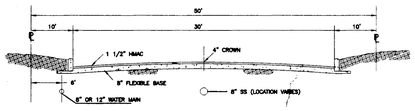


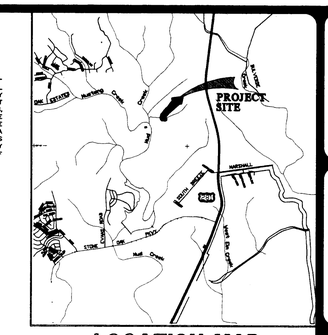
STREET CROSS-SECTION (50' R.O.W.)
N.T.S.

6" D.I. @ F.H.	8" D.I.	8" PVC	12" PVC	12" D.I.
2.0'	4.0'	251.0'	4.0'	4.0'
2.0'		3.0'	280.0'	
1.0'		53.0'	2.0'	
2.0'		778.0'	2.0'	
2.0'		3.0'	214.0'	
1.0'		512.0'		
2.0'		3.0'		
2.0'		548.0'		
1.0'		312.0'		
2.0'		40.0'		
2.0'				
1.0'				
2.0'				
2.0'				
1.0'				
TOTAL:	* 25.0'	** 4.0'	2,503.0'	502.0'	** 4.0'

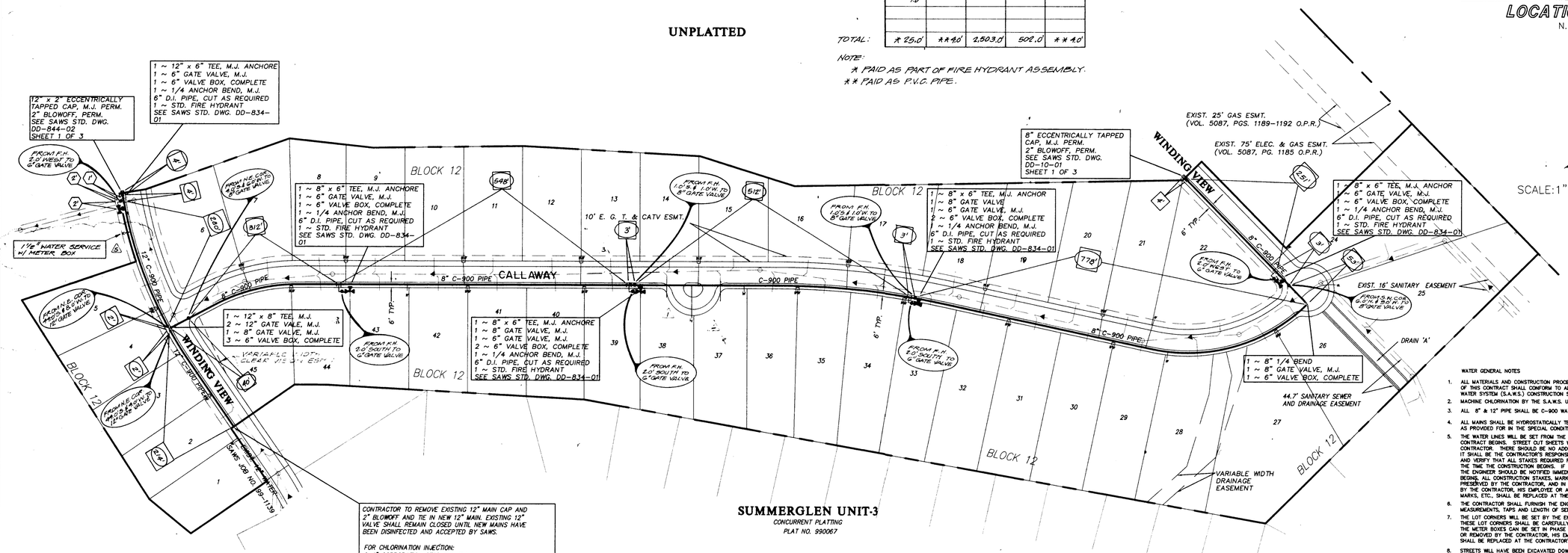
NOTE:
* PAID AS PART OF FIRE HYDRANT ASSEMBLY.
** PAID AS P.V.C. PIPE.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



LOCATION MAP
N.T.S.



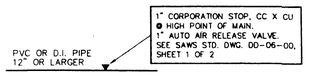
CONTRACTOR TO REMOVE EXISTING 12" MAIN CAP AND 2" BLOWOFF AND TIE IN NEW 12" MAIN. EXISTING 12" VALVE SHALL REMAIN CLOSED UNTIL NEW MAINS HAVE BEEN DISINFECTED AND ACCEPTED BY SAWS.

FOR CHLORINATION INJECTION:
2-1" CORPORATION STOP C.C. X I.P.
2- 1" COMP. X 1r" CPL, CURB STOP
2-1" THD SOLID CAP FOR MACHINE CHLORINATION
2-1" COPPER TUBING, CUT AS REQ.
CONTRACTOR TO PROVIDE A 2" JUMPER CONNECTION TO LOAD NEW MAIN

SUMMERGLEN UNIT-3
CONCURRENT PLATTING
PLAT NO. 990067

MATERIALS:

P.V.C. PIPE _____ J.M.
FITTINGS _____ TYLER
VALVES _____ MUELLER
FIRE HYDRANT _____ MUELLER

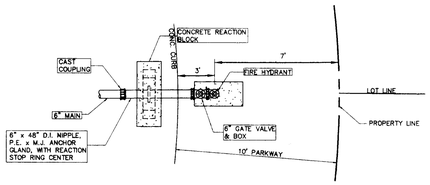


1" AIR RELEASE VALVE DETAIL N.T.S

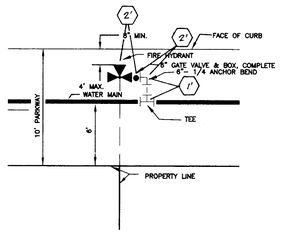
ONLY INSTALL IF REQUIRED BY INSPECTOR
CONTRACTOR TO NOTIFY ENGINEER BEFORE INSTALLATION.

NOTE: Contractor must comply with manufacture's installation of proper restraints. If proper thrust blocking is not installed, contractor must install joint restraints per manufacture's specifications.

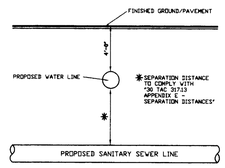
- Double nut all retraints bolts.
- Any type of joint restraint must be bi-directional



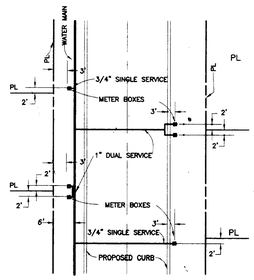
FIRE HYDRANT @ END OF CUL-DE-SAC DETAIL
N.T.S



FIRE HYDRANT INSTALLATION
N.T.S



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
N.T.S



METER BOX LOCATION
N.T.S

No meter boxes to be set in Driveways.
Any meter boxes set in driveways will be relocated at contractors expense.

I HEREBY CERTIFY THAT THIS "PLAN OF RECORD" IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND WAS PREPARED UNDER MY SUPERVISION.

Bruce Mayo

NOTE: INFORMATION FOR "PLAN FOR RECORD" DRAWING WAS PROVIDED TO PAPE-DAWSON ENGINEERS BY THE CONTRACTOR.

WATER GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL CONFORM TO APPLICABLE SAN ANTONIO WATER SYSTEM (S.A.W.S.) CONSTRUCTION SPECIFICATIONS.
2. MACHINE CHLORINATION BY THE S.A.W.S. UNLESS OTHERWISE
3. ALL 8" & 12" PIPE SHALL BE C-900 WATER PIPE
4. ALL MAINS SHALL BE HYDROSTATICALLY TESTED BY THE CONTRACTOR, AS PROVIDED FOR IN THE SPECIAL CONDITIONS.
5. THE WATER LINES WILL BE SET FROM THE STREET HUBS BEFORE THIS CONTRACT BEGINS. STREET CUT SHEETS WILL BE SUPPLIED TO THE CONTRACTOR. THERE SHOULD BE NO ADDITIONAL STAKES REQUIRED, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE SITE AND VERIFY THAT ALL STAKES REQUIRED FOR HIS WORK ARE IN PLACE AT THE TIME THE CONSTRUCTION BEGINS. IF ANY STAKES ARE MISSING, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY. AFTER CONSTRUCTION BEGINS, ALL CONSTRUCTION STAKES, MARKS, ETC., SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR, AND IN CASE OF DESTRUCTION OR REMOVAL BY THE CONTRACTOR, HIS EMPLOYEE OR ANY OTHER MEANS, SUCH STAKES, MARKS, ETC., SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH ALL THE FINAL MEASUREMENTS, TAPS AND LENGTH OF SERVICE CONNECTIONS.
7. THE LOT CORNERS WILL BE SET BY THE ENGINEER FOR ALL WATER SERVICES. THESE LOT CORNERS SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR SO THE METER BOXES CAN BE SET IN PHASE II. ANY LOT CORNER DESTROYED OR REMOVED BY THE CONTRACTOR, HIS EMPLOYEES, OR BY ANY OTHER MEANS, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. STREETS WILL HAVE BEEN EXCAVATED DOWN TO SUBGRADE AND THE PARKWAY WILL BE CUT DOWN TO TOP OF CURB BY THE STREET CONTRACTOR, PRIOR TO CONSTRUCTION OF THE WATER MAINS. IT WILL BE THE UTILITY CONTRACTOR'S RESPONSIBILITY TO PROVIDE A PAD FOR HIS EQUIPMENT.
9. WATER METER BOXES IF APPLICABLE SHALL BE INSTALLED EIGHT FEET FROM FACE OF CURB TO CENTER OF THE METER BOX.
10. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT.

SANITARY SEWER (SAWS)	704-7164
TELEPHONE:	1-800-828-5127
CITY PUBLIC SERVICE (GAS & ELECTRIC)	978-3500
PARAGON CABLE	352-4672
SAWS WATER WORKS INSPECTION	704-7817

11. CONTRACTOR SHALL NOTIFY AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION:
    A) KEN MAHAFFY, SAWS INSPECTION AT 704-7112.
    B) CITY SIDEWALKS AND TRENCH DIVISION AT 734-2131.
    C) THE CITY TRAFFIC ENGINEER AT 207-7760.
    D) JIM WEMHEYER, TXDOT AT 615-5865
12. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.
13. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED AND THE S.A.W.S. RELEASES THE MAIN FOR TIE-IN AND USE.
14. UNIT PRICE BID FOR "STANDARD FIRE HYDRANT ASSEMBLY" SHALL INCLUDE FIRE HYDRANT, 6-INCH GATE VALVE AND 6-INCH VALVE BOX COMPLETE, ANCHOR BEND, AND ALL 6-INCH DI PIPE REQUIRED (DI PIPE REQUIRED SHALL INCLUDE ALL PIPE FROM THE TEE ON THE MAIN LINE TO THE FIRE HYDRANT).
15. WHEN SEWER LINES ARE INSTALLED IN THE VICINITY OF WATER MAINS, SUCH INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS" (1988 OR ANY REVISIONS THERETO).
16. ALL TRENCH BACKFILL FOR THIS PROJECT SHALL BE ACCOMPLISHED IN ONE-FOOT LIFTS COMPACTED TO 95% MAXIMUM DRY DENSITY. NO WATER JETTING WILL BE ALLOWED. OBSERVATION OF TRENCH BACKFILL WILL BE SUPPLEMENTED BY MOISTURE-DENSITY TESTING CONDUCTED AT PERIODIC INTERVALS DURING THE COMPACTION PROCESS. THE CONTRACTOR WILL BE REQUIRED TO MAKE SUITABLE EXCAVATION TO ALLOW ACCESS FOR SUCH TESTING, AND WILL BE REQUIRED TO REMOVE AND REPLACE BACKFILL AS MANY TIMES AS NECESSARY TO ACHIEVE 95% COMPACTION.
17. ALL MAINS ARE ON-SITE.
18. BENDS IN CURVE INCIDENTAL.

"PLAN OF RECORD"
SEPTEMBER 27,2000

S.A.W.S. JOB NO. 00-1045
S.A.W.S. CONTRACT NO. 9228

REVISIONS:
1. REVISED PER REVISE DRAFT PUBLIC NOTICE COMMENTS 8/10/00
2. REVISED PER SAWS COMMENTS 8/30/00
3. REVISED PER CITY OF SAN ANTONIO COMMENTS 11/3/00
4. FIRE HYDRANT REVISION 11/13/00
5. 4/4/2001 RECORD NOTE SERVICE & CLEANOUT

STATE OF TEXAS
BRUCE MAYO
66014
11-13-00

PAPE-DAWSON ENGINEERS
CIVIL & ENVIRONMENTAL
555 EAST RAMSEY SAN ANTONIO TEXAS 78216 210-375-9000

SUMMERGLEN, UNIT-3A
(PLANNED UNIT DEVELOPMENT)
WATER DISTRIBUTION PLAN

PLAT NO. 990393

JOB NO. 4042-05
DATE MAY 1999
DESIGNER JMM
CHECKED BM DRAWN MSD
SHEET 1 OF 1