

FINAL WATER AND SEWER ENGINEERING REPORT FORMAT

(If installing the Water Distribution System and utilizing a Letter of Credit for OSSF prior to the subdivision receiving final approval.)

WATER SUPPLY: DESCRIPTION, COST, AND OPERABILITY DATE:

GEO ACRES NO.2 SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY NORTH EVEREST WATER SUPPLY CORPORATION (N.E.W.S.C.). THE SUBDIVIDER AND N.E.W.S.C. HAVE ENTERED INTO A CONTRACT IN WHICH N.E.W.S.C. HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND N.E.W.S.C HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

N.E.W.S.C. HAS AN EXISTING 6" DIAMETER WATER LINE RUNNING ALONG THE EAST SIDE OF THE RIGHT-OF-WAY OF MILE 8 WEST ROAD AND AN EXISTING 8" DIAMETER WATER LINE RUNNING ALONG THE SOUTH SIDE OF THE RIGHT-OF-WAY OF FM 1981 (HOYLE RD). THE WATER SYSTEM FOR GEO ACRES NO.2 SUBDIVISION CONSISTS OF A 6" DIAMETER WATER LINE THAT TAPS INTO THE EXISTING 6" LINE. THIS 6" LINE THEN RUNS EAST ALONG THE SOUTH SIDE OF SOL AVE. RIGHT-OF-WAY ENDING WITH A FLUSH VALVE ON THE NORTH EAST CORNER OF LOT 14. ANOTHER 6" LINE RUNS SOUTH ALONG THE WEST SIDE OF LUNA AVE. RIGHT-OF-WAY TAPPING TO THE EXISTING 8" LINE ON THE SOUTH SIDE OF FM 1981 (HOYLE RD.). ANOTHER 6" LINE TAPS INTO THE 6" WATER LINE ALONG THE WEST SIDE OF THE RIGHT-OF-WAY OF LUNA AVE RUNNING WEST ALONG THE SOUTH SIDE OF MAR AVE, THEN TURNING SOUTH ALONG THE EAST SIDE OF ECLIPSE AVE., AND THEN TURNING EAST ON THE NORTH SIDE OF TIERRA AVE. TAPPING TO THE 6" LINE ON WEST SIDE OF LUNA AVE RIGHT-OF-WAY.

WATER DISTRIBUTION FOR THE GEO ACRES No. 2 CONSISTS OF THIRTY -1" DIAMETER DUAL SERVICE LINES RUN TO PAIRS OF LOTS BEFORE SPLITTING INTO ¾" DIAMETER SERVICE LINES AND FIVE -¾" DIAMETER SINGLE SERVICE LINES. SAID SERVICES TERMINATE AT THE WATER METER BOXES FOR EACH LOT. THE 6" LINE, THE DUAL SERVICES AND ¾" SINGLE SERVICES, AND THE METER BOXES HAVE ALREADY BEEN INSTALLED, AT A TOTAL COST OF \$57,870.00, OR \$890.31 PER LOT. IN ADDITION, THE SUBDIVIDER HAS PAID N.E.W.S.C. THE SUM OF \$25,780.00, WHICH COVERS THE \$396.62 COST PER LOT AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, RIGHTS ACQUISITION FEES, AND ALL MEMBERSHIP OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO N.E.W.S.C. UPON REQUEST BY THE LOT OWNER, N.E.W.S.C. WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER HAS INSTALLED 5 FIRE HYDRANTS AT A UNIT COST OF \$1,500.00 FOR A TOTAL COST OF \$7,500.00. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY N.E.W.S.C. AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT

SEWAGE FACILITIES DESCRIPTION; COST AND OPERABILITY DATES

SEWAGE FROM GEO ACRES No.2 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 SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THAT THE SITE IS SUITABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

SOIL EVALUATION REPORT:

EACH LOT IN THE PROPOSED SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY LOAM SOIL FOR THE AREA. AT LEAST TWO SOIL EXCAVATIONS WERE PERFORMED ON THE SITE, AT OPPOSITE ENDS OF THE PROPOSED DISPOSAL AREA. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMIT AREA). THE SOIL IS A UNIFORM SANDY LOAM EXTENDING UP TO 36" BELOW THE BOTTOM OF ANY PROPOSED EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS. THE SUBDIVISION DRAINS WELL

THE ESTIMATED COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$1,500.00, INCLUDING THE COSTS FOR THE REQUIRED PERMIT AND LICENSE. NO OSSF'S HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL. THE SUBDIVIDER WILL POST A LETTER OF CREDIT WITH THE FILING OF THIS FINAL PLAT WITH HIDALGO COUNTY TO COVER THE TOTAL SEPTIC SYSTEM COST OF \$97,500.00. THE SUBDIVIDER WILL INCLUDE THE COST OF A SEPTIC TANK SYSTEM IN THE SALE PRICE OF THE LOT. AT ANY TIME AFTER THE LOT IS SOLD, THE PURCHASER MAY INITIATE INSTALLATION OF A SEPTIC SYSTEM BY WRITING 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 (60 DAYS BEFORE LETTER OF CREDIT EXPIRATION DATE) THEN THE SUBDIVIDER SHALL RENEW HIS/HER LETTER OF CREDIT WITH THE COUNTY. IF HE/SHE CHOOSES NOT TO RENEW THE LETTER OF CREDIT, THEN HE/SHE MUST OBTAIN THE PROPER PERMITS AND INSTALL ALL SEPTIC TANK SYSTEM BY (LETTER OF CREDIT EXPIRATION DATE). IF THE DEVELOPER FAILS TO RENEW HIS/HER LETTER OF CREDIT OR INSTALL ALL SEPTIC TANKS BY THE AFOREMENTIONED DATES, THEN THE COUNTY IN ACCORDANCE WITH THE EXECUTED SUBDIVISION CONSTRUCTION AGREEMENT WILL INITIATE THE DRAW DOWN OF THE LETTER OF CREDIT TO INSTALL THE REMAINING SYSTEMS. IF ON A LOT BELONGING TO SOMEONE OTHER THAN THE SUBDIVIDER NO SEPTIC SYSTEM HAS BEEN INSTALLED AS OF (60 DAYS BEFORE LETTER OF CREDIT EXPIRATION DATE) THEN THE SUBDIVIDER WILL FIRST REMIND THE LOT OWNER OF THE AVAILABILITY OF THE SEPTIC SYSTEM. UNLESS THE LOT OWNER THEN PROMPTLY INITIATES THE INSTALLATION OF THE SEPTIC SYSTEM BY NOTIFYING THE SUBDIVIDER AND FILING AN APPLICATION FOR A PERMIT TO CONSTRUCT THE SYSTEM, THE SUBDIVIDER WILL EXERCISE HIS/HER RETAINED RIGHT OF ENTRY AND HIS/HER OBTAINED POWER OF ATTORNEY SO THAT HE/SHE MAY INSTALL THE SEPTIC SYSTEM, OR SUBMIT TO THE COUNTY A RENEWAL OF THE LETTER OF CREDIT FOR THOSE SYSTEMS THAT HAVE NOT BEEN INSTALLED.

AT ANY TIME AFTER THE LOT IS SOLD, THE PURCHASER MAY INITIATE INSTALLATION OF AN OSSF SYSTEM BY WRITING OR CALLING THE SUBDIVIDER. SUBDIVIDER SHALL BE RESPONSIBLE TO FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AN APPLICATION FOR A PERMIT TO INSTALL AN OSSF. THE OSSF SYSTEM SHALL BE INSTALLED ON THE LOT PRIOR TO THE COUNTY ISSUING A FINAL LIGHT AND WATER CLEARANCE.

IN ANY EVENT, ALL SEPTIC SYSTEMS WILL BE INSTALLED ON EACH LOT BY (LETTER OF CREDIT EXPIRATION DATE). UNLESS THE SUBDIVIDER RENEWS HIS/HER LETTER OF CREDIT TO COVER THE UNINSTALLED SEPTIC TANK SYSTEMS FOR AN ADDITIONAL TIME PERIOD AS APPROVED BY THE COUNTY OF HIDALGO. SEPTIC TANK SYSTEMS SHALL BE INSTALLED ON THE LOT PRIOR TO THE COUNTY ISSUING A FINAL LIGHT AND WATER CLEARANCE.

ENGINEER 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 COSTS TO INSTALL THE WATER AND THE UNCONSTRUCTED ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES - THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$83,650.00 WHICH EQUALS TO \$1,327.77 PER LOT.

SEWAGE FACILITIES - SEPTIC SYSTEM IS ESTIMATED TO COST \$1,500.00 PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$97,500.000 FOR THE ENTIRE SUBDIVISION.

ENGINEER'S SIGNATURE

DATE

