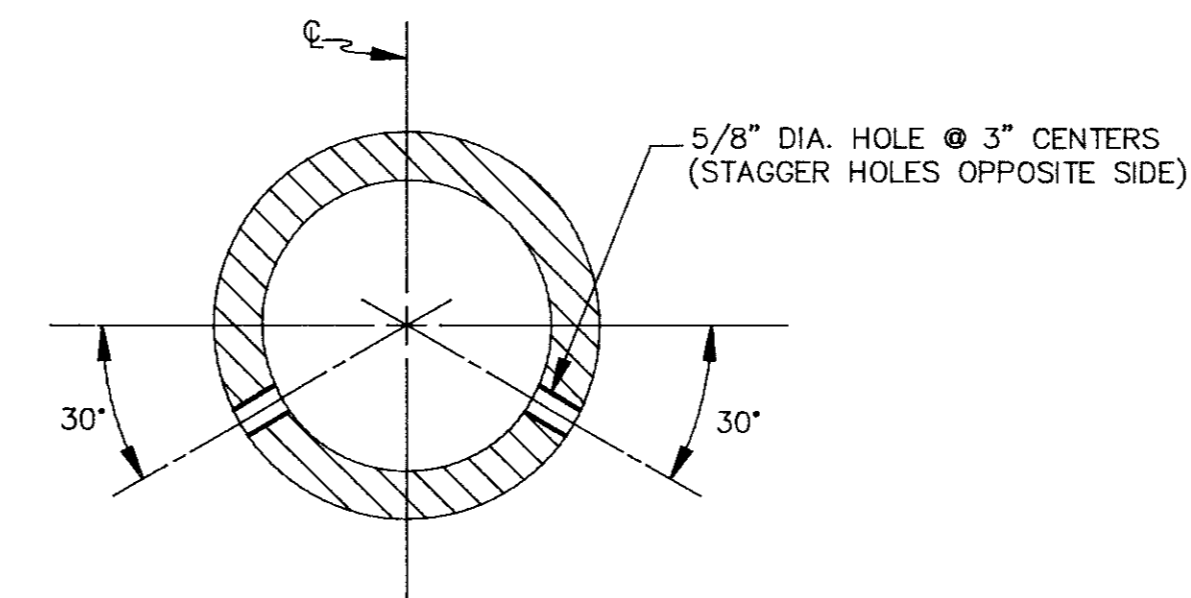
N.T.S.

NOTE:  
 COST OF 6" PERFORATED P.V.C. PIPE FOR CLEANOUT, EXTENSION, PLUG AND 45° WYE TO BE INCLUDED IN COST OF 6" PERFORATED P.V.C. PIPE (NO SEPARATE PAY). COST OF CLEANOUT SHALL BE A SEPARATE PAY ITEM.



SWALE AND FRENCH DRAIN TYPICAL SECTION

N.T.S.



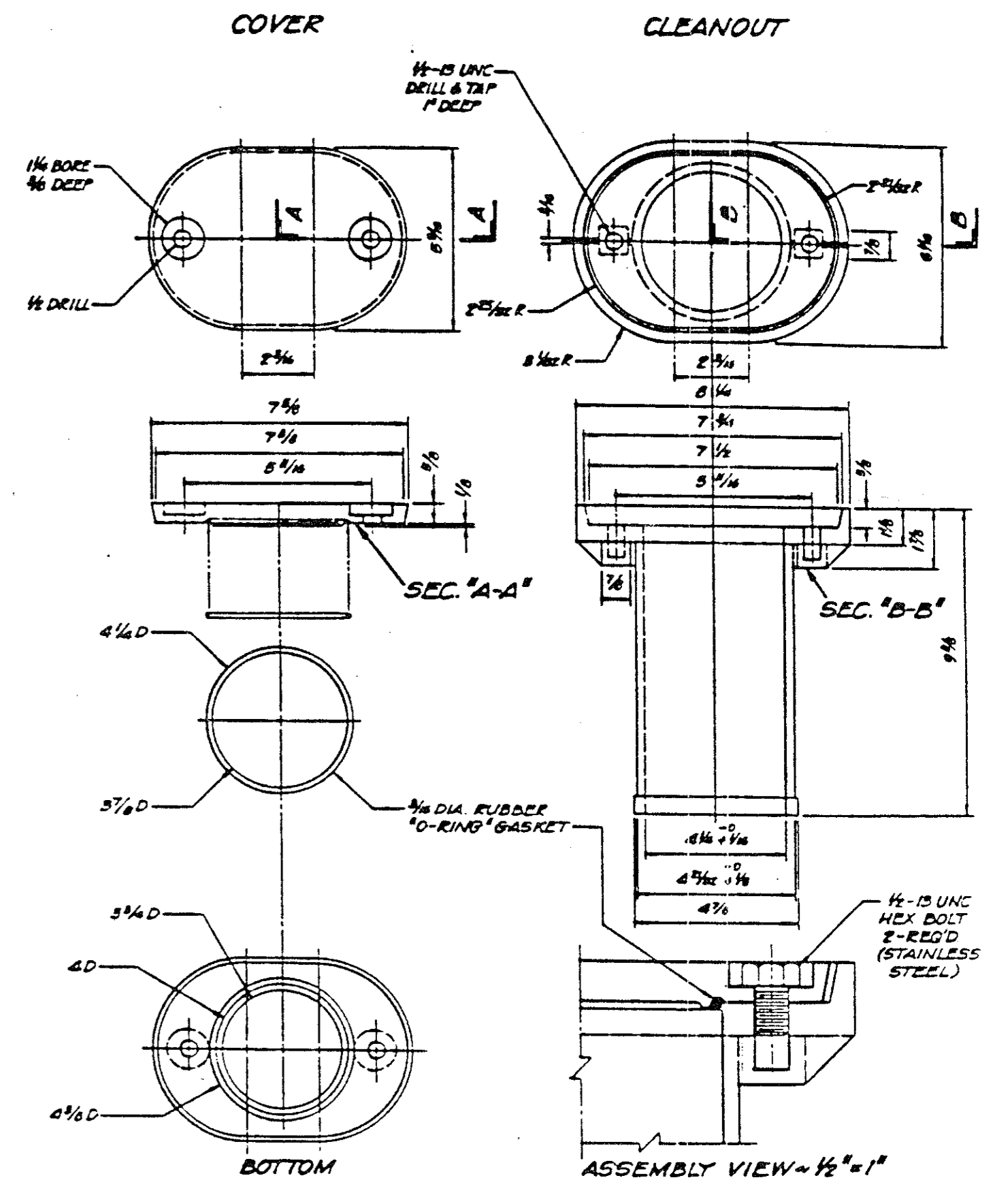
PERFORATED P.V.C. PIPE DETAIL

N.T.S.

NOTES:

- P.V.C. PIPE SHALL BE SCHEDULE 80 WITH SOLVENT WELDED COUPLING JOINTS.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE DEWATERING EQUIPMENT TO REMOVE AND DISPOSE OF ALL SURFACE AND GROUND WATER ENTERING EXCAVATIONS, TRENCHES OR OTHER PARTS OF THE WORK. NO SEPARATE PAY ITEMS SHALL BE PROVIDED.
- BACKFILL MATERIAL OVER AND AROUND THE P.V.C. PIPE SHALL BE LIGHTLY HAND TAMPED.

1. ALL DIMENSIONS ARE IN INCHES.  
 2. MATERIAL TO BE P.V.C.



P.V.C. CLEANOUT DETAIL

N.T.S.

NO.	REVISION	BY	DATE

DESIGNED BY: E.H.&A.  
 DRAWN BY: E.H.&A.  
 CHECKED BY: B. GRANTHAM  
 SCALE: AS NOTED  
 DATE: MAY 1990

*[Signature]*  
 6/25/90

**eh** ESPEY, HUSTON & ASSOCIATES, INC.  
 Engineering & Environmental Consultants  
 17811 Waterview Parkway Dallas, Texas 75252  
 (214) 669-9600

CONSTRUCTION DETAILS

WINNWOOD/BELLBROOK DRAINAGE  
 for  
 THE TOWN OF ADDISON

SHEET NO. 6  
 OF 6 SHEETS  
 JOB NO. 12552