

# SEWER IMPROVEMENT PLAN

## GENERAL NOTES

- NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECT WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT OF WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
- QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.
- WHEN A PORTION OF THE WORK IS TO BE DONE BY THE CITY, THE DEVELOPER AND/OR CONTRACTOR SHALL GIVE THE CITY 60-DAYS NOTICE SO THAT THE DEVELOPER'S WORK AND THE CITY'S WORK CAN BE PROPERLY COORDINATED. THE DEVELOPER SHALL PREPARE AND COMPACT THE SUBGRADE TO ELEVATIONS WITHIN ± .1' OF THE DESIGN ELEVATIONS AND SHALL BE RESPONSIBLE FOR THE CONDITION OF THE SUBGRADE UNTIL ACCEPTED BY THE CITY. THE DEVELOPER SHALL ALSO BE RESPONSIBLE FOR ANY BARRICADING DURING THIS TIME.
- THE DEVELOPER AND/OR CONTRACTOR SHALL CONTACT THE PUBLIC WORKS DEPARTMENT 30 DAYS PRIOR TO BEGINNING CONSTRUCTION TO NEGOTIATE THE COST OF THE CITY'S PORTION OF THE WORK.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
- ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
- WHERE NEW PAVEMENT IS TO JOIN EXISTING PAVEMENT, THE EDGE OF THE EXISTING PAVEMENT SHALL BE TRIMMED IN A SMOOTH AND STRAIGHT LINE. CONSTRUCT MATCH-UP PAVING AS SHOWN ON THE PLANS AND OVERLAY PAVING AS DIRECTED IN THE FIELD TO PRODUCE A SMOOTH SECTION.
- CONSTRUCT DRIVEWAY APPROACHES PER STANDARD DRAWING 302. EXACT SIZE AND LOCATION TO BE STAKED BY THE PRIVATE ENGINEER PRIOR TO CONSTRUCTION OF THE CURB AND GUTTER.
- THE SUBDIVIDER SHALL ARRANGE FOR A SOIL TEST TO BE MADE BY A SOILS ENGINEER AFTER THE STREETS HAVE BEEN PREPARED TO ROUGH GRADE AND PRIOR TO CURB AND GUTTER CONSTRUCTION. DEPTH OF BASE MATERIAL AND A.C. PAVING SHALL BE DETERMINED BY THE CITY OF RIVERSIDE DESIGN STANDARDS AND TEST PROCEDURE. (FOR TRACT ONLY- SEE CHECK LIST ITEM 25 FOR OTHER PLANS.)
- THE DEVELOPER IS RESPONSIBLE FOR PROVIDING ACCESS PAVING. SHOULD THE DEVELOPER AND/OR CONTRACTOR DECIDE TO INSTALL THE ACCESS PAVING PRIOR TO THE CITY COMMENCING ITS PAVING WORK, THE DEVELOPER SHALL COORDINATE HIS INSTALLATION OF ACCESS PAVING ON BOROUGH COURT WITH THE CITY INSPECTOR. FINAL COURSE OF PAVING IN ACCESS AREA TO BE PAID FOR BY DEVELOPER PRIOR TO THE CITY COMMENCING ITS PAVING OPERATION. DEVELOPER SHALL INSTALL TYPE F-1 FLEXIBLE DELINEATORS AT 20' INTERVALS ON OUTGOING TAPES.
- THE DEVELOPER AND/OR CONTRACTOR SHALL CONTACT THE STREET DIVISION (351-6127) TO PICK UP ANY EXISTING STANDARD 180 BARRICADES THAT ARE BEING REMOVED. THE CITY'S INSPECTOR WILL MAKE THE FINAL DETERMINATION ON WHETHER A BARRICADE CAN BE RELOCATED.
- ON ALL AREAS WITHIN PUBLIC RIGHT OF WAY WHERE THE FILL IS ONE (1) FOOT OR GREATER, A LETTER WILL BE REQUIRED FROM THE SOILS ENGINEER, CERTIFYING THE COMPACTION OF THE FILL BELOW SUBGRADE, PRIOR TO ISSUANCE OF THE CONSTRUCTION PERMIT/CUT SHEETS.
- STREET OPENING PERMIT FOR CONSTRUCTION AND/OR MODIFICATION OF TRAFFIC SIGNAL FACILITIES IS REQUIRED.
- ALL TRAFFIC SIGNS SHALL BE INSTALLED PRIOR TO OPENING THE STREETS TO TRAFFIC.
- ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN FIVE DAYS AFTER NOTIFICATION FROM THE CITY INSPECTORS.
- FINAL STRIPING FOR TRAFFIC CONTROL AND/OR PAVEMENT MARKING TO BE THE RESPONSIBILITY OF THE DEVELOPER.
- THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE # 1-800-227-2600, TWO WORKING DAYS BEFORE DIGGING. NO CONSTRUCTION PERMIT WILL BE ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS BEEN PROVIDED AN IQUIRY IDENTIFICATION NUMBER BY U.S.A.
- CONTRACTOR IS TO VERIFY EXISTING SEWER ELEVATION PRIOR TO CONSTRUCTION.
- LOCATION OF LATERALS TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE OWNER. AVOID CONFLICT WITH PROPOSED AND/OR EXISTING FACILITIES.
- NO FINISHED FLOOR ELEVATION SHALL BE LESS THAN 6" ABOVE THE UPPER MANHOLE RIM ELEVATION OF THE SEWER LINE SEGMENT BEING CONNECTED TO, WITHOUT HAVING A PROPER BACKWATER VALVE INSTALLED IN THE LATERAL.
- A PLUG SHALL BE INSTALLED AND WILL REMAIN IN PLACE WHERE THE NEW SEWER UNTIL THE NEW SEWER IS ACCEPTED BY THE CITY.
- THE SEWER CONTRACTOR SHALL ADJUST MANHOLES TO FINAL GRADE AFTER PAVING IS COMPLETED.
- IN PAVEMENT OVERLAY AREAS, ANY DISTRESSED EXISTING PAVEMENT SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE INSPECTOR PRIOR TO OVERLAYING WITH A.C. PAVING.
- THE CONTRACTOR SHALL COORDINATE TRENCHING FOR CABLE TELEVISION WITH OTHER TRENCHING WITHIN THE SUBDIVISION.

## ENGINEER'S NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS 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 WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

### A.P.N.:

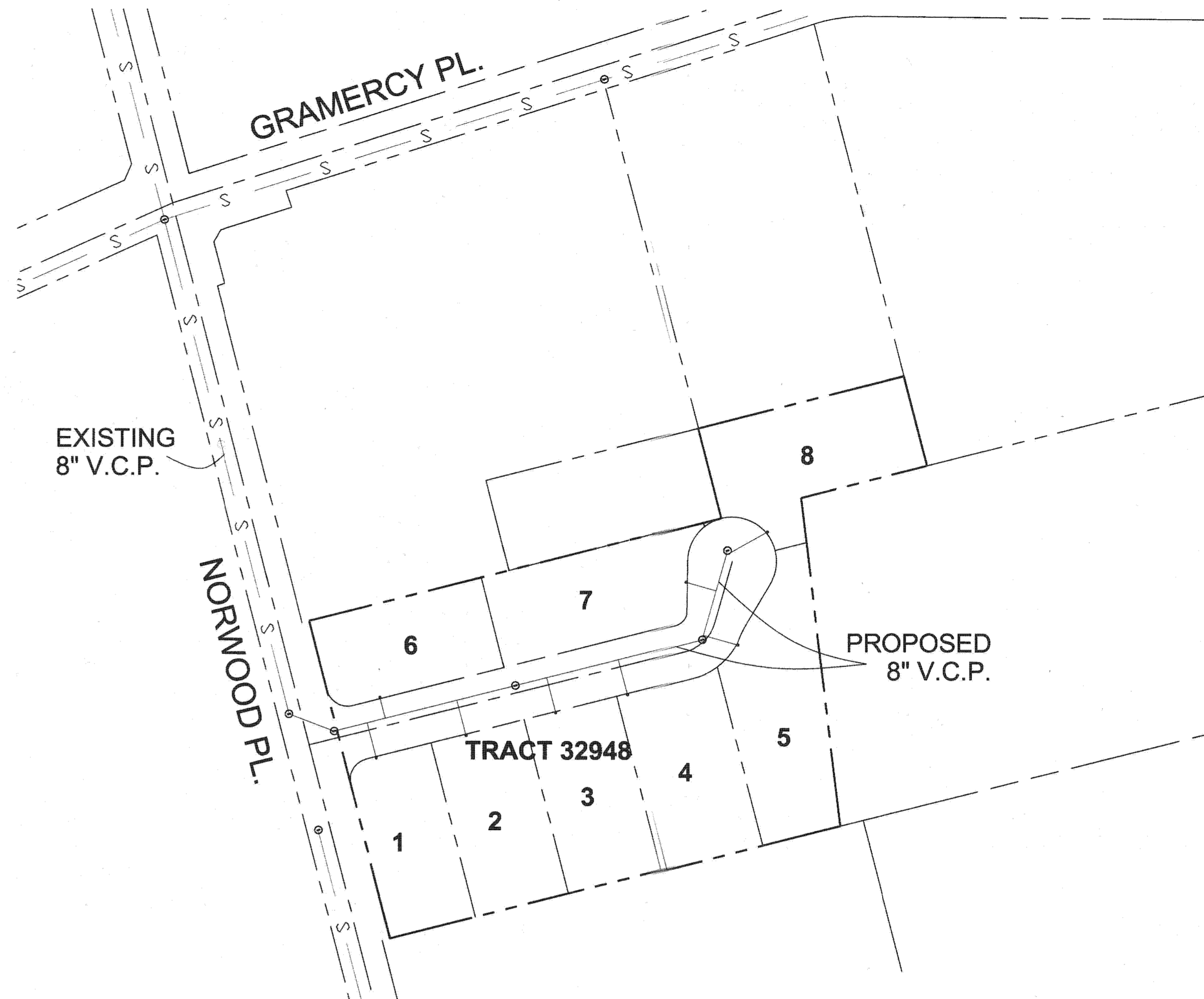
146-090-014, 146-090-032 & 146-090-033

### CONSTRUCTION NOTES:

- REMOVED EXISTING SEWER CLEANOUT
- CONSTRUCT CONCRETE MANHOLE PER CITY STANDARD NO. 500
- INSTALL 8" V.C.P. SEWER PIPE TYPE G JOINTS
- INSTALL SEWER LATERAL WITH CLEANOUT PER CITY STANDARD NO. 562A

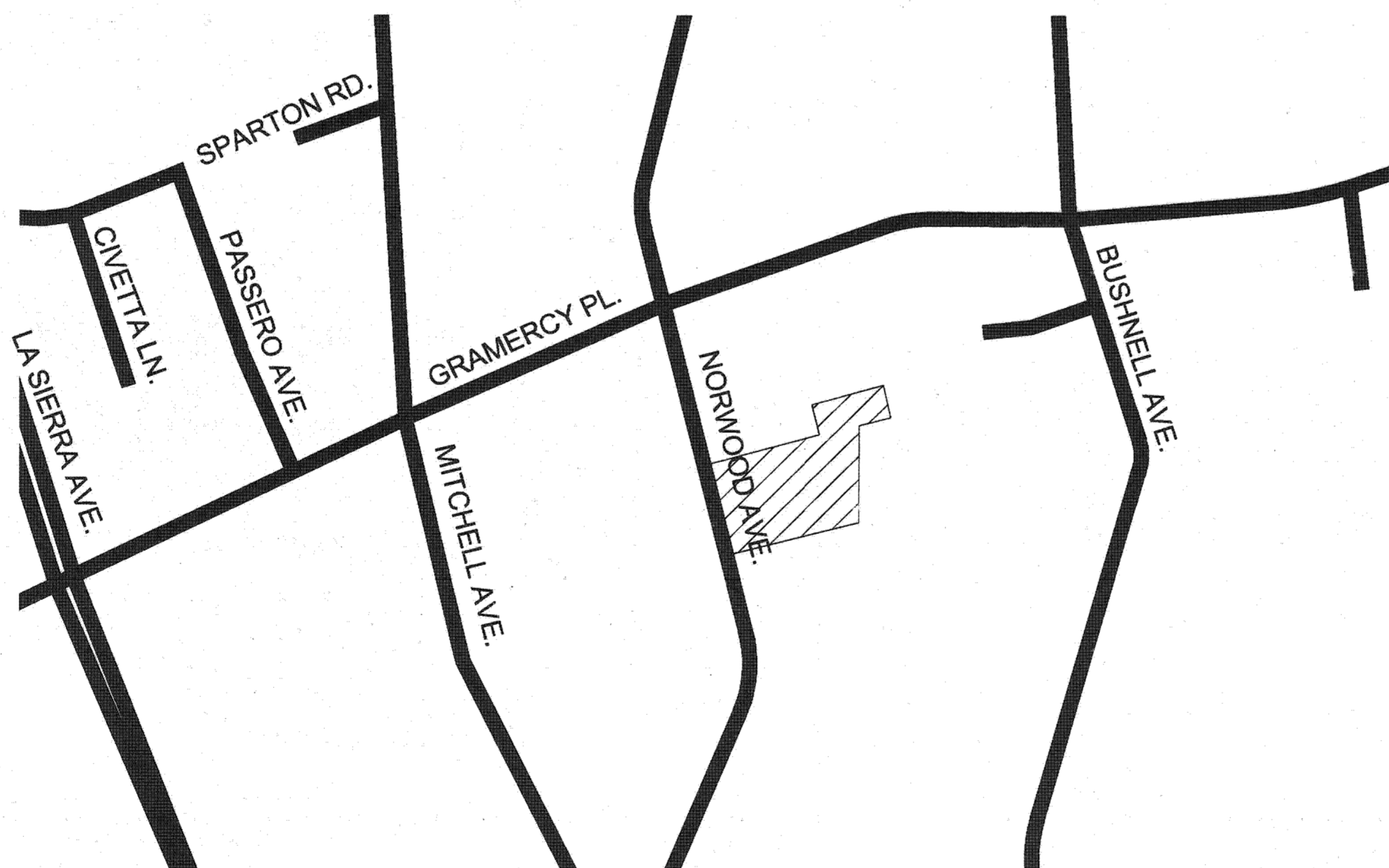
### QUANTITY

- 1 EA.
- 5 EA.
- 540.18 L.F.
- 8 EA.



## INDEX MAP

SCALE: 1" = 100'



## VICINITY MAP

N.T.S.



### ABBREVIATION AND SYMBOLS:

<ul style="list-style-type: none"> <li>★ STREET LIGHT</li> <li>△ FIRE HYDRANT</li> <li>○ MANHOLE</li> <li>SS SANITARY SEWER</li> <li>W WATER</li> <li>SD STORM DRAIN</li> <li>G GAS</li> <li>GV GAS VALVE</li> <li>E ELECTRIC</li> <li>T TELEPHONE</li> <li>SL STREET LIGHT</li> <li>FH FIRE HYDRANT</li> <li>WM WATER METER</li> <li>CB CATCH BASIN</li> <li>CF CURB FACE</li> <li>MAX. MAXIMUM</li> <li>FS FINISHED SURFACE</li> <li>FL FLOW LINE</li> <li>TC TOP OF CURB</li> <li>BCR BEGIN CURB RETURN</li> <li>RCP REINFORCED CONCRETE PIPE</li> <li>PCC PORTLAND CEMENT CONCRETE</li> <li>PCC POINT OF COMPOUND CURVE</li> <li>PRC POINT OF REVERSE CURVE</li> <li>DI DRAIN INLET</li> <li>WV WATER VALVE</li> <li>I.E. INVERT ELEVATION</li> </ul>	<ul style="list-style-type: none"> <li>INV. PROP. INVERT PROPOSED</li> <li>EX. EXIST. EXISTING</li> <li>MH MANHOLE</li> <li>DWG DRAWING</li> <li>TEL. TELEPHONE</li> <li>ELECT. ELECTRICAL</li> <li>NO. NUMBER</li> <li>CONC. CONCRETE</li> <li>STD. STANDARD</li> <li>CL OR CL CENTER LINE</li> <li>FT. FEET</li> <li>AB AGGREGATE BASE</li> <li>AC ASPHALT CONCRETE</li> <li>ECR END CURB RETURN</li> <li>L LENGTH</li> <li>GB GRADE BREAK</li> <li>R/W RIGHT OF WAY</li> <li>TG TOP OF GRATE</li> <li>RR RAILROAD</li> <li>JS JUNCTION STRUCTURE</li> <li>BC BEGINNING OF CURVE</li> <li>ECR END OF CURVE</li> <li>ABS ACRYLONITRILE-BUTADIENE-STYRENE</li> <li>PE POLYETHYLENE</li> <li>SSPWC STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION</li> </ul>
---	--

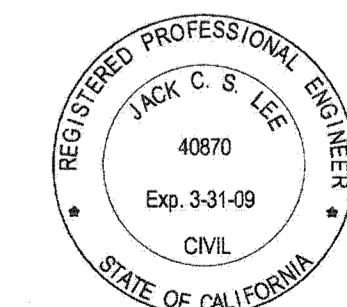
**BENCH MARK:**  
BENCHMARK POINT ID: G1-L3  
RAILROAD SPIKE IN A COMBINATION POWER POLE.  
NO. 28642J IN THE SOUTHEASTERLY CORNER OF  
GRAMERCY PLACE AND NORWOOD AVE

ELEVATION: 747.456 FEET

**Underground Service Alert**

Call: TOLL FREE  
**1-800-227-2600**

TWO WORKING DAYS  
BEFORE YOU DIG



CITY OF RIVERSIDE  
WATER SYSTEM

APPROVED BY: *[Signature]*  
SIGNATURE DATE: 7/24/07

CALLAND ENGINEERING, INC.

576 E. LAMBERT ROAD BREA, CALIFORNIA 92821  
TEL: (714) 671-1050 FAX: (714) 671-1090

APPROVED BY: *[Signature]*  
R.C.E. NO. 40870 EXP. 3-31-09 DATE: Sept. 18, 2007

MARK	REVISION	APPR.	DATE

CITY OF RIVERSIDE  
PUBLIC WORKS DEPARTMENT

APPROVED BY: *[Signature]*  
PRINCIPAL ENGINEER DATE: 7/24/07  
APPROVED BY: *[Signature]*  
PUBLIC WORKS DIRECTOR DATE: 7/24/07

SEWER PLAN  
BOROUGH COURT  
FOR TRACT 32948, RIVERSIDE, CA

HORIZ SCALE: 1" = 20'

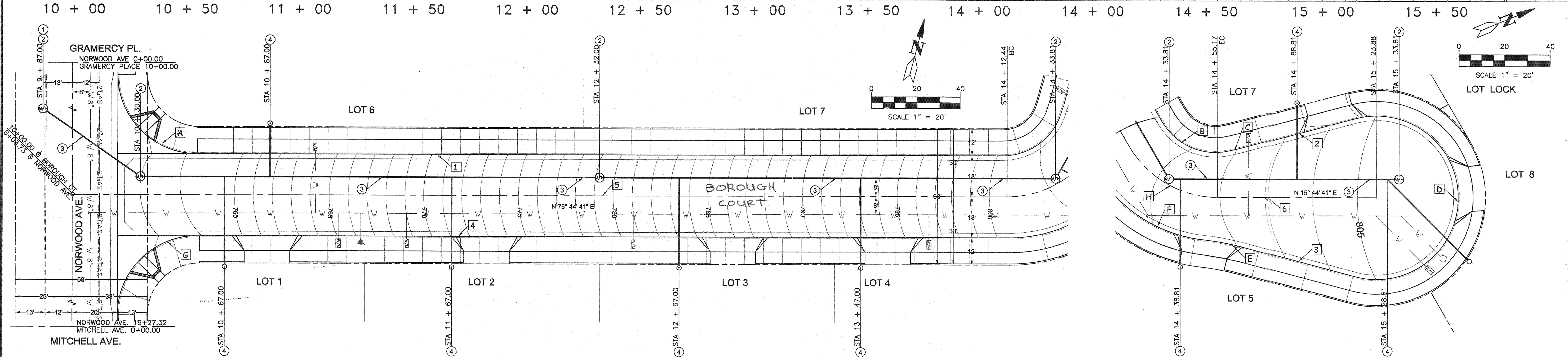
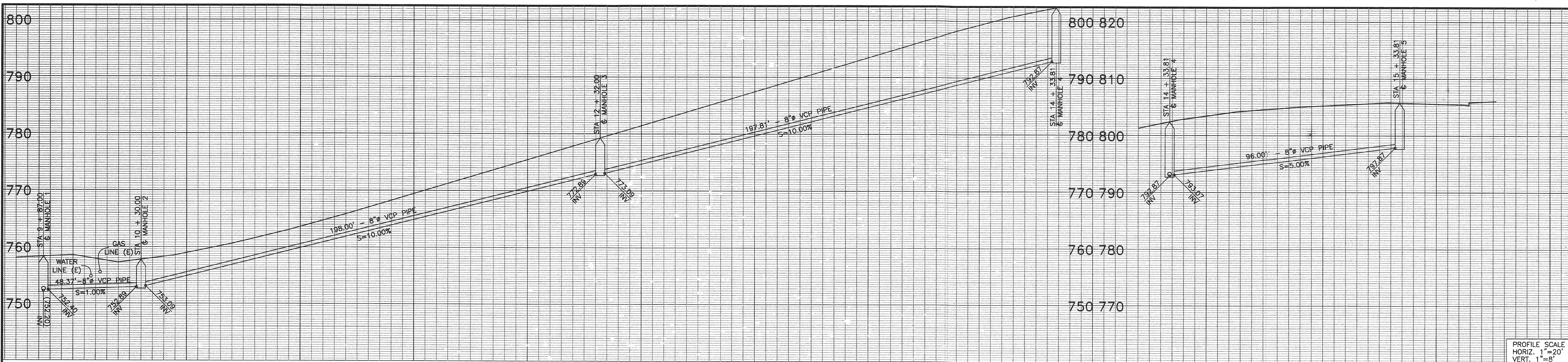
VERT. SCALE: 1" = 8'

PW07-0295

S-2025

1 OF 2 SHEETS

INDEXED 10-15-07 lft



**CONSTRUCTION NOTES:**

- ① REMOVED EXISTING SEWER CLEANOUT
- ② CONSTRUCT CONCRETE MANHOLE PER CITY STANDARD NO. 500
- ③ INSTALL 8" V.C.P. SEWER PIPE TYPE & JOINTS
- ④ INSTALL SEWER LATERAL WITH CLEANOUT PER CITY STANDARD NO. 562A

**NOTES:**

CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL PROPOSED CONNECTION AND CROSSING TO EXISTING UTILITIES PRIOR TO START CONSTRUCTION.

SYMBOL	DELTA	RADIUS	LENGTH	TANGENT
A	90°01'28"	35'	54.99'	35.01'
B	71°21'50"	27'	33.63'	19.39'
C	3°38'10"	115'	7.30'	3.65'
D	210°00'00"	36'	131.95'	134.35'
E	8°53'57"	115'	17.86'	8.95'
F	53°53'57"	63'	59.27'	32.03'
G	89°58'32"	35'	55.35'	34.99'
H	60°00'00"	45'	47.12'	25.98'

SYMBOL	BEARING	LENGTH
1	N75°44'41"E	355.43'
2	N05°44'23"E	49.65'
3	N30°44'59"E	49.65'
4	N75°44'41"E	357.48'
5	N75°44'41"E	412.44'
6	N15°44'41"E	68.71'



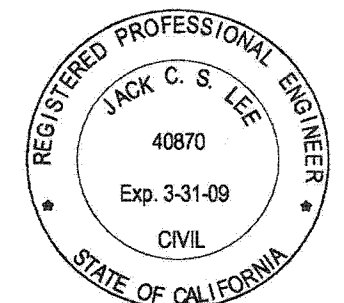
CITY OF RIVERSIDE  
WATER SYSTEM  
APPROVED BY: *[Signature]* 9/29/07  
SIGNATURE DATE

CALLAND ENGINEERING, INC.  
576 E. LAMBERT ROAD  
TEL: (714) 671-1050 FAX: (714) 671-1090  
BREA, CALIFORNIA 92821  
APPROVED BY: *[Signature]* 8-13-07  
R.C.E. NO. 40870 EXP. 3-31-09 DATE

MARK	REVISION	APPR.	DATE
DESIGNED BY:	DRAWN BY:	CHECK BY:	

CITY OF RIVERSIDE  
PUBLIC WORKS DEPARTMENT  
APPROVED BY: *[Signature]* DATE: 9/29/07  
PRINCIPAL ENGINEER  
APPROVED BY: *[Signature]* DATE: 9/29/07  
PUBLIC WORKS DIRECTOR

SEWER PLAN  
BOROUGH COURT  
FOR TRACT 32948, RIVERSIDE, CA  
PW07-0295  
S-2025  
2 OF 2 SHEETS  
HORIZ. SCALE: 1" = 20'  
VERT. SCALE: 1" = 8'



INDEXED 10-15-07 LFT