DETENTION POND
GENERAL REQUIREMENTS, CONSTRUCTION SPECIFICATION, NOTES
REQUIREMENTS AND CONDITIONS

1. DRAWINGS AND SPECIFICATIONS MAY BE EXAMINED AND INFORMATION OBTAINED

HARRIS COUNTY FLOOD CONTROL DISTRICT 9900 NORTHWEST FREEWAY, SUITE 220 HOUSTON, TEXAS 77092 COLLEEN O'BRIEN, P.E. (713) 684-4050

"THE ENGINEER" AS REFERRED TO IN THESE NOTES AND SPECIFICATIONS SHALL MEAN THE H.C.F.C.D.'S REPRESENTATIVE.

- 2. THE CONTRACTOR MUST BE FAMILIAR WITH HARRIS COUNTY AND HARRIS COUNTY FLOOD CONTROL DISTRICT (HCFCD) CONTRACTING PROCEDURES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR MUST OBTAIN A RIGHT-OF-WAY AGREEMENT FROM THE HARRIS COUNTY FLOOD CONTROL DISTRICT PRIOR TO WORKING ON SITE.
- 3. THE CONTRACTOR AGREES THAT HCFCD SHALL BE AN ADDITIONAL INSURED ON ALL OF THE POLICIES LISTED ABOVE WITH THE EXCEPTION OF THE WORKER'S COMPENSATION INSURANCE. THE INSURANCE COMPANIES SHALL HAVE NO RECOURSE AGAINST THE HCFCD, ITS EMPLOYEES OR OFFICIALS FOR PAYMENT OF ANY PREMIUM OR FOR ASSESSMENT UNDER ANY MUTUAL FORM OF POLICY.
- 4. THE PROVISIONS OF THE HARRIS COUNTY GENERAL REQUIREMENTS AND COVENANTS AND THE SUPPLEMENTARY CONDITIONS SHALL APPLY TO THIS PROJECT.
- 5. THE CONTRACTOR SHALL BE AWARE OF THE SPECIAL NOTICE TO CONTRACTORS, DATED 10-8-91, AND APPROVED BY HARRIS COUNTY COMMISSIONER'S COURT ON JULY 23, 1962. THIS "NOTICE" ADDRESSES THE HANDLING OF CONSTRUCTION MATERIALS, EXCAVATION EQUIPMENT OR OTHER ITEMS REQUIRED IN THE COMPLETION OF THIS PROJECT ON PUBLIC ROADS AND STREETS.
- 6. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE IF ANY PORTION OF THESE SPECIFICATIONS ARE AFFECTED BY ANY EXISTING FEDERAL, STATE OR CITY LAWS. THIS IS PARTICULARLY TRUE OF THE FEDERAL WAGE AND HOUR LAW CONCERNING WORK THAT IS CONSTRUED AS BEING COVERED BY THE INTERSTATE COMMERCE CLASSIFICATION.
- 7. THE CONTRACTOR SHALL ACQUIRE ALL PERMITS REQUIRED BY ANY*AND ALL GOVERNMENTAL AGENCIES. A MANIFEST OF THE EXCAVATED MATERIAL SHOWING THE LOCATION AND PERMIT(S) TO DISPOSE OF SAID MATERIAL SHALL BE FURNISHED TO THE HARRIS COUNTY FLOOD CONTROL DISTRICT BY THE CONTRACTOR WHEN APPLICABLE.
- 8. SHOULD ANY CONTRACT SPECIFICATION ITEMS CONFLICT WITH LOCAL ORDINANCES, LOCAL, STATE OR FEDERAL LAWS, THAT PORTION OF THE SPECIFICATIONS SHALL BE SUPERSEDED BY THAT PORTION OF ORDINANCES OR LAW GOVERNING SAME. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH CONFLICT.
- 9. ANY RIVER, BAYOU, CREEK OR OTHER DRAINAGE CHANNEL AT OR WITHIN THE PROJECT SHALL BE LEFT OPEN TO FLOW AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING FLOW OBSTRUCTIONS BY ITS CONSTRUCTION OPERATIONS.
- 10. THE CONTRACTOR SHALL PROVIDE FLAG MEN AND TRAFFIC CONTROL AS REQUIRED FOR PUBLIC SAFETY AND LOCAL ORDINANCES. TRAFFIC SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 11. UNTIL THE ACCEPTANCE OF THE WORK BY THE ENGINEER IS EVIDENCED IN WRITING. IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR, THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST INJURY OR DAMAGE TO ANY PART THEREOF BY THE ACTION OF THE ELEMENTS OR ANY CAUSE WHETHER ARISING FROM THE EXECUTION OR FROM THE NON-EXECUTION OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD AT HIS OWN EXPENSE ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK BEFORE ITS COMPLETION AND ACCEPTANCE. THE CONTRACTOR SHALL MAINTAIN THE PROJECT IN FIRST CLASS CONDITION UNTIL FINAL ACCEPTANCE.
- 12. THE CONTRACTOR IS CAUTIONED THAT IN HAULING EXCAVATED MATERIAL AND OTHER CONSTRUCTION MATERIAL UPON PUBLIC STREETS AND THOROUGHFARES, WHATEVER MEANS ARE NECESSARY SHALL BE USED TO PREVENT SOIL AND OTHER FOREIGN MATERIAL FROM LITTERING STREETS AND THOROUGHFARES. IN THE EVENT THAT THESE HAULING THOROUGHFARES BECOME HAZARDOUS OR CLUTTERED, AS A RESULT OF THE CONTRACTOR'S FAILURE TO PREVENT SPILLAGE OF MATERIALS ON THE THOROUGHFARES, THE CONTRACTOR WILL REMOVE THIS MATERIAL IMMEDIATELY FOR THE PROTECTION OF THE TRAVELING PUBLIC. THE CONTRACTOR IS CAUTIONED ABOUT CREATING DUST IN DEVELOPED AREAS. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PREPARE THE POLLUTION PREVENTION PLAN (PPP) AND THE LETTER OF INTENT FOR OBTAINING THE PROPER NPDES PERMITS, FOR THE ENGINEER'S REVIEW. THE PPP SHALL BE PREPARED IN ACCORDANCE WITH THE "STORM WATER MANAGEMENT HANDBOOK FOR CONSTRUCTION ACTIVITIES".

DETENTION POND
GENERAL REQUIREMENTS, CONSTRUCTION SPECIFICATIONS, NOTES
REQUIREMENTS AND CONDITIONS (CONTINUED)

- 13. WHEN THE CONTRACTOR HAS COMPLETED HIS CONSTRUCTION STAKING, BASED ON THE HCFCD'S MONUMENTATION, HE SHALL NOTIFY THE ENGINEER FOR APPROVAL, AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS.
- 14. UPON WRITTEN NOTICE FROM THE CONTRACTOR THAT THE ENTIRE WORK OR AN AGREED PORTION THEREOF IS COMPLETE, THE ENGINEER WILL MAKE A FINAL INSPECTION WITH THE HCFCD AND CONTRACTOR AND WILL NOTIFY THE CONTRACTOR IN WRITING OF ALL PARTICULARS IN WHICH THIS INSPECTION REVEALS THAT THE WORK IS INCOMPLETE OR DEFECTIVE. THE CONTRACTOR SHALL IMMEDIATELY TAKE SUCH MEASURES AS ARE NECESSARY TO REMEDY SUCH DEFICIENCIES.
- 15. AFTER THE PROJECT IS COMPLETE A ONE YEAR MAINTENANCE PERIOD BEGINS. INCLUDED IN THE RESPONSIBILITY IS MAINTAINING THE PROJECT. REPAIRING THE PROJECT AND MOWING THE PROJECT TO THE EXTENT NECESSARY FOR ESTABLISHING TURF TO PREVENT EROSION, MOWING FOR SUCH PURPOSE SHALL BE PERFORMED A M'NIMUM OF TWICE DURING THE ONE—YEAR MAINTENANCE PERIOD OR AS THE FLOOD CONTROL DISTRICT MAY OTHERWISE REASONABLY REQUEST IN WRITING.
- 16. AT THE END OF THE ONE—YEAR MAINTENANCE PERIOD THE FLOOD CONTROL DISTRICT WILL PERFORM THE FINAL INSPECTION. ANY DEFICIENCY NOTED SHALL BE PROMPTLY CORRECTED BY THE CONTRACTOR.
- 17. NO OVER-EXCAVATION OF THE SITE SHALL BE ALLOWED.

CAUTION: UNDERGROUND GAS FACILITIES

LOCATION OF ENTEX MAIN LINES (TO INCLUDE UNITED GAS TRANSMISSION AND/OR INDUSTRIAL GAS SUPPLY CORPORATION WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATELY LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 223-4567 OR 1-800-699-8344 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK AND AGREE TO BE FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

DETENTION POND GENERAL NOTES

- 1. THE LOCATIONS OF UTILITIES ARE SHOWN IN AN APPROXIMATELY WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
- 2. THE CONTRACTOR, WHEN THE STRIPPING OPERATION BEGINS, SHALL STOCKPILE ALL TOPSOIL IN A LOCATION SELECTED BY THE ENGINEER. ONLY TOPSOIL AND SELECT MATERIAL SHALL BE STOCKPILED. THIS STRIPPING OPERATION SHALL CONSIST OF STRIPPING THE EXISTING TOPSOIL TO APPROXIMATELY FOUR (4) TO SIX (6) INCHES DEEP AND STOCKPILE THE MATERIAL IN THE DESIGNATED AREA. THE TOPSOIL SHALL BE USED TO BRING THE DETENTION BASIN TO ITS FINAL GRADE IN ACCORDANCE WITH HCFCD STANDARD SPECIFICATIONS SECTION 02920 "FURNISHING AND PLACING TOPSOIL".
- 3. ENGINEER SHALL SUBMIT LETTER AND RECORD DRAWINGS TO HARRIS COUNTY FLOOD CONTROL DISTRICT, WATERSHED MANAGEMENT DEPARTMENT, REQUESTING INSPECTION AND ACCEPTANCE OF ITEMS CONSTRUCTED IN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT—OF—WAY. PRIOR TO REQUESTING INSPECTION, THE DRAINAGE RIGHT—OF—WAY AND/OR EASEMENTS SHALL BE STAKED AND FLAGGED. THE RECORD DRAWINGS SHALL INCLUDE AS—BUILT ELEVATIONS, LIMITS OF EXCAVATION AND THE ESTIMATED QUANTITY OF EXCAVATION REMOVED FROM THE SITE.
- 4. BACKFILL TO BE COMPACTED IN NO GREATER THAN 1 FOOT LIFTS TO THE DENSITY OF THE UNDISTURBED ADJACENT SOIL.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW IN THE BASIN AND IN THE CHANNELS DURING CONSTRUCTION AND RESTORING THEM TO ORIGINAL CONDITION.
- 6. NO FILL IS TO BE PLACED WITHIN A DESIGNED FLOOD PLAIN AREA WITHOUT FIRST OBTAINING A FILL PERMIT.

NOTES:

- 1. ALL INFORMATION CONCERNING THE BOUNDARY, ADJOINING PROPERTIES & EASEMENTS WAS OBTAINED FROM A LAND TITLE SURVEY OF THE 165.735 ACRE DETENTION SITE, DATED SEPTEMBER 23, 1991 AS PREPARED BY HOVIS SURVEYING COMPANY.
- 2. ALL ELEVATIONS SHOWN HEREON ARE BASED ON A HARRIS COUNTY FLOOD CONTROL DISTRICT BENCH MARK LOCATED ON SITE. BENCH MARK IS A STANDARD HARRIS COUNTY FLOOD CONTROL DISTRICT BRASS DISK SET IN CONCRETE AND LOCATED 10.15 FEET WEST OF THE NORTHWEST FENCE CORNER AT THE INTERSECTION OF HILTONVIEW AND MAZEN ROAD. ELEVATION 115.76, 1973 DATUM.

HCFCD NOTES:

- 1. HARRIS COUNTY FLOOD CONTROL DISTRICT, WATERSHED MANAGEMENT DEPARTMENT, SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION (713)684-4050. A COPY OF THE APPROVED CONSTRUCTION DRAWINGS IS REQUIRED AT THIS TIME.
- 2. ENGINEER SHALL SUBMIT LETTER AND RECORD DRAWINGS TO HARRIS COUNTY FLOOD CONTROL DISTRICT, WATERSHED MANAGEMENT DEPARTMENT, REQUESTING INSPECTION AND ACCEPTANCE OF ITEMS CONSTRUCTED IN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT—OF—WAY. PRIOR TO REQUESTING INSPECTION, THE DRAINAGE RIGHT—OF—WAY AND/OR EASEMENTS SHALL BE STAKED AND FLAGGED.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING AND RESTORING BACKSLOPE DRAINAGE SYSTEMS.
- 4. ALL DISTURBED AREAS WITHIN THE HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY, INCLUDING THE BASIN BOTTOM, SHALL BE HARRIS COUNTY FLOOD CONTROL SPECIFICATION (02931) ENTITLED "TURF ESTABLISHMENT" OR APPROVED EQUAL.
- 5. BACKFILL TO BE COMPACTED IN NO GREATER THAN ONE-FOOT LIFTS TO THE DENSITY OF THE UNDISTURBED ADJACENT SOIL.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW IN CHANNEL DURING CONSTRUCTION AND RESTORING CHANNEL TO ORIGINAL CONDITION.
- 7. ALL EXCAVATED MATERIAL IS TO BE REMOVED FROM THE HCFCD RIGHT-OF-WAY. NO FILL IS TO BE PLACED WITHIN A DESIGNATED FLOODPLAIN AREA WITHOUT FIRST OBTAINING A FILL PERMIT.
- 8. CONTRACTOR, WITH THE ASSISTANCE OF THE ENGINEER IF NECESSARY, SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL PERMITS.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING CHANNEL FLOWLINES TO DESIGN ELEVATIONS AS SHOWN ON THE PLANS AND DOWNSTREAM AS NECESSARY TO ENSURE NO WATER IN STORM SEWER DURING "DRY" CONDITIONS.
- 10. THE TOP 6 INCHES OF TOPSOIL IN THE POND SHALL BE STRIPPED AND STOCKPILED PRIOR TO EXCAVATING THE POND. THE POND SHALL THEN BE OVER-EXCAVATED BY 6" AND FINAL LINE AND GRADE AS SHOWN ON THESE PLANS ACHIEVED BY PLACEMENT AND COMPACTION OF THIS ORIGINAL 6" OF TOPSOIL.

DETENTION POND PROGRESSION OF WORK

- 1. PHASE ONE: THE CONTRACTOR SHALL BEGIN CONSTRUCTION AND EXCAVATION FROM THE MOST NORTHERLY END OF THE PROPOSED DETENTION POND. ALL EMBANKMENT AND BACKFILL SHALL BE PLACED IN ACCORDANCE WITH HCFCD SPECIFICATION 02224. THE WETLAND AREAS ARE NOT TO BE DISTURBED AND ARE TO BE PROTECTED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THE EMBANKMENT UNTIL ALL WORK IS COMPLETED AND ACCEPTED BY THE OWNER. ALL EXCAVATION SHALL BE IN AN ORDERLY MANNER TO INSURE PROPER DRAINAGE AT ALL TIMES AND SHALL PROGRESS IN A SOUTHERLY DIRECTION. EXCAVATION SHALL NOT BE BELOW THE ELEVATIONS SHOWN ON THIS PLAN AND THE BOTTOM SHALL BE GRADED TO DRAIN AS SHOWN. THE CONSTRUCTION AND EXCAVATION SHALL INCLUDE ALL ADJACENT PERMANENT MAINTENANCE BERMS, BACKSLOPE DRAINS, INTERCEPTOR STRUCTURES, ETC. CONCRETE PILOT CHANNELS SHALL BE CONSTRUCTED. ALL CONSTRUCTION AND EXCAVATION SHALL BE AS DIRECTED BY THE HARRIS COUNTY FLOOD CONTROL DISTRICT OR THEIR REPRESENTATIVE.
- 2. ALL EXCESS EXCAVATED MATERIALS SHALL BE DISPOSED OF OFF SITE AS DIRECTED BY THE ENGINEER. DISPOSAL OF MATERIAL SHALL BE INCIDENTAL TO EXCAVATION OF DETENTION POND.
- 3. ACTUAL SITE CONDITIONS MAY VARY AT TIME OF CONSTRUCTION FROM THOSE SHOWN HEREON. THE CONTRACTOR IS TO COORDINATE WITH THE DESIGN ENGINEER AND THE HARRIS COUNTY FLOOD CONTROL DISTRICT ENGINEER TO DETERMINE TO REVISED SCOPE OF WORK.
- 4. WET LANDS ARE TO BE PROTECTED AND ARE NOT TO BE DISTURBED DURING CONSTRUCTION.

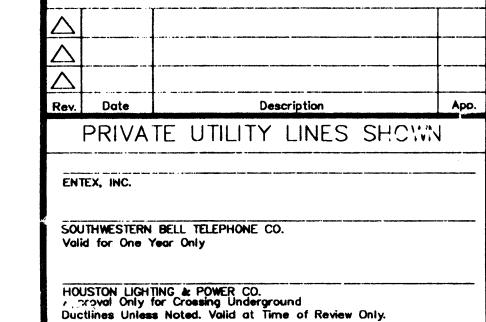
WARNING:

OVERHEAD LINES MAY EXIST ON THE PROPERTY. WE HAVE NOT ATTEMPTED TO MARK THOSE LINES SINCE THEY ARE CLEARLY VISIBLE, BUT THE CONTRACTOR SHALL LOCATE THEM PRIOR TO BEGINNING AND CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH 7 SAFETY CODE, FORBIDS ALL ACTIVITIES IN WHICH PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES. CONTRACTORS AND OWNERS ARE LEGALLY RESPONSIBLE FOR SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BY TURNED OFF OR MOVED, CALL HL&P 228-7400.

NOTE:

CONTRACTOR TO CALL TEXAS ONE CALL AT 1-800-8344 A MINIMUM OF 48 HOURS PRIOR TO ANY CONSTRUCTION.





CITY OF HOUSTON

DEPARTMENT OF PUBLIC WORKS & ENGINEERING
ENGINEERING. CONSTRUCTION AND REAL ESTATE GROUP

SECTION APPROVALS

WATER DESIGN TRAFFIC AND SIGNAL DESIGN

STORM SEWER DESIGN STREET, BRIDGE AND RIGHT-OF-WAY DESIGN

WASTEWATER DESIGN CONSTRUCTION

OTHER DEPARTMENTS

PLANNING AND DEVELOPMENT

CITY ENGINEER DATE

DIRECTOR OF PUBLIC WORKS DATE AND ENGINEERING

SUBMITTED: ______

SCALE: _____

DATE: _____3/17/96

SURVEY BY: _____

SHEET NO. 2 OF 5 SHEETS

450 DWG. NO. NOTE.DWG

DESIGNED BY:

DRAWN BY:

MVB

NOTES



PROVIDENT ENGINEERS, INC 12200 N.W. FRWY, Suite 210 Houston, Texas 77092