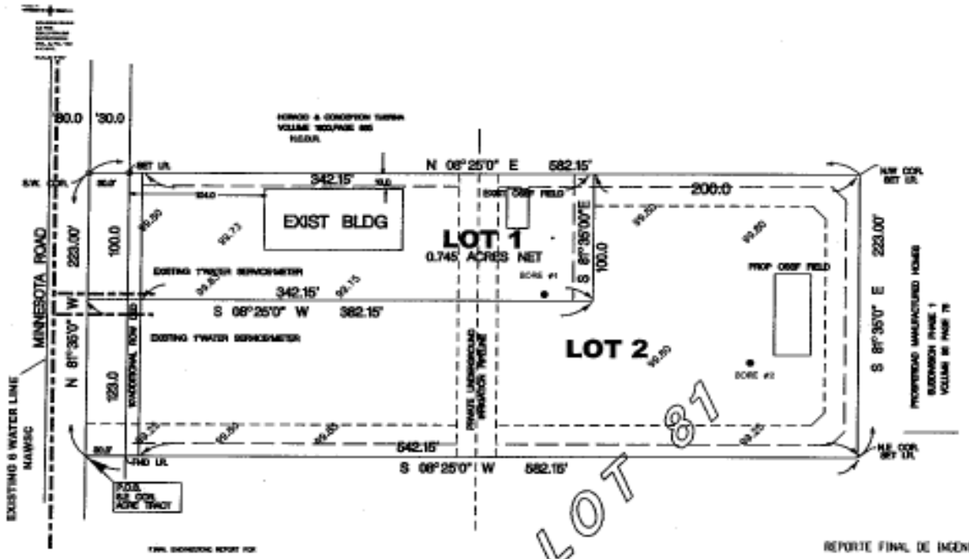


FINAL DRAINAGE REPORT FOR FRANK'S SUBDIVISION

BY RAUL P. FLORES, P.E.

I. Legal Description:
A 2.48 tract of land out of a certain 12.58 acre tract of land out of Lot 81, Kelly - Pharr Subdivision, Hidalgo County, Texas, as recorded in Volume 3, Page 133, Map records of Hidalgo County, Texas.

II. Location:
The proposed subdivision is located approximately 680 feet west of the intersection at "I" Road and Minnesota Road.

III. Proposed Use:
The subdivision will consist of commercial and multi-family use only.

IV. Topography and Soil:
The subdivision has a general slope to the east of the subdivision towards "I" Road with a slope of less than 1%.

V. Topography and Soil:
Lands within said proposed Sepulveda Subdivision falls within FEMA Flood Zones "B"; areas of 500 - year flood; areas of 100 - year flood with average depths of less than one foot or with drainage areas less than one square miles; and areas protected by levees from 100 - year flood; as per FEMA NFIL Flood Insurance Rate Map Community # 480334, Panel # 0425, Index C, as revised June 6, 2000

VI. Drainage Statement:
The subdivision is required to detain 3,476 cf or 0.08 acre feet of runoff or 1,735 cf 0.04 acre feet) per lot. Present drainage flows into Minnesota and "I" Road. The site will be graded with detention pond utilizing green areas as per attached site plan. Detention areas will be maintained by owner. Detention pond areas will be landscaped and sodded. An 8' "bleeder" line will be constructed to connect to the roadside ditch of the paved Minnesota Road.

RAUL P. FLORES PE 39278

FOR REVIEW ONLY NOT FOR RECORDING

FOR REVIEW ONLY - NOT FOR CONSTRUCTION-NOT FOR RECORDING

FINAL ENGINEERING REPORT FOR

WATER DISTRIBUTION FACILITIES DESCRIPTION,COSTS,AND DEPENDABILITY DATES

BY RAUL P.FLORES P.E.

FRANK SEPULVEDA SUBDIVISION CONSISTS OF 2 LOTS AND IS LOCATED 680 FEET WEST OF THE INTERSECTION OF I ROAD AND MINNESOTA ROAD AND IS INSIDE THE D MILE TERRITORIAL JURISDICTION OF THE CITY OF PHARR.WATER SERVICE IS PROVIDED BY THE NORTH ALAMO WATER SUPPLY CORPORATION (NAWSC) THE HOLDER OF THE CERTIFICATE OF CONVENIENCE AND NECESSITY. THE CITY OF PHARR HAS RELINQUISHED ITS SUBDIVISION REVIEW AUTHORITY TO THE COUNTY.

THE NAWSC 12" MAIN ALONG THE SOUTH SIDE OF MINNESOTA ROAD HAS EXISTING 6" DISTRIBUTION. THE DEVELOPER HAS INSTALLED 2 SINGLE WATER SERVICES. THE EXISTING WATER LINE AND THE SERVICE LINES IS SUFFICIENT TO SERVE THE PROPOSED TWO LOTS OF THIS SUBDIVISION. WATER METERS AND ALSO DESIGN PROVIDED BY THE SUBDIVIDER AT A COST OF $ 0.00 ITEMS DUE TO NAWSC FOR THE WATER LINES AND CONNECTION CONSTRUCTION ($ 0.00) INCLUDES MEMBERSHIPS, TAPPING FEES AND INSTALLATION.THE TOTAL AMOUNT OF MONEY PAID TO THE NAWSC FOR WATER LINES AND WATER SERVICE CONNECTION CONSTRUCTION IS $ 0.00. ALL WATERLINE CONSTRUCTION IMPROVEMENTS HAVE BEEN COMPLETED

SEWAGE FACILITIES DESCRIPTION,COSTS,AND DEPENDABILITY DATES

SEWAGE FROM FRANK SEPULVEDA SUBDIVISION WILL BE TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES (OSSF) CONSISTING OF A STANDARD DESIGN (DUAL COMPARTMENT) SEPTIC TANK AND A DRAIN FIELD ON EACH LOT. THE UNDERSIGNED PROFESSIONAL ENGINEER HAS EVALUATED THE DEPENDABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THAT THE SITE IS DESIRABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT.

THE ESTIMATED COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS $1000.00 INCLUDING THE COSTS FOR THE REQUIRED PERMIT AND LICENSE. NO OSSF HAVE BEEN INSTALLED AS THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL. THE SUBDIVISION WILL POST A LETTER OF CREDIT WITH THE FILING OF THIS FINAL PLAT WITH HIDALGO COUNTY TO COVER THE TOTAL SEPTIC SYSTEM COST OF $ 0.00.00. THE SUBDIVIDER WILL INCLUDE THE COST OF A SEPTIC TANK SYSTEM IN THE SALE PRICE OF A LOT. AT ANY TIME AFTER THE LOT IS SOLD THE PURCHASER MAY INITIATE INSTALLATION OF A SEPTIC SYSTEM BY MAILING OR CALLING THE SUBDIVIDER AND THEN FILING WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AN APPLICATION FOR A PERMIT TO CONSTRUCT A SEPTIC SYSTEM. IF ON A LOT BELONGING TO THE SUBDIVIDER NO SEPTIC SYSTEM HAS BEEN INSTALLED AS OF DEC 26,2006 THEN THE COUNTY WILL DRAW IMMEDIATELY ON THE LETTER OF CREDIT AND HAVE THE OSSF INSTALLED.

CERTIFICATION

BY MY SIGNATURE BELOW,I CERTIFY THAT THE WATER AND SEWAGE SERVICE FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL RULES ADOPTED UNDER SECTION 16.343,WATER CODE.I CERTIFY THAT THE ESTIMATED COSTS TO INSTALL UNCONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES,DESCRIBED ABOVE,ARE AS FOLLOWS:WATER FACILITIES - THESE FACILITIES ARE FULLY CONSTRUCTED,EXCEPT FOR THE INSTALLATION OF WATER METERS,WHICH COST A TOTAL OF $0.00.00. THE SUBDIVIDER HAS PAID AN ADDITIONAL TOTAL OF $ 0.00.00 TO NORTH ALAMO TO COVER THE COST OF THE SERVICE LINE INSTALLATIONS.

CERTIFICATION

RAUL P. FLORES
LICENSED PROFESSIONAL ENGINEER No. 39278

SUBDIVIDER CERTIFICATION

1.) BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT,SUBDIVIDER WILL COMPLY WITH MINIMUM STATE STANDARDS AND THAT 6a)WATER QUALITY AND CONNECTIONS INCLUDING WATER METERS TO THE LOTS MEET SUCH STANDARDS AND 6b)SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET OR WILL MEET SUCH STANDARDS AND WILL BE BY THE BUILDER AS REQUIRED BY SECTION 7.25.02 OF THE THE COUNTY REGULATIONS.

SUBDIVIDER STATEMENT:

1.) I WILL FRANK SEPULVEDA SUBDIVIDER OF FRANK'S SUBDIVISION HEREBY CERTIFY SEWER PERMITS ARE REQUIRED PRIOR TO BUILDING ON ANY LOTS THAT ANY ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY & QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS TO THE STATE AS REQUIRED BY SECTION 7.25.02 OF THE COUNTY REGULATIONS.

FRANK SEPULVEDA OWNER DATE

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY APPEARED FRANK SEPULVEDA KNOWN TO ME BY THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FORGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME PURPOSES AND CONSIDERATION THEREIN STATED.GIVEN UNDER MY HAND AND SEAL OF THIS OFFICE, THIS .....DAY OF 2000

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES.....

SEL EVALUATED REPORT INFORMATION						
SOIL SERIES NAME/LINK						
SOIL SERIES	SLOPE	SOIL TEXTURE	PERCOLATION RATE (MINUTES PER INCH)	DEPTH TO WATER TABLE	DEPTH TO BEDROCK	REMARKS
1	0.00-0.0	SANDY LOAM	---	---	NONE	SEL REPORT ATTACHED
2	0.00-0.0	SANDY LOAM				
3	0.00-0.0	SANDY LOAM				
4	0.00-0.0	SANDY LOAM				

SEL EVALUATED REPORT INFORMATION						
SOIL SERIES NAME/LINK						
SOIL SERIES	SLOPE	SOIL TEXTURE	PERCOLATION RATE (MINUTES PER INCH)	DEPTH TO WATER TABLE	DEPTH TO BEDROCK	REMARKS
1	0.00-0.0	SANDY LOAM	---	---	NONE	SEL REPORT ATTACHED
2	0.00-0.0	SANDY LOAM				
3	0.00-0.0	SANDY LOAM				
4	0.00-0.0	SANDY LOAM				

EACH LOT IN THE SUBDIVISION MUST NEED MORE THAN ONE ACRE OF HIGHER AND EXCAVATIONS OF EVALUATION OF LOCATION SUITABLE FOR THE SUBDIVISION EXCAVATIONS HAVE BEEN PERFORMED ON EACH LOT. THESE EXCAVATIONS SUITABLE FOR SEPTIC TANK USE. EXCAVATIONS WERE PERFORMED ON EACH LOT. LOCATION OF THE EXCAVATIONS WERE MADE BY THE PROFESSIONAL ENGINEER. THE EXCAVATIONS WERE MADE BY THE PROFESSIONAL ENGINEER. THE EXCAVATIONS WERE MADE BY THE PROFESSIONAL ENGINEER.

CADA LOTE EN LA SUBDIVISION NOS NECESITA MAS DE HECTAREA POR EXCAVACIONES DE EVALUACION DE LOCACION SUITABLE EN LA SUBDIVISION EXCAVACIONES HAN SIDO PERFORMADO EN CADA LOTE. LOCACION DE EXCAVACION SUITABLE PARA EL TANQUE EN ESTA AREA ES SUMAMENTE IMPORTANTE. EXCAVACIONES HAN SIDO PERFORMADO POR EL INGENIERO PROFESIONAL. EXCAVACIONES HAN SIDO PERFORMADO POR EL INGENIERO PROFESIONAL.

REPORTE FINAL DE INGENIERIA PARA LA SUBDIVISION DE FRANK SEPULVEDA.

FRANK SEPULVEDA SUBDIVISION CONSISTE DE 2 LOTES Y ESTA LOCALIZADO APROXIMADAMENTE 680 PIES AL OESTE DE LA INTERSECCION DE "I"ROAD Y MINNESOTA, Y ESTA DENTRO DE EL TERRITORIO DE PHARR, SERVIDO DE AGUA DE UN MEDIDOR DE NORTH ALAMO WATER SUPPLY NAWSC.

LA COMPAÑIA OBANSEL ON LOCALIZADO 6000 LINEA DE 6 PULGADAS AL LADO SUR DE LA CALLE MINNESOTA. EL DUEÑO DE LA SUBDIVISION INSTALO DOS SERVICIOS DE AGUA DE UNA ESTRADADAS (1-900 OR 25 FEET). LA SUBDIVISION HASTA HOSTA CONECTADA A UNA LINEA DISTANTE DE 6 PULGADAS.

LOS MEDIDORES MECANICOS DE AGUA SERAN PROPORCIONADOS POR EL SUBDIVISOR A COSTO DE $0.00.00(0.00). ESTE PRECIO NO INCLUYE LA CONSTRUCCION O LINEA DE AGUA Y SERVICIOS QUE SE LE PAGO A LA COMPAÑIA DE NAWSC,INC. QUE FUE 1 $0.00.00 LAS MEDIDORES DE AGUA ESTAN EXISTENTES Y LISTOS TODOS LOS CARGOS FUERON PAGADOS POR EL DEVELOPER.

DRENAJE: DESCRIPCION,DATOS Y FECHA DE INICIO PARA LA SUBDIVISION.

SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL INGENIERO PROFESIONAL DE ESTE DOCUMENTO HA EVALUADO EL AREA DONDE SE ENCUENTRA LA SUBDIVISION Y HA PREPARADO UN REPORTE QUE CONCLUYE QUE ESTE TERRENO ES ADECUADO PARA FOSAS SEPTICAS PARA EL. EL REPORTE FUE APROBADO POR LA DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HIDALGO COUNTY HEALTH DEPARTMENT.

SE ESTIMA QUE EL COSTO DE INSTALAR UNA FOSA SEPTICA EN EL SOLAR SERA DE APROX. $1000 ESTE PRECIO INCLUYE LOS GASTOS PARA EL PERMISO Y LA LICENCIA. A LA HORA DE LA EMPRESA DE LA SOLICITUD DE APROBACION FINAL DE LA SUBDIVISION EL NORTH ALAMO WATER SUPPLY CORPORATION HA ESTIMADO QUE EL DUEÑO DE LA SUBDIVISION INCLUIRA EL COSTO DEL SISTEMA DE FOSA SEPTICA PARA CADA EL SOLAR. EL DUEÑO PARA EL SISTEMA SEPTICO COMPRA DE INSTALAR LA SOLICITUD PARA UN PERMISO DE LA COMPAÑIA DEL SOLAR. CUANDO EL SOLAR FUERE VENDIDO LA INSTALACION DEL SISTEMA SEPTICO PODRAHSER HECHO POR EL COMPRADOR DE UN DUEÑO DE LA SUBDIVISION EL INGENIERO EL PERMISO DE CONSTRUCCION DE LA FOSA SEPTICA. SI FAMA EL DUEÑO DE LA SUBDIVISION INSTALARA EL SISTEMA SEPTICO PERSONALMENTE AL DUEÑO DE LA SUBDIVISION TENDRA QUE OBTENER EL MEMORANDUM DE LA SOLICITUD PARA UN SISTEMA SEPTICO PARA EL. SI NO SE HA INSTALADO UNA FOSA SEPTICA PARA EL SOLAR EL DUEÑO DE LA SUBDIVISION LE PAGARA UN TOTAL DE $1000.00 A NORTH ALAMO WATER SUPPLY CORPORATION PARA LA INSTALACION DEL SISTEMA SEPTICO. CUANDO EL SOLAR FUERE VENDIDO LA INSTALACION DEL SISTEMA SEPTICO SERA INSTALADO EL DUEÑO DE LA SUBDIVISION LE PAGARA UN TOTAL DE $1000.00 A NORTH ALAMO WATER SUPPLY CORPORACION PARA LA INSTALACION DEL SISTEMA SEPTICO.

CERTIFICACION

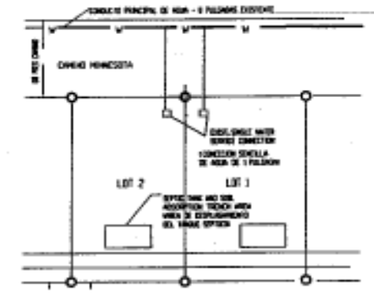
CON MI FIRMA,CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE,DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS MODEL SUBDIVISION RULES (LAS REGLAS CONSIDERADAS A LAS SUBDIVISIONES) ADOPTADAS EN LA SECCION 16.343 DEL TEXAS WATER CODE (CODIGO DE AGUA DE TEXAS).CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DE DRENAJE SERA ASI:EL SISTEMA/SERVICIO DE AGUA SERA INSTALADO Y COMPLETAMENTE CONSTRUIDO MENOS EL MEDIDOR MECANICO DE AGUA QUE CONTARAN HONRADAMENTE POR SOLAR.EL DUEÑO DE LA SUBDIVISION LE HA PAGADO UN TOTAL DE $1000.00 A NORTH ALAMO WATER SUPPLY CORPORACION PARA LA INSTALACION DEL SERVICIO DE AGUA.

MEDIDORES DE AGUA,MECANICO(4 X $0.00)	$ 0.00.00
SERVICIO DE AGUA PERMISO:	$ 0.00.00
SERVICIO DE DRENAJE SANITARIO	$ 0.00.00
DRENAJE PLUVIAL:	$ 0.00.00

RAUL P. FLORES
LICENSED PROFESSIONAL ENGINEER No. 39278

BY MY SIGNATURE I CERTIFY THAT THIS SUBDIVISION FALLS IN
Lands within said proposed Sepulveda Subdivision falls within FEMA Flood Zones "B"; areas of 500 - year flood; areas of 100 - year flood with average depths of less than one foot or with drainage areas less than one square miles; and areas protected by levees from 100 - year flood; as per FEMA NFIL Flood Insurance Rate Map Community # 480334, Panel # 0425, Index C, as revised June 6, 2000

RAUL P. FLORES PE 39278



TYPICAL DETAIL OF SERVICE LINES AND WATER METER BOXES
DETALLE TIPICO DE LA LINEA DEL SERVICIO Y MEDIDORES DE AGUA

NO.	SHEET	REVISION	DATE	APPROVED

SHEET 1 — [illegible]

SHEET 2 — [illegible]

SHEET 3 — [illegible]

FLORES ENGINEERS

ENGINEERING REPORT
FRANKS SUBDIVISION

DATE OF PREPARATION
3/28/2007
REVISED

...\03-ENGINEERING REPORT.dgn 2/27/2008 2:54:30 PM