



**PERMIT APPLICATION REVIEW FORM FOR
CABLE, CONDUIT, AND POLE LINE ACTIVITY
IN FORT BEND COUNTY**

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytx.gov

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2018-18739

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

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- a. Name of road, street, and/or drainage ditch affected.
- b. Vicinity map showing course of directions
- c. Plans and specifications

(2) BOND:

☐

County Attorney, approval when applicable.

☐

Perpetual bond currently posted.

Bond No: _____

Amount: _____

☒

Performance bond submitted.

Bond No: XXXXXXXXXX

Amount: \$5,000.00

☐

Cashier's Check

Check No: _____

Amount: _____

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

We have reviewed this project and agree it meets minimum requirements.

Rick J. Staigle, PE, PTOE

Permit Administrator

4/30/2018

Date



REVIEW BY FORT BEND COUNTY
COMMISSIONERS COURT

**Fort Bend County
Engineering Department**

301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500

Permits@fortbendcountytexas.gov

1

Right of Way Permit

X

Commercial Driveway Permit

Permit No: 2018-18739

Applicant: LQC, Inc dba Longhorn Builders

Job Location Site: 21611 West Bellfort Street, Richmond, TX 77406

Bond No. [REDACTED] **Date of Bond:** 3/1/2018 **Amount:** \$5,000.00

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
 - a. 48 hours in advance of construction start up, and
 - b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru [MyGovernmentOnline.org](https://mygovernmentonline.org) portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 8th day of May, 2018, Upon Motion of Commissioner _____, seconded by Commissioner _____, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Signature

Presented to Commissioners Court and approved.

By: Rick J. Staigle, PE, PTOE
County Engineer

Date Recorded Comm. Court No.

Clerk of Commissioners Court

N/A

By: _____
Deputy

Drainage District Engineer/Manager

Effective Date: March 1st, 2018

**PERFORMANCE BOND COVERING ALL CABLE, CONDUIT AND/OR POLE LINE
ACTIVITY IN, UNDER, ACROSS OR ALONG FORT BEND COUNTY ROAD,
COMMERCIAL DRIVEWAY AND MEDIAN OPENINGS OR MODIFICATIONS
(AUTHORIZED)**

BOND NO [REDACTED]

THE STATE OF TEXAS §

COUNTY OF FORT BEND §

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, LQC, INC. DBA Longhorn Builders
whose (address, phone) is 21931 Kobbs Rd, Ste 100, Tomball, TX 77377

(281) 357-1465 Texas,

hereinafter called the Principal, and WESTERN SURETY COMPANY, a Corporation existing under and by virtue of the laws of the state of South Dakota and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at (name/address/phone) P.O. Box 5077, Sioux Falls, SD 57117-5077, (605) 336-0850, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is R. Y. A. Ins. Agency, Inc. and whose address is 12155 Jones Rd, Houston, TX 77070,

hereinafter called the Surety, and held and firmly bound unto, Robert E. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, in the full sum of Five Thousand and 00/100 Dollars (\$ 5,000.00) current, lawful money of the United States of America, to be paid to said Robert E. Hebert, County Judge of Fort Bend County, Texas, or his successors in office, to which payment well and truly to be made and done, we, the undersigned, bind ourselves and each of us, our heirs, executors, administrators, successors, assigns, and legal representatives, jointly and severally, by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, the above bounden principal contemplates laying, constructing, maintaining and/or repairing one or more cables, conduits, and/or pole lines in, under, across and/or along roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend, and the State of Texas, under the jurisdiction of the Commissioners' Court of Fort Bend County, Texas, pursuant to the Commissioners' Court order adopted on the 1st day of December, A.D. 1980, recorded in Volume 13, of the Commissioners' Court Minutes of Fort Bend County, Texas, regulating same, which Commissioners' Court order is hereby referred to and made a part hereof for all purposes as though fully set out herein;

AND WHEREAS, the principal desires to provide Fort Bend County with a performance bond covering all such cable, conduit and/or pole line activity, commercial driveway and median openings or modifications;

NOW, THEREFORE, if the above bounden principal shall faithfully perform all its cable, conduit and/or pole line activity (including, but not limited to the laying, construction, maintenance and/or repair of cables, conduits and/or pole lines) in, under, across and/or along roads, streets and highways, commercial driveway and median openings or modifications in the County of Fort Bend and State of Texas, under the jurisdiction of the Commissioners Court of Fort Bend County, Texas, pursuant to and in accordance with minimum requirements and conditions of the above mentioned Commissioners' Court order set forth and specified to be by said principal done and performed, at the time and in the manner therein specified, and shall pay over and make good and reimburse Fort Bend County, all loss and damages which Fort Bend County may sustain by reason of any failure or default on the part of said principal, then this obligation shall be null and void, otherwise to remain in full force and effect.

This bond is payable at the County Courthouse in the County of Fort Bend and State of Texas.

It is understood that at any time Fort Bend County deems itself insecure under this bond, it may require further and/or additional bonds of the principal.

EXECUTED this 1st day of March, 2018.

Longhorn Builders
PRINCIPAL
Greg Powers
BY

WESTERN SURETY COMPANY
SURETY
Azra M
BY

Western Surety Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That WESTERN SURETY COMPANY, a corporation organized and existing under the laws of the State of South Dakota, and authorized and licensed to do business in the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the United States of America, does hereby make, constitute and appoint

Aaron Paul Reece of Houston,
State of Texas, with limited authority, its true and lawful Attorney-in-Fact, will full power and authority hereby conferred to sign, execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, the following bond:

Cable, Conduit and/or Pole line Activity in, under, across or along County
One Roads County of Fort Bend

bond with bond number [REDACTED]

for LQC, INC. DBA Longhorn Builders

as Principal in the penalty amount not to exceed: \$5,000.00

Western Surety Company further certifies that the following is a true and exact copy of Section 7 of the by-laws of Western Surety Company duly adopted and now in force, to-wit:

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys-in-Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

In Witness Whereof, the said WESTERN SURETY COMPANY has caused these presents to be executed by its
Vice President with the corporate seal affixed this 1st day of March,
2018.

ATTEST

A. Viator

A. Viator, Assistant Secretary

WESTERN SURETY COMPANY

By

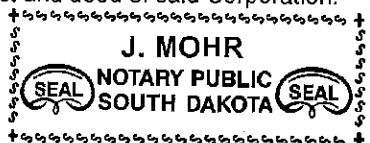
Paul T. Bruflat

Paul T. Bruflat, Vice President

STATE OF SOUTH DAKOTA }
COUNTY OF MINNEHAHA } ss

On this 1st day of March, 2018, before me, a Notary Public, personally appeared
Paul T. Bruflat and A. Viator

who, being by me duly sworn, acknowledged that they signed the above Power of Attorney as Vice President
and Assistant Secretary, respectively, of the said WESTERN SURETY COMPANY, and acknowledged said instrument to be the
voluntary act and deed of said Corporation.



My Commission Expires June 23, 2021

Notary Public

To validate bond authenticity, go to www.cnasurety.com > Owner/Obligee Services > Validate Bond Coverage.

IMPORTANT NOTICE

- 1 To obtain information or make a complaint:
- 2 You may contact Western Surety Company, Surety Bonding Company of America or Universal Surety of America at 605-336-0850.
- 3 You may call Western Surety Company's, Surety Bonding Company of America's or Universal Surety of America's toll-free telephone number for information or to make a complaint at:

1-800-331-6053

- 4 You may also write to Western Surety Company, Surety Bonding Company of America or Universal Surety of America at:

P.O. Box 5077
Sioux Falls, SD 57117-5077

- 5 You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at:

1-800-252-3439

- 6 You may write the Texas Department of Insurance:

P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-Mail: ConsumerProtection@tdi.texas.gov

7 PREMIUM OR CLAIM DISPUTES:

Should you have a dispute concerning your premium or about a claim you should contact Western Surety Company, Surety Bonding Company of America or Universal Surety of America first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

8 ATTACH THIS NOTICE TO YOUR POLICY:

This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

Para obtener informacion o para someter una queja:

Puede comunicarse con Western Surety Company, Surety Bonding Company of America o Universal Surety of America al 605-336-0850.

Usted puede llamar al numero de telefono gratis de Western Surety Company's, Surety Bonding Company of America's o Universal Surety of America's para informacion o para someter una queja al:

1-800-331-6053

Usted tambien puede escribir a Western Surety Company, Surety Bonding Company of America o Universal Surety of America:

P.O. Box 5077
Sioux Falls, SD 57117-5077

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al:

1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:

P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-Mail: ConsumerProtection@tdi.texas.gov

DISPUTAS SOBRE PRIMAS O RECLAMOS:

Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el Western Surety Company, Surety Bonding Company of America o Universal Surety of America primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del documento adjunto.

WITHIN FORT BEND COUNTY, TEXAS

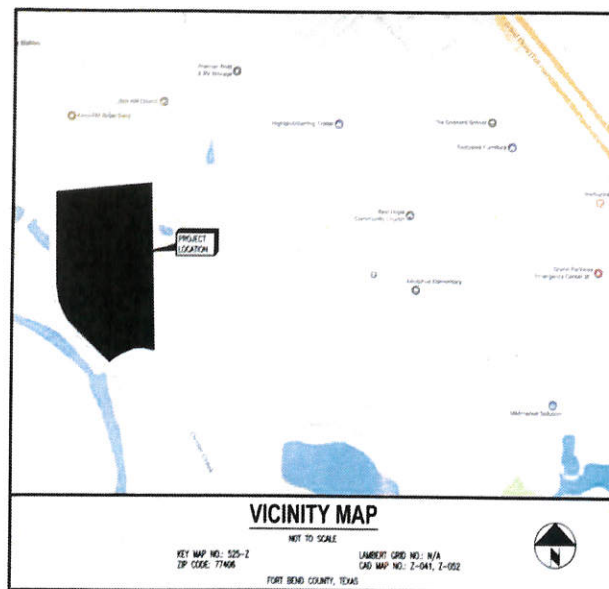
PLANS FOR CONSTRUCTION OF
PAVING, DRAINAGE, GRADING, STORM WATER DETENTION & UTILITIES
TO SERVE:

GRACE COMMUNITY FELLOWSHIP

21611 WEST BELLFORT ST. – RICHMOND, TEXAS 77406

SHEET INDEX

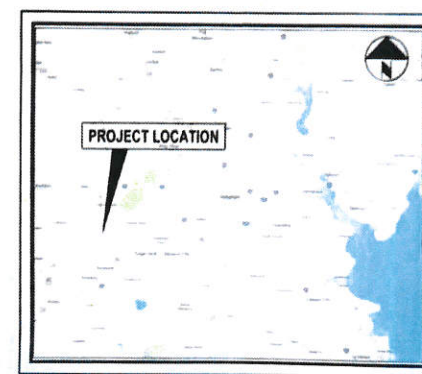
1. COVER SHEET
2. GENERAL CONSTRUCTION NOTES
3. EXISTING CONDITIONS
4. DRAINAGE AREA MAP (PRE-DEVELOPED)
5. DIMENSION CONTROL PLAN
6. UNDERGROUND STORM SEWER PLAN
7. PAVING & GRADING PLAN
8. SITE UTILITY PLAN
9. DRAINAGE COMPUTATIONS
10. TYPICAL SECTIONS
11. SWPP PLAN
12. SWPP DETAILS
13. FIRE LANE EXHIBIT
14. PAVEMENT DETAILS
15. STORM SEWER DETAILS
16. SANITARY SEWER DETAILS
17. WATER LINE DETAILS
18. TRAFFIC CONTROL PLAN



NOTE TO CONTRACTOR:
CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
CALL UTILITY LOCATION SERVICE AT LEAST 72 HOURS PRIOR TO COMMENCING
WITH ANY CONSTRUCTION ACTIVITIES.

NOTE TO OWNER:
THE DESIGN WAS BASED ON SURVEYED INFORMATION PROVIDED BY KALLIDA &
ASSOCIATES, INC. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR UNDISCOVERED
PIPELINES OR EXISTENCES THAT MAY EXIST ON THIS PROPERTY. THE OWNER
SHALL PROVIDE ALL EXISTENCES AND EXISTING FEATURES THAT MAY EXIST.

48 HOUR NOTICE:
CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPT. 48 HRS.
PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING ANY UTILITIES.



LOCATION MAP

PREPARED BY:
DPK Engineering LLC
LAND DEVELOPMENT – SITE DEVELOPMENT – MUNICIPAL
3103 Bowser Road – Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. F9323

NOVEMBER 2017

AUTHORIZED SIGNATURE BY
DAVID P. KELLY II, P.E. ON
November 26, 2017



FORT BEND COUNTY ENGINEER	
ENGINEER: David P. Kelly II, P.E.	DATE: 2/6/18
THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL.	
APPROVED: [Signature]	DATE: 2/6/18
DEVELOPMENT ESTIMATOR	

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
-AT LEAST 72 HOURS BEFORE YOU DIG-
(713) 223-4047 (IN HOUSTON)
(800) 545-9005 (STATEWIDE)

OWNER/DEVELOPER:
Grace Community Fellowship
Contact: Paul Taylor II
paultaylor@gracefellowship.com
21611 West Bellfort St.
Richmond, Texas 77406
Phone: (281) 239-0999

Civil Engineer:
DPK Engineering LLC
Contact: David P. Kelly II, P.E.
david.kelly@dpkengineering.com
Phone: (281) 346-2616
3103 Bowser Rd.
Fulshear, Texas 77441

SURVEYOR:
Kallida & Associates, Inc.
3014 Avenue I
Houston, Texas 77471
askallida@kallida.com
Phone: (281) 341-0808
Fax: (281) 341-8333

GENERAL CONSTRUCTION NOTES

- [illegible]

SANITARY SEWER CONSTRUCTION NOTES

- [illegible]

READING NOTE

1. **GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE RELIABILITY OF ALL EXISTING AND PROPOSED TEST CONSTRUCTION BUILDING DEPENDS AND THEREAFTER BEFORE COMMENCING CONSTRUCTION THE UNDERSIGNED SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.**
2. **BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY THE FOLLOWING ELEMENTS AND NOTIFY OWNER IF ANY DISCREPANCY AND/OR CONFLICT IS FOUND:**
3. **CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS AND SHALL NOTIFY OWNER IF ANY SUCH DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED UNDERPINS PRIOR TO PROCEEDING WITH PROPOSED WORK.**
4. **CONTRACTOR SHALL PROTECT ALL ADJACENT CANALS, WATER COURSES, WATER LINES, FIRE HYDRANTS, POWER LINES, CABLES, AND TELEPHONE LINES SO AS TO REMAIN IN PLACE AND UNDISTURBED THROUGH CONSTRUCTION.**
5. **ALL EXISTING CONDUITS, FIBER OPTICS, AND CABLE DRAINAGE SHALL BE RELOCATED AND PROTECTED BY AN APPROVED CONDUIT SYSTEM SHALL BE AT AN APPROVED 30" DEPTH, LARGER LOCATIONS SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.**

ENTRÉE CONSTRUCTION NOTES

- CONTRACTOR SHALL IMPLEMENT BEST PRACTICES REDUCED EROSION AND REINFORCED FLEET PARKING (SHOULDER ALONG ROAD) AND SIDE SHOULDS AT LOCATIONS WHERE ON THE TYPICAL STORM WATER POLLUTION PREVENTION PLAN(S) IT IS REQUIRED TO KEEP ALL EROSION/EXCAVATION MATERIALS FROM ENTERING INTO THE STORM WATER DRAINS AND OTHERS CRITICAL POLLUTING THE RECEIVING STREAM.
- DURING THE EXCAVATION PHASE OF THE PROJECT CONTRACTOR SHALL SCREEN THE WASTE FROM ALL OTHER MATERIALS THAT ARE NOT ALLOWED TO BE DISCHARGED INTO THE RECEIVING STREAM. CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT IT FROM BEING DISCHARGED ON THE EXISTING PREVENTED AND LOCATED EXCAVATED MATERIAL WHICH FALLS ON PREVENTED OR OTHERWISE SHALL BE SHIPPED BACK INTO THE EXCAVATED AREA.
3. CONTRACTOR SHALL CLEAR UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS (AS NECESSARY, TO REMAIN, ANY EXCESS ROAD, BUT OF ROCK THICKNESS FROM THE EXCAVATED AREA).
4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESS.
5. CONTRACTOR TO RECTIFY AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY TWENTY (20) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
- a. DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FULLY CHANGELIST.
 - b. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - c. STRUCTURAL CONTROL MEASURES.
 - d. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
6. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING FENCES AND/OR GATEWAYS FOR UNCHANGING DAMAGE AT ALL TIMES. WHEN SECONDARY IS DESTROYED BY CONSTRUCTION OR UNWARRANTED OBSTRUCTION, NEW AREAS SHALL BE RECONSTRUCTED TO BE AT LEAST AS GOOD AS OR BETTER THAN THE ORIGINAL. NEW AREAS SHALL BE RECONSTRUCTED TO BE AT LEAST AS GOOD AS OR BETTER THAN THE ORIGINAL.

WATER LINE CONSTRUCTION NOTES

1. ALL WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FERTIL RENO COUNTY RULES, REGULATIONS AND REQUIREMENTS AND:
2. (1) THRU 12" WATER LINES SHALL BE P.V.C. CLASS 150, DR-18, 40' MIN. A-S-100 AND 1" THRU 12" WATER LINES SHALL BE HDPE (SCHEDULE 40) 1/2" THRU 4" SHAL BE SCHEDULE 40S SHALL BE ADW 333 (ENR 421-33) AND DEGREE MIN. 40' MIN. A-S-100. (1) ALL PREVENTIVE PIPE SHALL BE LINED IN ACCORDANCE WITH ADW 333 (ENR 421-33).
3. (2) WHEN IN THINLY PLACED SHALL BE PROVIDED AS NECESSARY TO PREVENT PIPE MOVEMENT AND RESTRICTED JOINTS AND PREVENTING MOVEMENT OF 1/2" OR GREATER PIPE IS NECESSARY DUE TO THIRST.
4. ALL WATER LINES ARE NOT PROHIBED FROM EXPOSURE FROMING AND TO A POINT ONE (1) FEET BACK OF ALL PROPOSED OR EXISTING CURBS SHALL BE ENCASED IN SAND SAND 12" THRU 18" PIPE AND BACKFILLED WITH CERTIFIED STABILIZED SAND TO WITHIN ONE (1) FOOT OF SURFACE.
5. ALL WATER LINES AND FEMER LINE CHANGES SHALL BE CONSTRUCTED PER FERTIL RENO COUNTY RULES, REGULATIONS AND REQUIREMENTS.
6. ALL WATER VALVES SHALL BE SLEPTED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF ADW 300 AND SHALL BE OF THE INCIDENT SEAT TYPE.
7. ALL WATER LINES TO BE EXCAVATED IN CONFORMANCE WITH ADW 300 AND THE TEXAS STATE DEPARTMENT OF HIGHWAY AT LEAST ONE INCHES DEEPER SHALL BE COLLECTED FOR EVERY 1,000 LINEAR FEET OF WATER LINE AND SHALL BE INSTALLED IN CONFORMANCE OF REQUIREMENTS.
8. ALL BELOW GRADE VALVES SHALL BE GARSTED 1/40-60 GALLON VALVES WITH A 1.000 LINEAR INCH, EXCEPT WHERE FLAGMAN ARE CALLED OUT FOR THE PROJECT.
9. (1) THRU 12" FITTINGS SHALL BE CEMENT MORTAR LINED COMPACT DUCTILE IRON PRESSURE FITTINGS PER ANSI A21.5, OF WITHIN ONE FOOT PER ANSI A21.5 PRESSURE RATED UP TO 250 PSI.
10. HYDROSTATIC TESTING: ALL WATER PIPE SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LATEST FERTIL RENO COUNTY RULES, REGULATIONS AND REQUIREMENTS. TESTS ARE TO BE PERFORMED ON THE ENTIRE FOOTAGE OF WATER PIPE LINED IN THE PROJECT.
11. ALL WATER LINES TO HAVE A MINIMUM COVER TO FINISHED GRADE AND MINIMUM 12" CLEARANCE TO OTHER UTILITIES AT CROSSING POINTS. OTHER NOTES ON PLANS: ALL WATER LINE INSTALLED OVER OR DEEPER SHALL BE RESTRAINED AGAINST FLOODING.
12. CONTRACTORS SHALL KEEP ALL WATER LINES AND CAPS AND COVERED OFF EFFECTIVELY COVERED ONCE PIPES DUE TO EXISTING INFESTS, ANIMALS, OTHER SOURCES OF CONTAMINATION FROM UNPAVED PIPE LINES AT TIMES WHEN

STORM SEWER CONSTRUCTION NOTES

3. STORM SEWER SHALL BE REINFORCED CONCRETE PIPE (C-76, CLASS B) AND SHALL BE INSTALLED BEDDING AND BACKFILL IN ACCORDANCE WITH FORT BEND COUNTY TRAILS, REGULATIONS AND REQUIREMENTS AS APPLICABLE (PLEASE OTHERWISE SHOW ON THE DRAWINGS).
4. ALL STORM SEWER CONSTRUCTION IS TO SIDE LOT EASEMENT SHALL BE R.C.P. (C-76, CLASS B) AND SHALL BE EASEMENT EXISTENCE UNLESS OTHERWISE NOTED ON THE DRAWINGS. TRAILS, REGULATIONS AND REQUIREMENTS AS APPLICABLE.
5. ALL SEWER UNDER PROPOSED ON FUTURE PAVING AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED FUTURE CURBS SHALL BE BACKFILLED WITH 1-1/2" SACK CONCRETE/1 STABILIZED SAND TO WITHIN ONE (1) FOOT OF SURFACE. THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUFFICIENT EXISTING MATERIAL.
6. ALL TRENCH BACKFILL SHALL BE IN 8" LIFTS, WITH TESTS TAKEN AT 100 FOOT INTERVALS IN EACH LIFT, AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 1557-68/AASHTO T99).
7. CIRCULAR AND ELLIPTICAL FLOWING CONCRETE PIPE SHALL BE INSTALLED USING RUBBER GASKET JOINT CONFORMING TO ASTM D4444 AND ASTM D4777 RELEVANT.
8. ALL STORM SEWER PIPES AND RAIN LEAK SHALL BE 24" AND LARGEST R.C.P. (C-76, CLASS B).
9. ALL PROPOSED PIPE STUB-OUTS FROM MANHOLES AND LEAK AREAS ARE TO BE PLUGGED WITH 8" BRICK WALLS UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL PROVIDE 12" MINIMUM HORIZONTAL CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS.
11. ADJUST MANHOLE COVERS TO CONFORM TO REQUIREMENTS FOR FORT BEND COUNTY TRAILS, REGULATIONS AND REQUIREMENTS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, MAINTAINING AND RESTORING ANY BACK SLOPE DRAINAGE SYSTEM DISTURBED AS A RESULT OF THIS WORK.
13. ALL DITCHES SHALL BE GRASSED TO PREVENT EROSION. CONTRACTOR TO ENSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED. ALL DISTURBED AREA SHALL BE GRASS-SEED, SOILED, AND FERTILIZED.
14. ALL DRAINAGE SHALL BE LOCATED TO AVOID EXISTING CURB AND RAIL STRUCTURES.

ELEVATIONS ARE DERIVED FROM NGS MONUMENT 1604
 RESET 1943 DESCRIBED AS A IRON SET IN CONCRETE
 ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
 HIGHWAY NO. 723, APPROXIMATELY 2,000 FT WEST OF
 STATE FARM MARKET HIGHWAY NO. 558.

CLASIFICACIÓN = 84.54' MSD 199

LEONARD M. HARRIS, JR.

SET COTTON PIERCE SPINULE IN 33" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER (V PROPERTY)

ELEVATION = 92.11' NAVD 1988

TIMOTHY BLANCHARD, 2.
 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021, 2022-2023, 2024-2025, 2026-2027, 2028-2029, 2030-2031, 2032-2033, 2034-2035, 2036-2037, 2038-2039, 2040-2041, 2042-2043, 2044-2045, 2046-2047, 2048-2049, 2050-2051, 2052-2053, 2054-2055, 2056-2057, 2058-2059, 2060-2061, 2062-2063, 2064-2065, 2066-2067, 2068-2069, 2070-2071, 2072-2073, 2074-2075, 2076-2077, 2078-2079, 2080-2081, 2082-2083, 2084-2085, 2086-2087, 2088-2089, 2090-2091, 2092-2093, 2094-2095, 2096-2097, 2098-2099, 2100-2101, 2102-2103, 2104-2105, 2106-2107, 2108-2109, 2110-2111, 2112-2113, 2114-2115, 2116-2117, 2118-2119, 2120-2121, 2122-2123, 2124-2125, 2126-2127, 2128-2129, 2130-2131, 2132-2133, 2134-2135, 2136-2137, 2138-2139, 2140-2141, 2142-2143, 2144-2145, 2146-2147, 2148-2149, 2150-2151, 2152-2153, 2154-2155, 2156-2157, 2158-2159, 2160-2161, 2162-2163, 2164-2165, 2166-2167, 2168-2169, 2170-2171, 2172-2173, 2174-2175, 2176-2177, 2178-2179, 2180-2181, 2182-2183, 2184-2185, 2186-2187, 2188-2189, 2190-2191, 2192-2193, 2194-2195, 2196-2197, 2198-2199, 2200-2201, 2202-2203, 2204-2205, 2206-2207, 2208-2209, 2210-2211, 2212-2213, 2214-2215, 2216-2217, 2218-2219, 2220-2221, 2222-2223, 2224-2225, 2226-2227, 2228-2229, 2230-2231, 2232-2233, 2234-2235, 2236-2237, 2238-2239, 2240-2241, 2242-2243, 2244-2245, 2246-2247, 2248-2249, 2250-2251, 2252-2253, 2254-2255, 2256-2257, 2258-2259, 2260-2261, 2262-2263, 2264-2265, 2266-2267, 2268-2269, 2270-2271, 2272-2273, 2274-2275, 2276-2277, 2278-2279, 2280-2281, 2282-2283, 2284-2285, 2286-2287, 2288-2289, 2290-2291, 2292-2293, 2294-2295, 2296-2297, 2298-2299, 2300-2301, 2302-2303, 2304-2305, 2306-2307, 2308-2309, 2310-2311, 2312-2313, 2314-2315, 2316-2317, 2318-2319, 2320-2321, 2322-2323, 2324-2325, 2326-2327, 2328-2329, 2330-2331, 2332-2333, 2334-2335, 2336-2337, 2338-2339, 2340-2341, 2342-2343, 2344-2345, 2346-2347, 2348-2349, 2350-2351, 2352-2353, 2354-2355, 2356-2357, 2358-2359, 2360-2361, 2362-2363, 2364-2365, 2366-2367, 2368-2369, 2370-2371, 2372-2373, 2374-2375, 2376-2377, 2378-2379, 2380-2381, 2382-2383, 2384-2385, 2386-2387, 2388-2389, 2390-2391, 2392-2393, 2394-2395, 2396-2397, 2398-2399, 2400-2401, 2402-2403, 2404-2405, 2406-2407, 2408-2409, 2410-2411, 2412-2413, 2414-2415, 2416-2417, 2418-2419, 2420-2421, 2422-2423, 2424-2425, 2426-2427, 2428-2429, 2430-2431, 2432-2433, 2434-2435, 2436-2437, 2438-2439, 2440-2441, 2442-2443, 2444-2445, 2446-2447, 2448-2449, 2450-2451, 2452-2453, 2454-2455, 2456-2457, 2458-2459, 2460-2461, 2462-2463, 2464-2465, 2466-2467, 2468-2469, 2470-2471, 2472-2473, 2474-2475, 2476-2477, 2478-2479, 2480-2481, 2482-2483, 2484-2485, 2486-2487, 2488-2489, 2490-2491, 2492-2493, 2494-2495, 2496-2497, 2498-2499, 2500-2501, 2502-2503, 2504-2505, 2506-2507, 2508-2509, 2510-2511, 2512-2513, 2514-2515, 2516-2517, 2518-2519, 2520-2521, 2522-2523, 2524-2525, 2526-2527, 2528-2529, 2530-2531, 2532-2533, 2534-2535, 2536-2537, 2538-2539, 2540-2541, 2542-2543, 2544-2545, 2546-2547, 2548-2549, 2550-2551, 2552-2553, 2554-2555, 2556-2557, 2558-2559, 2560-2561, 2562-2563, 2564-2565, 2566-2567, 2568-2569, 2570-2571, 2572-2573, 2574-2575, 2576-2577, 2578-2579, 2580-2581, 2582-2583, 2584-2585, 2586-2587, 2588-2589, 2590-2591, 2592-2593, 2594-2595, 2596-2597, 2598-2599, 2600-2601, 2602-2603, 2604-2605, 2606-2607, 2608-2609, 2610-2611, 2612-2613, 2614-2615, 2616-2617, 2618-2619, 2620-2621, 2622-2623, 2624-2625, 2626-2627, 2628-2629, 2630-2631, 2632-2633, 2634-2635, 2636-2637, 2638-2639, 2640-2641, 2642-2643, 2644-2645, 2646-2647, 2648-2649, 2650-2651, 2652-2653, 2654-2655, 2656-2657, 2658-2659, 2660-2661, 2662-2663, 2664-2665, 2666-2667, 2668-2669, 2670-2671, 2672-2673, 2674-2675, 2676-2677, 2678-2679, 2680-2681, 2682-2683, 2684-2685, 2686-2687, 2688-2689, 2690-2691, 2692-2693, 2694-2695, 2696-2697, 2698-2699, 2700-2701, 2702-2703, 2704-2705, 2706-2707, 2708-2709, 2710-2711, 2712-2713, 2714-2715, 2716-2717, 2718-2719, 2720-2721, 2722-2723, 2724-2725, 2726-2727, 2728-2729, 2730-2731, 2732-2733, 2734-2735, 2736-2737, 2738-2739, 2740-2741, 2742-2743, 2744-2745, 2746-2747, 2748-2749, 2750-2751, 2752-2753,

THEY EXTENDED FROM THE PROPERTY IN AN EASTERLY DIRECTION FROM THE PROPERTY, LOCATED APPROXIMATELY 1,400-FT SOUTH AND 180-FT WEST OF THE NORTHEAST CORNER OF THE PROPERTY.

0000-0001-9100-0000

11/15/2017 11:07 AM

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM MAP PANEL NUMBER
48157-C-0101, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE". AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 10.00'

1000 HENSON (1973)

- * DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FULLY STABILIZED.
 - * AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
 - * STRUCTURAL CONTROL MEASURES.
 - * LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
6. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND/OR CHANNELS FOR UNCONSTRICTED DRAINAGE AT ALL TIMES WHEN DRAINAGE IS REQUIRED BY OPERATION OF DRILLING OPERATIONS. SUCH AREAS SHALL BE REVEALED BY SETBACK OR EXISTING DITCHES AT THE EXISTING FINAL OR BEST AVAILABLE DRAINAGE POINT.

DPK Engineering LLC LAND DEVELOPMENT • SITE DEVELOPMENT • MUNICIPAL 31033 Warner Road Fulshear, Texas 77441 Office and Fax: (281) 246-2418 Cell: (281) 300-1809 Firm Registration No. 73323	
DATE: NOV. 2017 AND NO. 217, 362, 19100	ENDORSED BY NLA NUMBERED BY DPK
AUTHORIZED SIGNATURE BY DWAY P. KELLY & P.E., ON November 26, 2017	
DRAWN BY NIELSEN & ASSOCIATES, INC.	
GRACE COMMUNITY FELLOWSHIP PROPOSED DEVELOPMENT	
GENERAL CONSTRUCTION NOTES	
FILE NO. _____ D.F. NO. _____	SHEET NUMBER 2
SCALE: N.T.S.	OF 18

BENCHMARKS
ELEVATIONS ARE DERIVED FROM NGS MONUMENT AND
NEST 1983 DESCRIBED AS A DOW SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 123, APPROXIMATELY 2,000-FT. WEST OF
STATE FARM MARKET HIGHWAY NO. 308
ELEVATION = 84.54' NAVD 1988
TEMPORARY BENCHMARK 1
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEAN
TREE LOCATED APPROXIMATELY 150-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY
ELEVATION = 82.11' NAVD 1988
TEMPORARY BENCHMARK 2
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEAN
TREE LOCATED APPROXIMATELY 1,400-FT. SOUTH AND
180-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY
ELEVATION = 85.97' NAVD 1988
FLOOD PLAIN STATEMENT
ACCORDING TO FIRM 1718-A MAP PANEL NUMBER
48152-C-1020, WITH AN EFFECTIVE DATE OF APRIL
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "X" AREAS DETERMINED TO
BE ABOVE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.07'



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 River Road
Fulshear, Texas 77441
Office and Fax: (281) 348-2616
Cell: (281) 300-1999
Firm Registration No. 19323

DATE: May 2017
JOB NO. 017-2017-0108

DESIGNED BY: JPA

APPROVED SIGNATURE BY:
DAVID P. KELLY, P.E.
November 28, 2017

SUPervised by:
KELLEN A. KENDRICK, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

EXISTING CONDITIONS	
FILE NO.:	SHEET NUMBER 3 OF 18
S.F. NO.:	
SCALE: 1" = 60'	
DATE: 2/14/19	



FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER
48157-C-0120L WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF OVERHEAD POWER LINES. CONTACT CENTERPOINT ENERGY AT LEAST 72 HOURS PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE EASEMENT, OR ADJACENT TO THE FACILITY.

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF BURIED GAS LINES. EXISTING GAS LINES ARE SHOWN AT APPROXIMATE LOCATIONS AND DEPTH BASED ON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING GAS LINES PRIOR TO COMMENCING CONSTRUCTION.



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowser Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2516
Cell: (281) 300-1869
Firm Registration No. F9323

DATE: May, 2017
JOB NO. 017 SD 10100

--	--

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

AUTHORIZED SIGNATURE
DAVID P. KELLY II, P.E.

January 7, 2018

100

SURVEYED BY:
KALLER, A. [unclear]

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

DIMENSION CONTROL PLAN

FILE NO.:

CE NO.

G.P. NO.:

SCALE: 1" = 30'

SHEET NUMBER

5

of 1

NOTES:

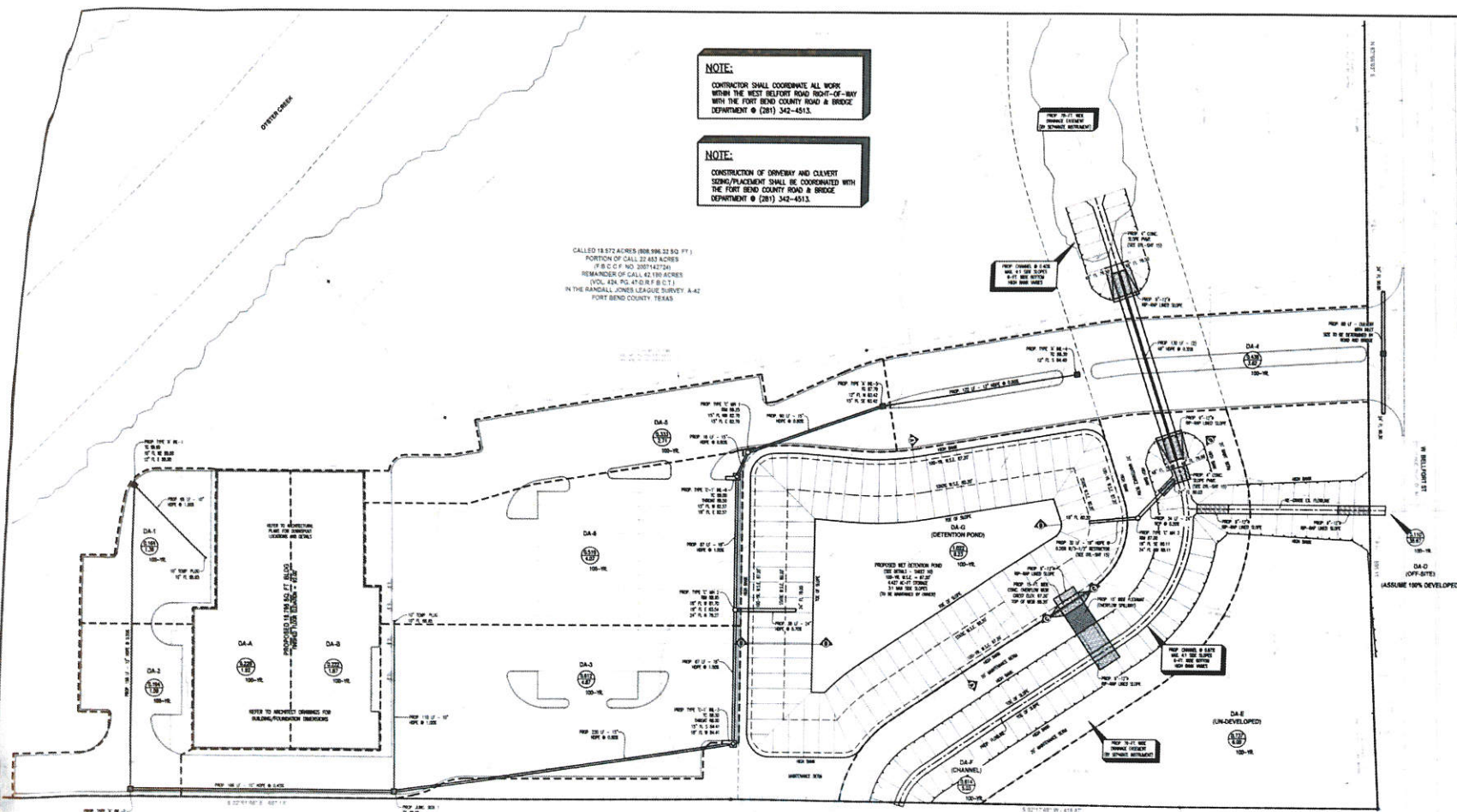
1. BUILDINGS, FENCES, RETAINING WALLS OR OTHER STRUCTURES SHALL NOT BE ERECTED WITHIN PUBLIC RIGHT-OF-WAY OR DRAINAGE EASEMENTS.
2. PAYMENT AND SUB-GRADE RECOMMENDATIONS ARE FOR REFERENCE ONLY. REFER TO THE SITE GEO-TECHNICAL REPORT TO VERIFY SPECIFICATIONS PRIOR TO CONSTRUCTION.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI FOR DAYS AND ALL STEEL SHALL BE GRADE 60, UNLESS NOTED OTHERWISE IN THE GEO-TECHNICAL REPORT.
4. THE LOCATION OF ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO COMMENCING WORK.
5. REFER TO IRRIGATION PLAN (BY OTHERS) FOR LOCATION OF IRRIGATION SLOPES.
6. PRESENTED DIMENSIONS AND RADII ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
7. REFER TO SITE ELECTRICAL PLAN (BY OTHERS) FOR SITE LIGHTING LAYOUT.
8. REFER TO ARCHITECTURAL PLANS FOR BUILDING/FOUNDATION DIMENSIONS.
9. THE LOCATION OF ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCURRED BY HIS FAILURE TO EXPLICITLY LOCATE AND PREPARE THESE UNDERGROUND UTILITIES.
10. CONTRACTOR TO OBTAIN ALL PERMITS AND APPROVALS REQUIRED PRIOR TO CONSTRUCTION.
11. CONTRACTOR TO VERIFY THAT ALL A.D.A. AREAS COMPLY WITH MINIMUM CROSS SLOPES OF 2% AND MAXIMUM SLOPES OF 5%.

LEGEND

- | | |
|---|--|
|  | PROPOSED 5" CONCRETE
PAVEMENT 1/8" STABILIZED
SUBGRADE & NO. 4 REBAR
@ 16" O.C. BOTH WAYS |
|  | PROPOSED SIDEWALK |
|  | PROPOSED LANDSCAPE AREA |
|  | PROPOSED HATCH AREA
(4" WHITE PAINTED 45°
STRIPES @ 2'-0" O.C.) |
|  | PROPOSED WHITE PAINTED
HANDICAP SYMBOL / LIGHT
BLUE PAINTED BORDER |

APPROVED: [Signature]
Development Contributor

DATE: 2/6/18



NOTE:
CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE WEST BELLEVUE ROAD RIGHT-OF-WAY WITH THE FORT BEND COUNTY ROAD & BRIDGE DEPARTMENT @ (281) 342-4513.

NOTE:
CONSTRUCTION OF DRIVEWAY AND CULVERT SHALL BE COORDINATED WITH THE FORT BEND COUNTY ROAD & BRIDGE DEPARTMENT @ (281) 342-4513.

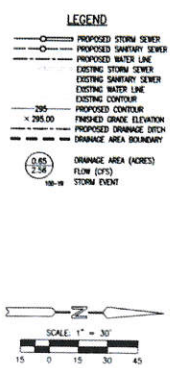
CALL 18.372 ACRES (808,986.22 SQ. FT.)
PORTION OF CALL 22.483 ACRES
F.B.C. OF NO. 2057142750
REMAINDER OF CALL 42.136 ACRES
(VOL. 234, PG. 47-51 & 8-11)
IN THE RANDALL JONES LEASE SURVEY, A-42
FORT BEND COUNTY, TEXAS

BENCHMARK:
ELEVATIONS ARE DERIVED FROM HGS MONUMENT LINE RESET 1943 DESCRIBED AS A DSK-SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723, APPROXIMATELY 2,200-FT WEST OF STATE FARM MARKET HIGHWAY NO. 359.
ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEACH TREE, LOCATED APPROXIMATELY 870-FT SOUTH AND 40-FT WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEACH TREE, LOCATED APPROXIMATELY 1,440-FT SOUTH AND 160-FT WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA F.E.M. MAP PANEL NUMBER 48157-C-0100, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO BE IN THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bayview Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. F5323

DATE: May 17, 2018
JOB NO. DPK-18-1018

DESIGNED BY: DPK
CHECKED BY: DPK

AUTHORIZED SIGNATURE BY:
DAVID P. KELLY, P.E., ON
February 5, 2018

SEAL OF DAVID P. KELLY, P.E.
STATE OF TEXAS
EXPIRATION DATE: 02/05/2021

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

WARNING-O/H POWER LINE
CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF OVERHEAD POWER LINES. CONTACT CENTER POINT ENERGY AT LEAST 72 HOURS PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE EASEMENT OR ADJACENT TO THE FACILITY.

WARNING-U/G GAS LINE
CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF BURIED GAS LINES. EXISTING GAS LINES ARE SHOWN AT APPROXIMATE LOCATIONS AND DEPTHS BASED ON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING GAS LINES PRIOR TO COMMENCING CONSTRUCTION.

GENERAL NOTES:

- BUILDINGS, FENCES, RETAINING WALLS OR OTHER STRUCTURES SHALL NOT BE ERECTED WITHIN PUBLIC RIGHT-OF-WAY OR DRAINAGE EASEMENTS.
- PAVEMENT AND SUB-GRADE RECOMMENDATIONS ARE FOR REFERENCE ONLY. REFER TO THE SITE GEO-TECHNICAL REPORT TO VERIFY SPECIFICATIONS PRIOR TO CONSTRUCTION.
- THE LOCATION OF ALL UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO COMMENCING WORK.
- REFER TO PERIGATION PLAN (BY OTHERS) FOR LOCATION OF PERIGATION SLEEVES.
- CONTRACTOR TO COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CONNECTION AND/OR LOCATION OF ALL DOWN SPOUTS, DRAINAGE PROTECTION (DRAIN BLOBS) AND ALL PLUMBING AND SERVICE UTILITIES.
- DETENTION POND AND DRAINAGE CHANNELS TO BE OWNED & MAINTAINED BY GRACE COMMUNITY FELLOWSHIP CHURCH.

GRADING & DRAINAGE NOTES:

- STRIP AND REMOVE ALL SURFACE ORGANICS, TOPSOIL AND UN-SUITABLE MATERIALS FROM ALL BUILDING AND PAVING AREAS. FILL STRIPS INCLUDING THE ROOT SYSTEM SHALL BE REMOVED.
- PROOF ROLL THE SUB-GRADE TO DETECT ANY HET, SOFT OR PUMPING AREAS. TEST THESE AREAS WITH DIPPING OR STABILIZING AGENTS AS NECESSARY OR REMOVE AND REPLACE THEM WITH SUITABLE FILL MATERIAL.
- COMPACT THE SUB-GRADE TO A MINIMUM OF NINETY-FIVE (95) PERCENT OF ITS MAX. DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 698).
- ADDITIONAL FILL MATERIAL WITHIN THE BUILDING AREA SHOULD BE A SIXTY OR SANDY CLAY HAVING A PLASTICITY INDEX (PI) OF TEN (10) TO THIRTY (30) AND A LIQUID LIMIT OF 25 OR MORE. FILL MATERIALS SHOULD BE PLACED IN SIX (6) TO EIGHT (8) HIGH LIFTS AND COMPACTED AT OPTIMUM MOISTURE CONTENT TO NINETY-FIVE (95) PERCENT OF THEIR MAX. DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST.
- ALL SIDEWALKS AND WALKWAYS AREAS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND MAXIMUM RUN SLOPES OF SIX (6) PERCENT. RAMP SLOPES SHALL HAVE A MAXIMUM SLOPE OF 1:12.
- CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 6-INCHES OF CLEARANCE AT ALL SANITARY SEWER AND WATER MAIN CROSSINGS, AND 8-INCHES OF MINIMUM CLEARANCE AT ALL SANITARY AND STORM SEWER CROSSINGS.
- REFER TO ARCHITECTURAL PLANS FOR GROUES INSIDE THE BUILDING ENVELOPE.
- PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.
- CONTRACTOR TO MATCH EXISTING TOP OF PAVEMENT AND CURB ELEVATIONS.
- INSTALL STORM DRAINAGE FEATURES AND ESTABLISH POSITIVE DRAINAGE.
- ALL DRAINAGE FEATURES SHALL HAVE EROSION CONTROL. ESTABLISHED UPON COMPLETION, CONTRACTOR TO COOPERATE WITH OWNER ON PROPOSED GRADE TIME APPLICATION RATE AND METHOD FOR APPROVAL PRIOR TO COMMENCING.

APPROVED: *[Signature]*
DATE: 7/16/18

FILE NO.:	SHEET NUMBER
SHEET NO.:	6
SCALE: 1" = 30'	OF 18

BENCHMARK:
ELEVATIONS ARE DERIVED FROM NGS MONUMENT 1806
HSET 1943 DESCRIBED AS A DICK SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200-FT. WEST OF
STATE FARM MARKET HIGHWAY NO. 359.

ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:

SET COTTON PICKER SPINDLE IN 3" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY

ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:

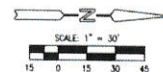
SET COTTON PICKER SPINDLE IN 3" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND
180-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY

ELEVATION = 88.97' NAVD 1988

FLOOD PLAN STATEMENT:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER
48157-C-0128, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE". AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'

LEGEND

- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING CONTOUR
- FINISHED GRADE ELEVATION
- PROPOSED DRAINAGE DITCH
- DRAINAGE AREA BOUNDARY
- ← PROPOSED FLOW DIRECTION
- ← EXTREME EVENT OVERFLOW DIRECTION
- PROPOSED FILL AREA

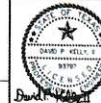


DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bower Road
Fulshear, Texas 77441
Office and Fax: (281) 344-2616
Cell: (281) 300-1869
Firm Registration No. F3323

DATE: May, 2017
JOB NO. 077-26-10108

DESIGNED BY: SLA
CHECKED BY: DPK

AUTHORIZED SIGNATURE BY:
DAVID P. KELLY R. P.E. ON
February 5, 2018



SUPPLIED BY:
KALLOS & ASSOCIATES, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

PAVING AND GRADING PLAN

FILE NO.:

G.F. NO.:

SCALE: 1" = 30'

SHEET NUMBER

7

OF 18

WARNING-O/H POWER LINE

CONTRACTOR SHALL USE EXTREME CAUTION WHEN
WORKING IN THE VICINITY OF OVERHEAD POWER LINES.
CONTACT CENTERPOINT ENERGY AT LEAST 72 HOURS
PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE
EASEMENT, OR ADJACENT TO THE FACILITY.

WARNING-U/G GAS LINE

CONTRACTOR SHALL USE EXTREME CAUTION WHEN
WORKING IN THE VICINITY OF BURIED GAS LINES.
EXISTING GAS LINES ARE SHOWN AT APPROXIMATE
LOCATIONS AND DEPTHS BASED ON THE BEST
INFORMATION AVAILABLE. CONTRACTOR SHALL FIELD
VERY LOCATION OF ALL EXISTING GAS LINES PRIOR
TO COMMENCING CONSTRUCTION.

GENERAL NOTES:

1. BUILDINGS, FENCES, RETAINING WALLS OR OTHER
STRUCTURES SHALL NOT BE ERECTED WITHIN PUBLIC
RIGHT-OF-WAY OR DRAINAGE EASEMENTS.
2. PAVEMENT AND SUB-GRADE RECOMMENDATIONS ARE FOR
REFERENCE ONLY. REFER TO THE SITE GEO-TECHNICAL
REPORT TO VERIFY SPECIFICATIONS PRIOR TO
CONSTRUCTION.
3. THE LOCATION OF ALL UTILITIES PRESENTED ON THESE
DRAWINGS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE
CONTRACTOR SHALL DETERMINE THE EXACT LOCATION PRIOR TO
COMMENCING WORK.
4. REFER TO IRRIGATION PLAN (BY OTHERS) FOR LOCATION OF
IRRIGATION SLEEVES.
5. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL,
MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR
CONNECTION AND/OR LOCATION OF ALL DOWN SPOUTS,
DRAINAGE PROTECTION (CRUSH BLOCKS) AND ALL PLUMBING
AND SERVICE UTILITIES.
6. DETENTION POND AND DRAINAGE CHANNELS TO BE OWNED
& MAINTAINED BY GRACE COMMUNITY FELLOWSHIP CHURCH.

GRADING & DRAINAGE NOTES:

1. STOP AND REMOVE ALL SURFACE ORGANICS, TOPSOIL AND
UN-SUITABLE MATERIALS FROM ALL BUILDING AND PAVING
AREAS. TREE STUMPS INCLUDING THE ROOT SYSTEM SHALL BE
REMOVED.
2. PROOF ROLL THE SUB-GRADE TO DETECT ANY NET, SOFT OR
PUMPING AREAS. TREAT THESE AREAS WITH GRINDING OR
STABILIZING AGENTS AS NECESSARY OR REMOVE AND REPLACE
THEM WITH SUITABLE FILL MATERIAL.
3. COMPACT THE SUB-GRADE TO A MINIMUM OF NINETY-FIVE
(95) PERCENT OF ITS MAX. DRY DENSITY AS DETERMINED BY
THE STANDARD PROCTOR COMPACTION TEST (ASTM D 1557).
4. ADDITIONAL FILL MATERIAL WITHIN THE BUILDING AREA SHOULD
BE A SILTY OR SANDY CLAY HAVING A PLASTICITY INDEX (PI)
OF TEN (10) TO TWENTY (20) AND A LIQUID LIMIT OF 26 OR
MORE. FILL MATERIALS SHOULD BE PLACED IN SIX (6) TO
EIGHT (8) INCH LAYER LIFTS AND COMPACTED AT OPTIMUM
MOISTURE CONTENT TO NINETY-FIVE (95) PERCENT OF THEIR
MAX. DRY DENSITY AS DETERMINED BY THE STANDARD
PROCTOR COMPACTION TEST.
5. ALL SIDEWALKS AND DRIVEWAY AREAS SHALL HAVE A MAXIMUM
CROSS SLOPE OF 2% AND MAXIMUM RISE SLOPES OF 5%.
CURB RAMP SHALL HAVE A MAXIMUM SLOPE OF 1:12.
6. CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 6-INCHES
OF CLEARANCE AT ALL SANITARY SEWER AND WATER MAIN
CROSSINGS, AND 6-INCHES OF MINIMUM CLEARANCE AT ALL
SANITARY AND STORM SEWER CROSSINGS.
7. REFER TO ARCHITECTURAL PLANS FOR GRADES INSIDE
THE BUILDING ENVELOPE.
8. PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL
EXISTING AND PROPOSED UTILITIES AND APPROPRIATELY
FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.
9. CONTRACTOR TO MATCH EXISTING TOP OF FINISHED AND
CURB ELEVATIONS.
10. INSTALL STORM DRAINAGE FEATURES AND ESTABLISH POSITIVE
DRAINAGE.
11. ALL DRAINAGE FEATURES SHALL HAVE EROSION CONTROL
ESTABLISHED UPON COMPLETION. CONTRACTOR TO COORDINATE
WITH OWNER ON PROPOSED GRASS TYPE, APPLICATION RATE
AND METHOD FOR APPROVAL PRIOR TO COMMENCING.

NOTE:

CONTRACTOR SHALL COORDINATE ALL WORK
WITHIN THE BEST DELIVERY ROAD RIGHT-OF-WAY
WITH THE FORT BEND COUNTY ROAD & BRIDGE
DEPARTMENT @ (281) 342-4513.

APPROVED: *[Signature]*
DATE: 2/6/18

BENCHMARKS
ELEVATIONS ARE DERIVED FROM NGS MONUMENT 360
RESEY 1983 DESCRIBED AS A CONCRETE SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200-FT. WEST OF
STATE FARM MARKET HIGHWAY NO. 309

ELEVATION = 84.54' NAVD 1988

TEMPORARY BENCHMARK 1:

SET COTTON PICKER SPINDLE IN 3" DIAMETER PINE
TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:

SET COTTON PICKER SPINDLE IN 3" DIAMETER PINE
TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND
180-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY.

ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT
ACCORDING TO FEMA FIRM MAP PANEL NUMBER
48157-C-0120L, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "X" AREAS DETERMINED TO BE
INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

LEGEND

- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING CONTOUR
- PROPOSED CONTROLLER
- PROPOSED DRAINAGE DITCH



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowser Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. 19323

DATE: May 2017 DESIGNED BY: SEA
JOB NO.: 017_02_10108 CHECKED BY: SEA

AUTHORIZED SIGNATURE BY
DAVID P. KELLY, P.E. ON
November 29, 2017



PREPARED BY:
KALLEN & ASSOCIATES, INC. David P. Kelly

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

SITE UTILITY PLAN

FILE NO.:	SHEET NUMBER 8 OF 18
G.F. NO.:	
SCALE: 1" = 30'	
DATE: 7/6/18	

CALLED 18.077 ACRES (808,996.32 SQ. FT.)
PORTION OF CALL 12.483 ACRES
(F.B.C.F. NO. 208714729)
REMANINDER OF CALL 42.180 ACRES
(VOL. 424 PG. 47 OF F.B.C.F.)
IN THE RANDALL JONES LEAGUE SURVEY, A-42
FORT BEND COUNTY, TEXAS

WATER & SANITARY SEWER NOTES:

- REFERENCE SANITARY SEWER AND WATER LINE NOTES (SHEET 2) FOR PIPE MATERIAL REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 6-INCHES OF CLEARANCE AT ALL SANITARY SEWER AND WATER MAIN CROSSINGS, AND 6-INCHES OF MINIMUM CLEARANCE AT ALL SANITARY AND STORM SEWER CROSSINGS.
- REFERENCE W.E.P. PLANS (BY OTHERS) FOR CONTINUATION OF SANITARY AND WATER FACILITIES INSIDE THE BUILDING.
- ALL CLEANOUTS LOCATED WITHIN CONCRETE PAVEMENT TO BE PLASTIC RATED.
- SANITARY SEWER PIPE SHALL HAVE 6" WIDE CONTINUOUS METALLIC DETECTABLE WARNING TAPE ATTACHED TO THE PIPE @ 10' MAXIMUM.
- ALL SANITARY SEWER MAINS SHALL HAVE A MINIMUM OF 2 FEET COVER.
- PROPOSED WATER LINE SHALL BE INSTALLED A MINIMUM OF TWO (2) FEET (VERTICAL DISTANCE) BELOW WHERE IT CROSSES PROPOSED SANITARY SEWER LINE.
- CONTRACTOR SHALL INSTALL ONE FULL SECTION (MIN. 20 FEET) OF NEW WATER LINE CENTERED ON SANITARY SEWER CROSSING.
- WHEN CROSSING A SANITARY SEWER LINE, THE PROPOSED WATER LINE SHALL BE ENCASED IN A 20 FEET LONG, 8 INCH SCHEDULE 80 PVC PIPE. THE SPACE AROUND CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR SHALL BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT.
- PROVIDE INSULATED HOT BOX OR INSULATE ALL ABOVE GROUND PIPES AND FITTINGS OF REDUCED PRESSURE BACK FLOW PREVENTER IN ACCORDANCE WITH FORT BEND COUNTY REQUIREMENTS.
- DOMESTIC WATER AND FIRE WATER PIPES SHALL HAVE 6" WIDE CONTINUOUS METALLIC DETECTABLE WARNING TAPE ATTACHED TO THE PIPE @ 10' MAXIMUM.
- RPPZ BACKFLOW PREVENTER SHALL BE SUPPORTED ON FOUNDATION SLAB. FOUNDATION SLAB SHALL BE 4,000 PSI CONCRETE 8" THICK, REINFORCED WITH NO. 4 REBAR @ 8" BOTH WAYS, TOP AND BOTTOM. PROVIDE GEOTEXTILE FABRIC (W800 GSD) BETWEEN SLAB AND COMPACTED SUB-BASE.
- DOUBLE DETECTOR CHECK BACKFLOW PREVENTER SHALL BE LOCATED INSIDE UNDERGROUND VAULT. BACKFLOW PREVENTION VAULT AND ENCLOSURE SHALL BE AS MANUFACTURED BY FIRM-USA OF HOUSTON, TEXAS OR APPROVED EQUAL. ENCLOSURE SHALL HAVE ACCESS PANELS PLACED SO THAT INDIVIDUAL COMPONENTS CAN BE ACCESSED FOR MAINTENANCE.

WARNING-O/H POWER LINE

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF OVERHEAD POWER LINES. CONTACT CENTERPOINT ENERGY AT LEAST 72 HOURS PRIOR TO ANY ACTIVITY WITHIN THE LIMITS OF THE EASEMENT, OR ADJACENT TO THE FACILITY.

WARNING-U/G GAS LINE

CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF BURIED GAS LINES. EXISTING GAS LINES ARE SHOWN AT APPROXIMATE LOCATIONS AND DEPTH BASED ON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL FIELD-VERIFY LOCATION OF ALL EXISTING GAS LINES PRIOR TO COMMENCING CONSTRUCTION.

RANDALL JONES LEAGUE SURVEY, A-42

S. 07°15'15" E. 407.18

S. 07°17'48" W. 410.07

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 33" DIAMETER PECAN
TREE; LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN
TREE; LOCATED APPROXIMATELY 1,440-FT. SOUTH AND
180-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY.

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER
48157-C-0120L WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

2018				2019				2020				2021				2022				2023				2024				2025				2026				2027				2028				2029				2030				2031				2032				2033				2034				2035				2036				2037				2038				2039				2040				2041				2042				2043				2044				2045				2046				2047				2048				2049				2050				2051				2052				2053				2054				2055				2056				2057				2058				2059				2060				2061				2062				2063				2064				2065				2066				2067				2068				2069				2070				2071				2072				2073				2074				2075				2076				2077				2078				2079				2080				2081				2082				2083				2084				2085				2086				2087				2088				2089				2090				2091				2092				2093				2094				2095				2096				2097				2098				2099				2100			
2018				2019				2020				2021				2022				2023				2024				2025				2026				2027				2028				2029				2030				2031				2032				2033				2034				2035				2036				2037				2038				2039				2040				2041				2042				2043				2044				2045				2046				2047				2048				2049				2050				2051				2052				2053				2054				2055				2056				2057				2058				2059				2060				2061				2062				2063				2064				2065				2066				2067				2068				2069				2070				2071				2072				2073				2074				2075				2076				2077				2078				2079				2080				2081				2082				2083				2084				2085				2086				2087				2088				2089				2090				2091				2092				2093				2094				2095				2096				2097				2098				2099				2100			
2018				2019				2020				2021				2022				2023				2024				2025				2026				2027				2028				2029				2030				2031				2032				2033				2034				2035				2036				2037				2038				2039				2040				2041				2042				2043				2044				2045				2046				2047				2048				2049				2050				2051				2052				2053				2054				2055				2056				2057				2058				2059				2060				2061				2062				2063				2064				2065				2066				2067				2068				2069				2070				2071				2072				2073				2074				2075				2076				2077				2078				2079				2080				2081				2082				2083				2084				2085				2086				2087				2088				2089				2090				2091				2092				2093				2094				2095				2096				2097				2098				2099				2100			
2018				2019				2020				2021				2022				2023				2024				2025				2026				2027				2028				2029				2030				2031				2032				2033				2034				2035				2036				2037				2038				2039				2040				2041				2042				2043				2044				2045				2046				2047				2048				2049				2050				2051				2052				2053				2054				2055				2056				2057				2058				2059				2060				2061				2062				2063				2064				2065				2066				2067				2068				2069				2070				2071				2072				2073				2074				2075				2076				2077				2078				2079				2080				20																																																																															

AREA TABULATION

TOTAL SITE AREA = 18.572 ACRES
TOTAL PHASE ONE AREA = 5.073 ACRES (DRAWING TO POND)
PHASE ONE IMPERVIOUS AREA = 3.327 ACRES

PERCENTAGE OF IMPERVIOUS AREA
 $3.327/5.073 = 0.656 = 65.6\%$ IMPERVIOUS AREA

DETENTION VOLUME

DETENTION VOLUME REQUIRED:
 $0.83 \text{ AC} \cdot \text{IN} \cdot \text{TC} \cdot \text{REQD FOR } 62.5\% \text{ IMPERVIOUS AREA}$
(SCALED FROM POND STORAGE MAINTENANCE)

$5.073 \text{ AC} \cdot 0.841 = 4.256 \text{ AC} \cdot \text{IN} \cdot (165.827 \text{ IN}^3) \text{ REQUIRED}$

DETENTION VOLUME PROVIDED:
 $10.0 \text{ IN} \cdot \text{W.E. (DESIGN)} = 87.26'$
STORAGE PROVIDED = $4.427 \text{ AC} \cdot \text{IN} \cdot (159.247 \text{ IN}^3)$

MITIGATION TABULATION (PHASE ONE)
BASE FLOOD ELEVATION = 85.00'

TOTAL FILL VOLUME PLACED
WITHIN 100-YR. FLOOD PLAIN
(BELOW ELEV. 85.00) = 1,298.21 CUBIC YARDS

TOTAL FILL VOLUME REMOVED
FROM 100-YR. FLOOD PLAIN
(BELOW ELEV. 85.00) = 1,615.48 CUBIC YARDS

NET FILL VOLUME = 328.27 CUBIC YARDS NET CUT

NOTE:
MITIGATION VOLUMES DO NOT
ACCOUNT FOR THE MATERIAL
REMOVED FROM THE DETENTION
POND AREA.

Stage	Elevation	Total Storage	18" RCP @ 0.20% w/3-1/2" restrictor	Overflow Weir	Total Outflow
(ft)	(ft)	(cufs)	(cufs)	(cufs)	(cfs)
0.00	80.20	0.000	0.000	0.000	0.000
0.50	80.70	10.610	0.123	0.000	0.123
1.00	81.20	21.213	0.208	0.000	0.208
2.00	82.20	44.351	0.314	0.000	0.314
3.00	83.20	69.478	0.393	0.000	0.393
4.00	84.20	96.959	0.459	0.000	0.459
5.00	85.20	126.451	0.516	0.000	0.516
6.00	86.20	157.915	0.567	0.000	0.567
7.00	87.20	192.847	0.614	0.000	0.614
7.50	87.70	209.087	0.637	17.66	18.30
8.00	88.20	227.051	0.658	49.95	50.61

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowser Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1889
Firm Registration No. F9323

DATE: May, 2017
JOB NO. 017_50_1010

AUTHORIZED SIGNATURE BY
DAVID P. KELLY II, P.E. ON
November 29, 2017

SERVICES BY:
KALISA & ASSOCIATES, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

DRAINAGE COMPUTATIONS

FILE NO.:

G.F. NO.:

SCALE: N.T.S.

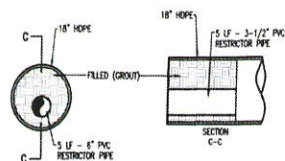
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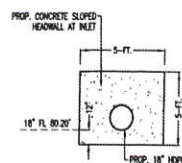
OF 18

APPROVED: Mariel
Development Coordinator

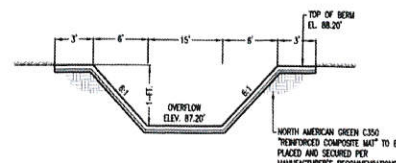
DATE: 2/6/18



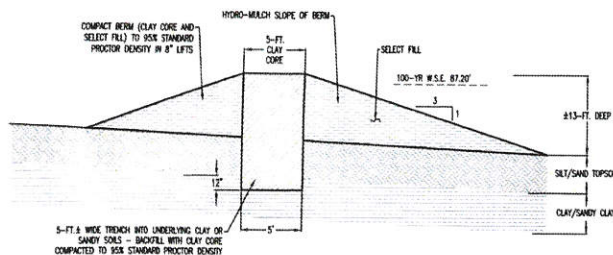
RESTRICTOR PIPE DETAIL
NOT TO SCALE



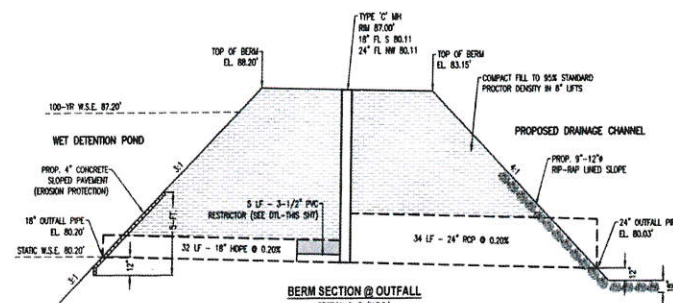
OUTFALL PROTECTION
(N.T.S.)



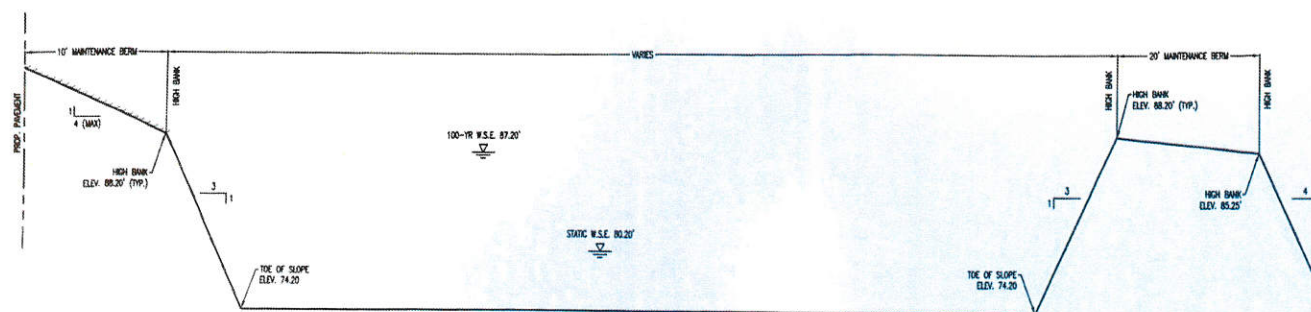
EMERGENCY SPILLWAY
SECTION C-C (N.T.S.)



TYPICAL BERM SECTION
SECTION B-B (N.T.S.)



BERM SECTION @ OUTFALL
SECTION D-D (N.T.S.)



TYPICAL CROSS SECTION
SECTION A-A (N.T.S.)

- NOTES:**
1. FILL SHALL BE PLACED IN 8-INCH LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY (ASTM D-1555) - (OR 95% OPTIMUM MOISTURE).
 2. CONTRACTOR TO INSTALL A 2-FOOT CLAY LINER PLACED AS SHOWN. CLAY MATERIAL TO BE OBTAINED FROM ON-SITE MATERIAL. THE 2-FOOT CLAY LINER SHALL BE CONSTRUCTED IN 8-INCH LIFTS AND SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY (OR 95% OPTIMUM MOISTURE) AS DETERMINED BY ASTM D-1555 PROCEDURE. (HATCHED AREA INDICATES LIMITS OF CLAY LINER.)

BENCHMARKS:
ELEVATIONS ARE DERIVED FROM NGS MONUMENT MARK RESET 1983 DESCRIBED AS A DISK SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723, APPROXIMATELY 2,200-FT WEST OF STATE FARM MARKET HIGHWAY NO. 358.

ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 33" DIAMETER PEG TREE, LOCATED APPROXIMATELY 870-FT SOUTH AND 40-FT WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PEG TREE, LOCATED APPROXIMATELY 1,440-FT SOUTH AND 160-FT WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER 48157-C-01202, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowyer Road
Fulshear, Texas 77441
Office and Fax: (281) 348-2816
Cell: (281) 300-1889
Firm Registration No. F9323

DATE: May 2013
JOB NO. D17-301-10108
DESIGNED BY: SLA
CHECKED BY: SPN

AUTHORIZED SIGNATURE BY
DAVID P. KELLY, P.E. ON
November 29, 2017



SUPervised by:
KATHA & ASSOCIATES, INC.
David P. Kelly

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

TYPICAL SECTIONS

FILE NO.:
C.F. NO.:
SCALE: N.T.S.

SHEET NUMBER

10

OF 18

APPROVED: [Signature]
DATE: 2/6/18

GRACE COMMUNITY FELLOWSHIP

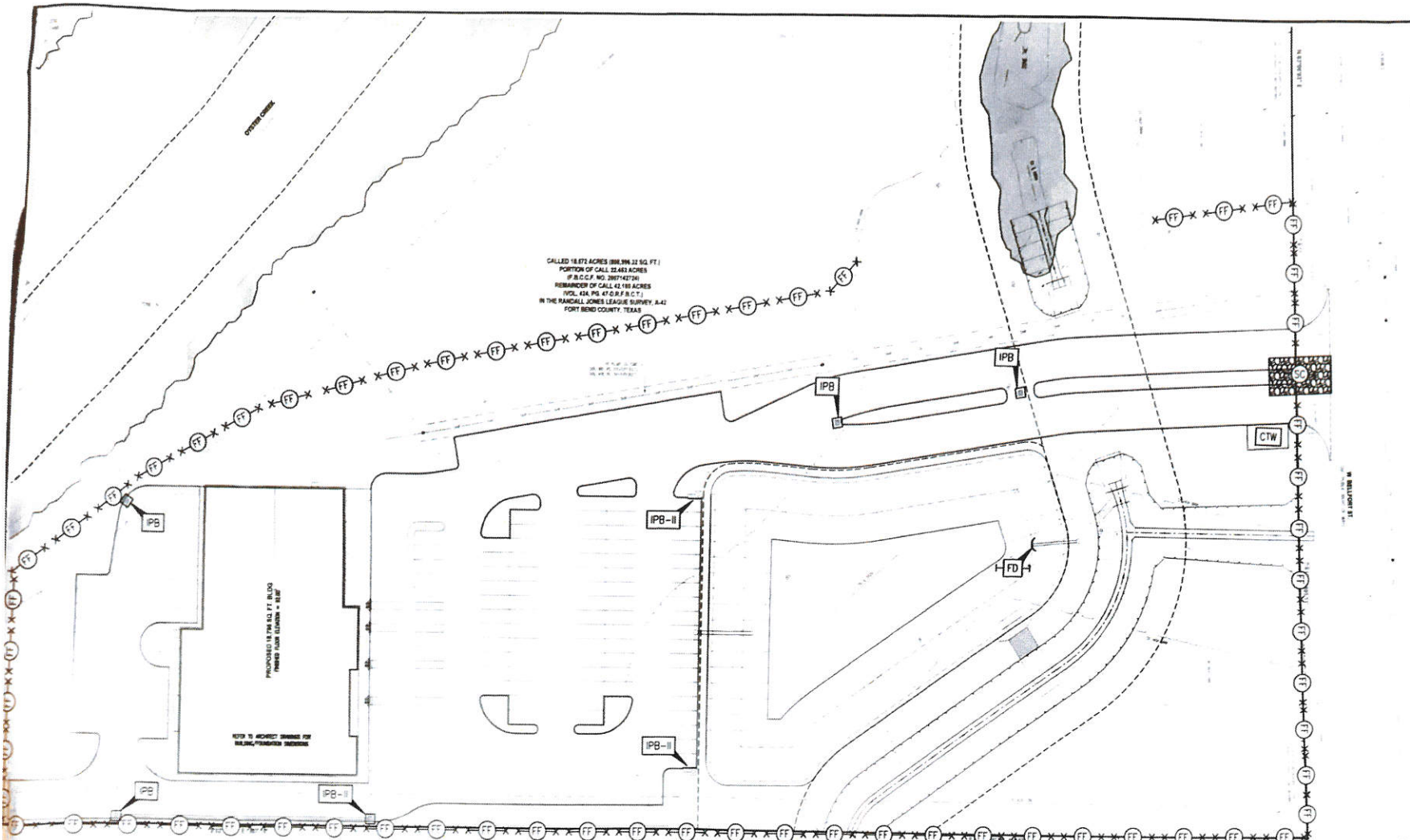


OF 18

APPROVED: [Signature]
Development Coordinator

DATE: 2/6/18

1. ALL SEDIMENT AND EROSION CONTROLS SHALL BE SHOWN ON THE STORM WATER POLLUTION PREVENTION PLAN. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STORM WATER POLLUTION PREVENTION CONTROLS FROM TO, AND DURING ALL CONSTRUCTION PHASES.
2. SEDIMENT SHALL BE RETAINED ON-SITE TO THE MAXIMUM EXTENT PRACTICABLE.
3. WHEN DE-WATERING (PUMPING) THE SITE, THE SEDIMENT-LOADED DISCHARGE SHALL BE DETAINED FOR A SUFFICIENT TIME TO ALLOW THE MAJORITY OF THE SEDIMENT TO SETTLE OUT. DIRECT DISCHARGE INTO STORM SEWER WILL NOT BE ALLOWED.
4. IF SEDIMENT ESCAPES FROM THE SITE, ACCUMULATION SHALL BE REMOVED TO PREVENT BECOMING A POLLUTANT SOURCE.
5. ALL OFF-SITE MATERIALS, STORAGE AREAS AND STOCKPILES OF DIRT USED BY THE CONTRACTOR ARE CONSIDERED PART OF THE PROJECT AND WILL FOLLOW THE SAME CONTROLS TO PREVENT ANY POLLUTION TO THE STORM SEWER SYSTEMS.
6. AFTER PAVING COMPLETION, ALL EROSION SHALL BE ADEQUATELY STABILIZED THROUGH HYPODROMAL SEEDING OR TOWNPLANT.
7. CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT ON DISCHARGE SURFACES. CONCRETE OR URINAL WASH WATER TO THE SITE, UNLESS A PROPERLY DESIGNED AND DESIGNED CONCRETE WASHOUT AREA IS USED.
8. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A SECURE LOCKED MATERIAL DUMPSTER FROM A LICENSED WASTE MANAGEMENT COMPANY. ALL CONSTRUCTION DEBRIS AND TRASH FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER AND CONSTRUCTION WASTE MATERIAL SHALL BE BURNED ON-SITE.
9. CONTRACTOR SHALL CLEAN THE PAVEMENT AREAS ADJACENT TO THE STABILIZED CONSTRUCTION ENTRANCE DAILY TO REMOVE ANY EXCESS MUD, DIRT OR TRUCK TRACKS FROM THE SITE.
10. CONTRACTOR TO REMOVE ALL TEMPORARY STORM WATER POLLUTION PREVENTION MEASURES UPON COMPLETION OF CONSTRUCTION.



BENCHMARKS:
ELEVATIONS ARE DERIVED FROM NAD 83 MONUMENT DATA
RECEIVED 1985 RECORDED AS A 100' SET BACK CORNER
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200'-FT. WEST OF
STATE FARM MARKET HIGHWAY NO. 356
ELEVATION = 94.54 NAVD 1983

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PINE
TREE, LOCATED APPROXIMATELY 870'-FT. SOUTH AND
40'-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY
ELEVATION = 92.11' NAVD 1983

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PINE
TREE, LOCATED APPROXIMATELY 1,440'-FT. SOUTH AND
180'-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY
ELEVATION = 88.97' NAVD 1983

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM MAP PANEL NUMBER
48157-C-0120, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE" AREAS DETERMINED TO
BE IN THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'

SWPPP LEGEND	
FF	FILTER FABRIC FENCE
RFB	REINFORCED FILTER FABRIC BARRIER
SC	STABILIZED CONSTRUCTION ENTRANCE
IPB	INLET PROTECTION BARRIER STAGE 1 INLETS
IPB-II	INLET PROTECTION BARRIER STAGE 2 INLETS
FD	FILTER DRAIN
CTW	CONCRETE TRUCK WASHOUT AREA



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Banner Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2816
Cell: (281) 300-1889
Firm Registration No. F9323

DATE: May 2017
JOB NO. DPK_05_10168

DESIGNED BY: JLA
CHECKED BY: JLA

AUTHORIZED SIGNATURE BY:
DAVID P. KELLY R. P.E. ON
November 28, 2017

SEAL OF DAVID P. KELLY R. P.E.
STATE OF TEXAS
No. 47791

SUBMITTED BY:
GRACE COMMUNITY FELLOWSHIP, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

PERMIT & REGULATORY NOTES:

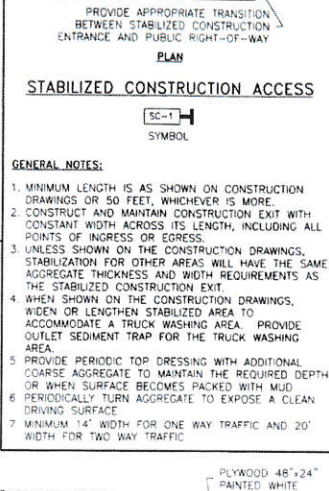
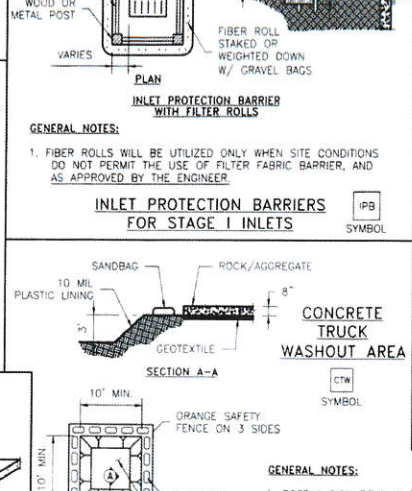
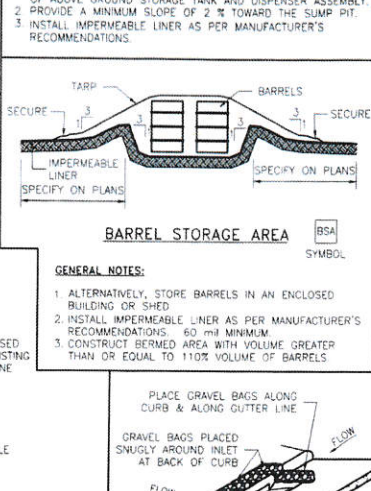
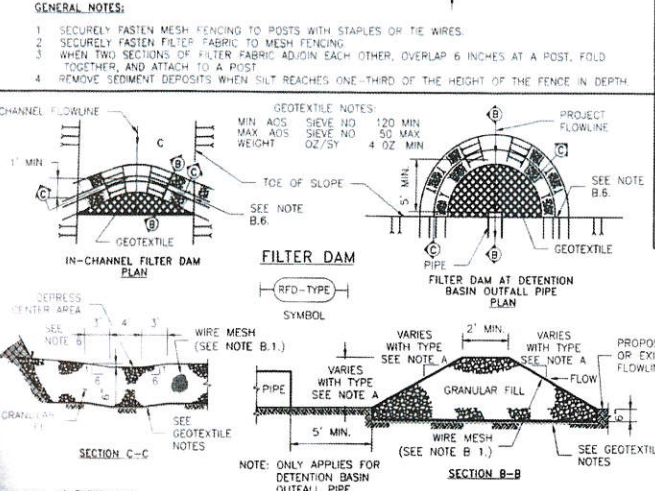
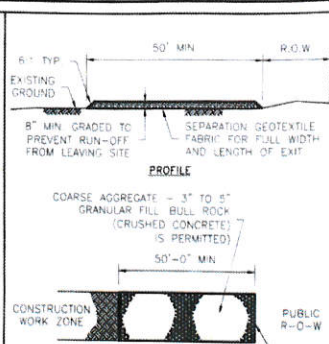
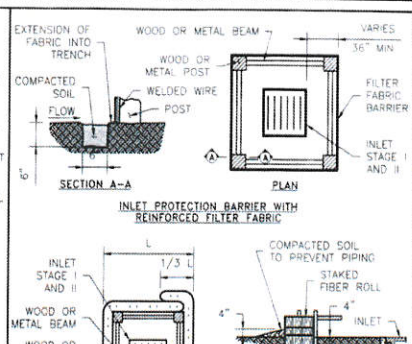
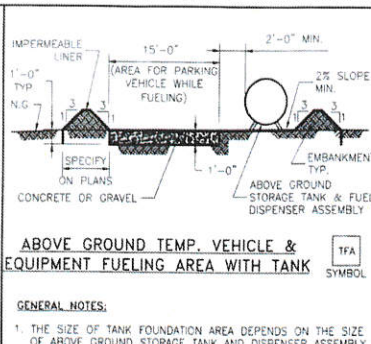
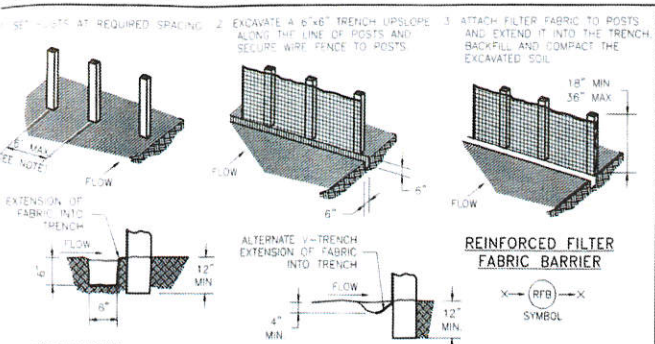
1. THE CONTRACTOR SHALL COMPLETE AND SIGN THE T.C.E.D. "CONSTRUCTION SITE NOTICE" (ATTACHMENT NO. 2 OF TEXAS GENERAL PERMIT FOR 150000).
2. THE CONTRACTOR SHALL POST A SIGNED COPY OF THE "CONSTRUCTION SITE NOTICE" WHERE IT IS READILY AVAILABLE FOR VIEWING BY THE GENERAL PUBLIC AND LOCAL, STATE AND FEDERAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND SHALL MAINTAIN THIS NOTICE UNTIL COMPLETION OF THE WORK.
3. THE CONTRACTOR SHALL PROVIDE A COPY OF THE SIGNED "CONSTRUCTION SITE NOTICE" TO THE OPERATOR OF ANY MUNICIPAL STORM SEWER SYSTEMS RECEIVING STORM WATER DISCHARGE FROM THE SITE AT LEAST TWO (2) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

SWPPP CONSTRUCTION NOTES:

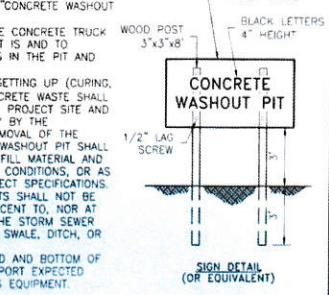
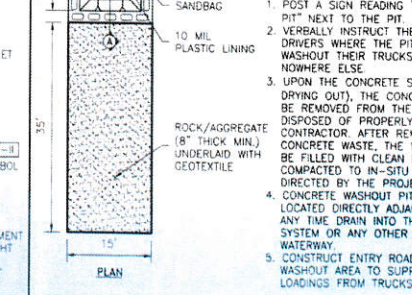
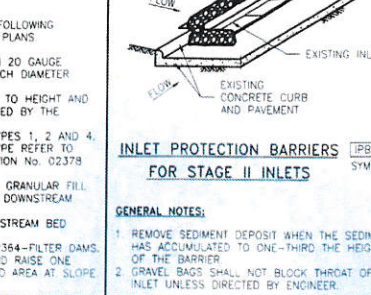
1. ALL SEGMENT AND CROSS CONTROLS ARE SHOWN ON THE STORM WATER POLLUTION PREVENTION PLAN. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STORM WATER POLLUTION PREVENTION CONTROLS PRIOR TO, AND DURING ALL CONSTRUCTION PHASES.
2. SEGMENT SHALL BE RETAINED ON-SITE TO THE MAXIMUM EXTENT PRACTICABLE.
3. WHEN DE-WATERING (PUMPING) THE SITE, THE SEGMENT-LOOSE DISCHARGE SHALL BE DETAINED FOR A SUFFICIENT TIME TO ALLOW THE MAJORITY OF THE SEGMENT TO SETTLE OUT. DIRECT DISCHARGE INTO STORM SEWERS WILL NOT BE ALLOWED.
4. IF SEGMENT ESCAPED FROM THE SITE, ACCUMULATION SHALL BE REMOVED TO PREVENT BECOMING A POLLUTANT SOURCE.
5. ALL OFF-SITE MATERIALS, STORAGE AREAS AND STOCKPILES OF DIRT USED BY THE CONTRACTOR ARE CONSIDERED PART OF THE PROJECT AND WILL FOLLOW THE SAME CONTROLS TO PREVENT ANY POLLUTION TO THE STORM SEWER SYSTEMS.
6. AFTER PAVING COMPLETION, ALL EXPOSED SOILS SHALL BE ACCURATELY STABILIZED THROUGH HYDRO-MULCH SEEDING OR EQUIVALENT.
7. CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRAM WASH WATER ON THE SITE, UNLESS A PROPERLY DESIGNED AND DESIGNATED CONCRETE WASHOUT AREA IS USED.
8. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A SECURE LOCKED METAL DUMPSTER FROM A LICENSED WASTE MANAGEMENT COMPANY. ALL CONSTRUCTION DEBRIS AND TRASH FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. NO CONSTRUCTION WASTE MATERIAL SHALL BE BURIED ON-SITE.
9. CONTRACTOR SHALL CLEAN THE PAVEMENT AREAS ADJACENT TO THE STABILIZED CONSTRUCTION ENTRANCE DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE.
10. CONTRACTOR TO REMOVE ALL TEMPORARY STORM WATER POLLUTION PREVENTION MEASURES UPON COMPLETION OF CONSTRUCTION.

APPROVED:
DATE: 2/16/18

SITE UTILITY PLAN	
FILE NO.	SHEET NUMBER 11 OF 18
G.F. NO.	
SCALE: 1" = 30'	



- 1. TYPES OF FILTER DAMS**
1. TYPE 1 (NON-REINFORCED)
 - a. HEIGHT - 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 - c. SLOPES - 2:1 (MAXIMUM).
 2. TYPE 2 (REINFORCED)
 - a. HEIGHT - 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 - c. SLOPES - 2:1 (MAXIMUM).
 3. TYPE 3 (REINFORCED)
 - a. HEIGHT - 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 - c. SLOPES - 3:1 (MAXIMUM).
 4. TYPE 4 (GABION)
 - a. HEIGHT - 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 5. TYPE 5 - AS SHOWN ON THE PLANS



BENCHMARK
ELEVATIONS ARE DERIVED FROM NGS MONUMENT 1001 RESET 1963 DESCRIBED AS A DISK SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723 APPROXIMATELY 2,200-FT. WEST OF STATE FARM MARKET HIGHWAY NO. 359.
ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND 40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND 180-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM MAP PANEL NUMBER 48157-C-01020, WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO BE IN THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bower Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. 19323

DATE: May 2017
JOB NO. 217-22-10108

DESIGNED BY: SA
CHECKED BY: SA

AUTHORIZED SIGNATURE BY:
DAVID P. KELLY, P.E.
November 29, 2017

SURVEYED BY:
NATHAN R. ARDRETT, INC.
David P. Kelly

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

STORM WATER POLLUTION PREVENTION DETAILS

FILE NO.:
S.F. NO.:
SCALE: N.T.S.

SHEET NUMBER
12
OF 18

APPROVED: *[Signature]*
DATE: 2/6/18

BENCHMARKS:
ELEVATIONS ARE DERIVED FROM NOS MONUMENT LEGAL
RESET 1963 DESCRIBED AS A DISK SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200-FT. WEST OF
STATE FARM MARKET HIGHWAY NO. 358.

ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:

SET COTTON PICKER SPINDLE IN 33" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTH-EAST CORNER OF PROPERTY.

ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:

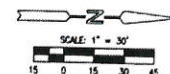
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND
180-FT. WEST OF THE NORTH-EAST CORNER OF
PROPERTY.

ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA F.I.M. MAP PANEL NUMBER
48157-C-0100, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

LEGEND

- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING CONTOUR
- 295.00
- × 295.00
- FINISHED GRADE ELEVATION
- PROPOSED DRAINAGE DITCH



DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bower Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1909
Firm Registration No. 79323

DATE: May 2017
JOB NO. 2017-05-1008

DESIGNED BY: SLA
CHECKED BY: JWA

AUTHORIZED SIGNATURE BY
DAVID P. KELLY, P.E. ON
November 29, 2017



SUPPLIED BY:
KALISH & ASSOCIATES, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

FIRE LANE EXHIBIT

FILE NO.:
SHEET NUMBER

SCALE: 1" = 30'

13

OF 18

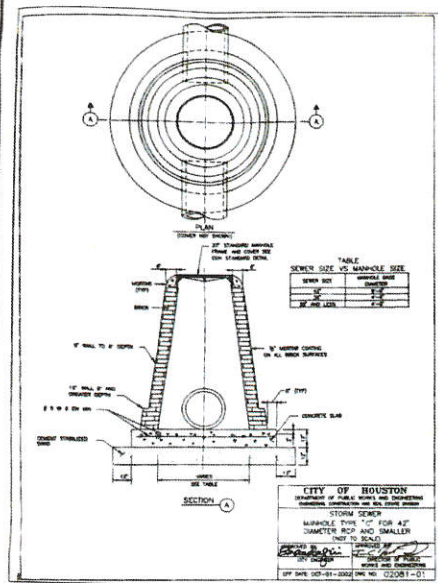
APPROVED: *[Signature]*
DATE: 2/16/18

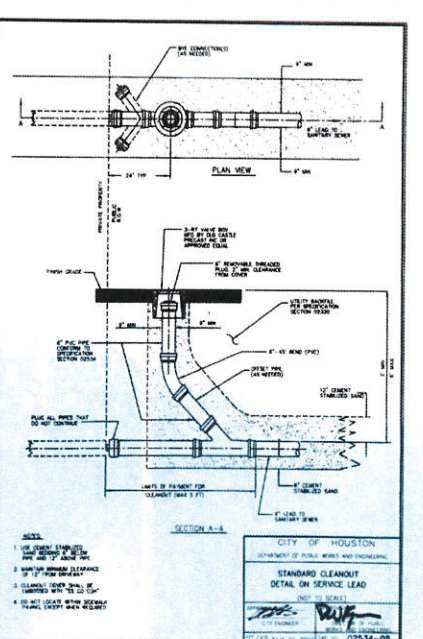
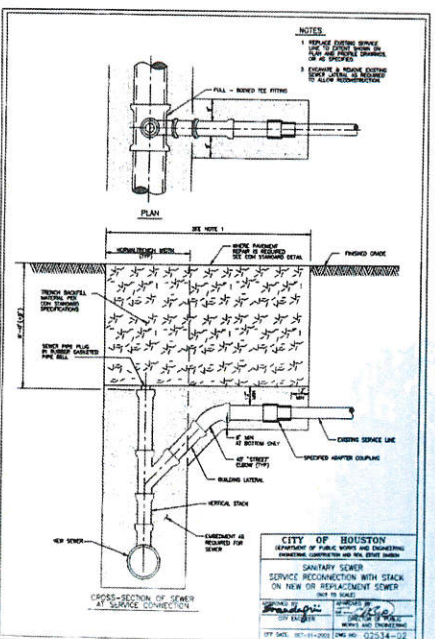
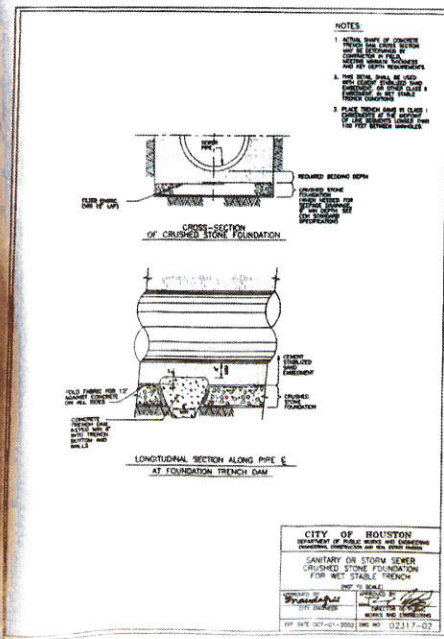
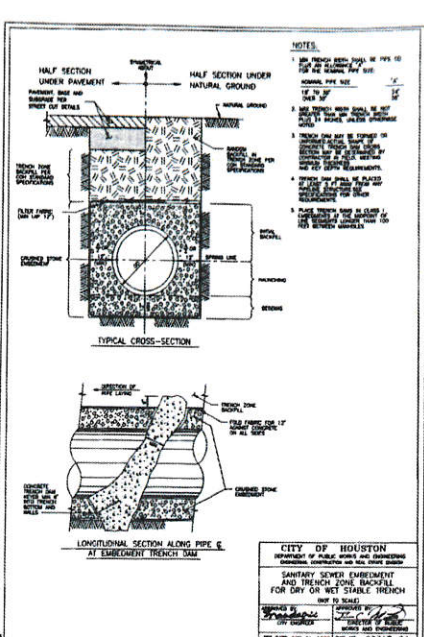
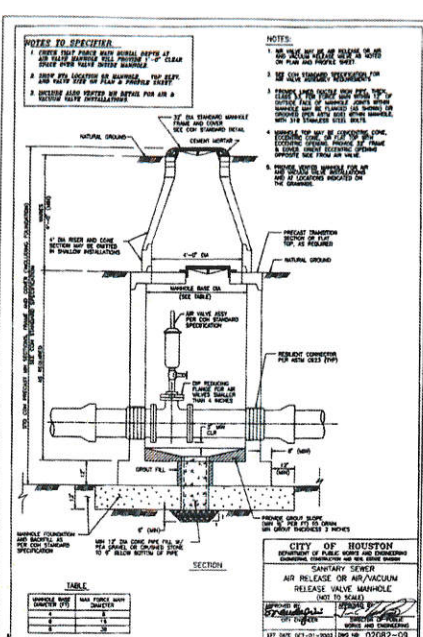
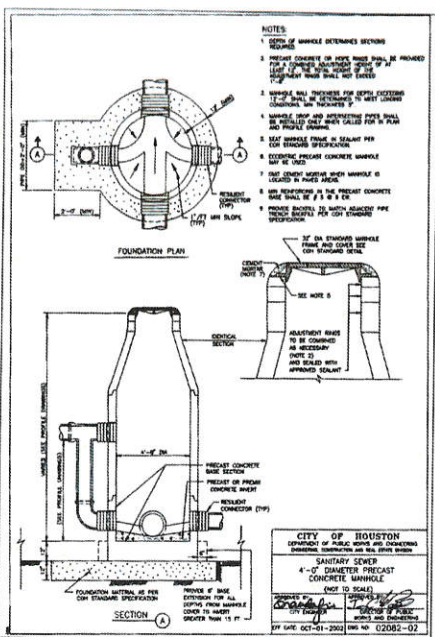
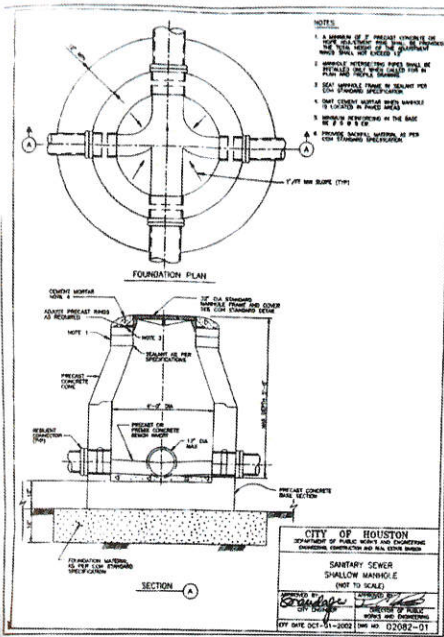
CALLED 18.972 ACRES (888,886.32 SQ. FT.)
PORTION OF CALL 22,483 ACRES
(P.B.C.P. NO. 208747574)
REMANINDER OF CALL 42,180 ACRES
(VOL. 434, PG. 47) D.R.P.C.T.
IN THE RANDALL JONES LEASUE SURVEY, A-42
FORT BEND COUNTY, TEXAS

PROVIDE RED STRIPING TO INDICATE TOW
AWAY ZONE (WHITE LETTERING)
MAINTAIN 14' VERTICAL CLEARANCE

FIRE LANE NOTES:

1. FIRE APPROXIMATE ACCESS ROADS SHALL BE MARKED BY PAINTED LINES OF RED TRAFFIC PAINT
30" INCHES (8") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS LETTERED
"FIRE LANE - NO PARKING - TOW AWAY ZONE" SHALL APPEAR IN FOUR ROWS (4") WHITE
LETTER AT 25 FEET INTERVALS ON THE RED BORDER WARNINGS ALONG BOTH SIDES OF THE
FIRE LANE. WHERE A CURB IS AVAILABLE, THE STRIPING SHALL BE ON THE VERTICAL FACE
OF THE CURB.
2. SIGNS SHALL READ "NO PARKING FIRE LANE" OR "FIRE LANE NO PARKING" AND SHALL BE
12" WIDE AND 18" HIGH. SIGNS SHALL BE PAINTED ON A WHITE BACKGROUND WITH LETTERS
AND BORDERS IN RED, USING NOT LESS THAN 2" LETTERING. SIGNS SHALL BE PERMANENTLY
ATTACHED TO A STATIONARY POST AND THE BOTTOM OF THE SIGN SHALL BE 50 FEET, SIX
INCHES (5'-6") ABOVE FINISHED GRADE. SIGNS SHALL BE SPACED NOT MORE THAN FIFTY FEET
(50') APART. SIGNS MAY BE INSTALLED ON PERMANENT BUILDINGS OR WALLS OR AS
APPROVED BY THE FIRE MARSHAL.





REMARKS:
ELEVATIONS ARE DERIVED FROM 1985 MONUMENT DATA RESET 1985 DESCRIBED AS A DIRM SET IN CONCRETE ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET HIGHWAY NO. 723, APPROXIMATELY 3,200-FT. WEST OF STATE FARM MARKET HIGHWAY NO. 350.

ELEVATION = 94.54' NAVD 1988
TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEAN TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND 40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 92.11' NAVD 1988
TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 3" DIAMETER PEAN TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND 180-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.
ELEVATION = 88.97' NAVD 1988

FLOOD PLAN STATEMENT:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER 48157-C-01202L WITH AN EFFECTIVE DATE OF APRIL 1, 2014, THE MAP INDICATES THIS TRACT TO BE PARTIALLY WITHIN ZONE "AE", AREAS DETERMINED TO BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE FLOOD ELEVATION (BFE) OF 85.00'.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bower Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. F9323

DATE: May 2017
JOB NO. D17-10-10108
DESIGNED BY: SL
CHECKED BY: DM

AUTHORIZED SIGNATURE BY:
DAVID P. KELLY, P.E.
November 23, 2017

SEAL OF DAVID P. KELLY, P.E.
1978

REVIEWED BY:
KALISA & ASSOCIATES, INC.
DAVID P. KELLY

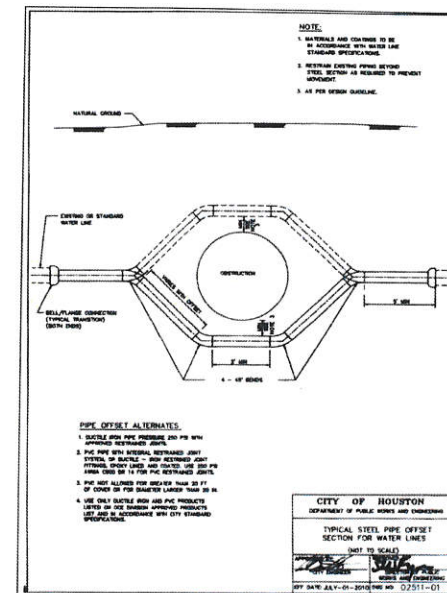
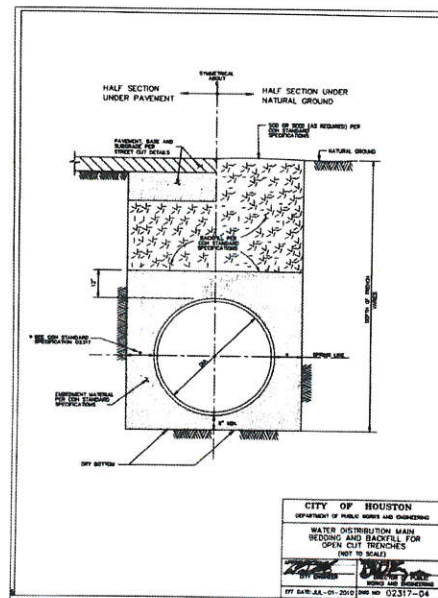
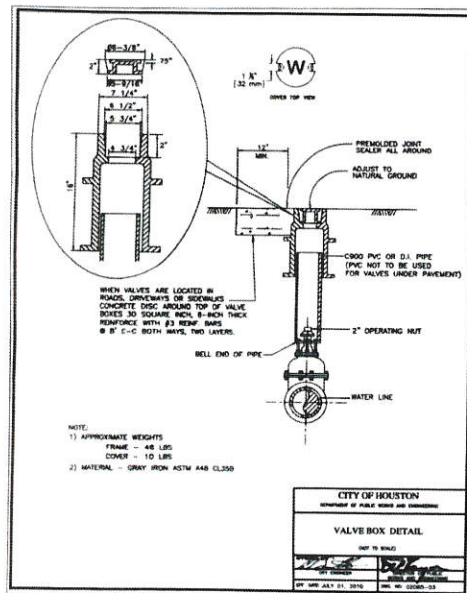
GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

SANITARY SEWER DETAILS

FILE NO.:
C.F. NO.:
SCALE: N.T.S.
SHEET NUMBER:
16
OF 18

APPROVED: [Signature]
DATE: 2/16/18

GRACE COMMUNITY FELLOWSHIP



BENCHMARK:
ELEVATIONS ARE DERIVED FROM NGS MONUMENT MARK
RESET 1965 DESCRIBED AS A DISK SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200-FT WEST OF
STATE FARM MARKET HIGHWAY NO. 350.

ELEVATION = 94.54' NAVD 1988

TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 33" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 870-FT SOUTH AND
40-FT WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 36" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 1,440-FT SOUTH AND
160-FT WEST OF THE NORTHEAST CORNER OF
PROPERTY.

ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENT:
ACCORDING TO FEMA FIRM, MAP PANEL NUMBER
48157-C-0120L WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "AE". AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowyer Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2616
Cell: (281) 300-1869
Firm Registration No. 13323

DATE: JULY 21, 2010
JOB NO. 017-20-1008

AUTHORIZED SIGNATURE BY
DAVID P. KELLY, P.E. ON
November 29, 2017

DESIGNED BY: JSA
CHECKED BY: JSA

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

WATER LINE DETAILS

FILE NO.:

G.F. NO.:

SCALE: N.T.S.

SHEET NUMBER

17

OF 18

APPROVED: [Signature]
DATE: 11/29/17

GRACE COMMUNITY FELLOWSHIP

BENCHMARKS:
ELEVATIONS ARE DERIVED FROM NOS MONUMENT LINK
RESET 1963 DESCRIBED AS A DISK SET IN CONCRETE
ON SOUTH RIGHT-OF-WAY OF STATE FARM MARKET
HIGHWAY NO. 723, APPROXIMATELY 2,200-FT. WEST OF
STATE FARM MARKET HIGHWAY NO. 355.

ELEVATION = 94.54' NAVD 1988

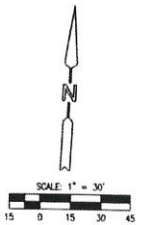
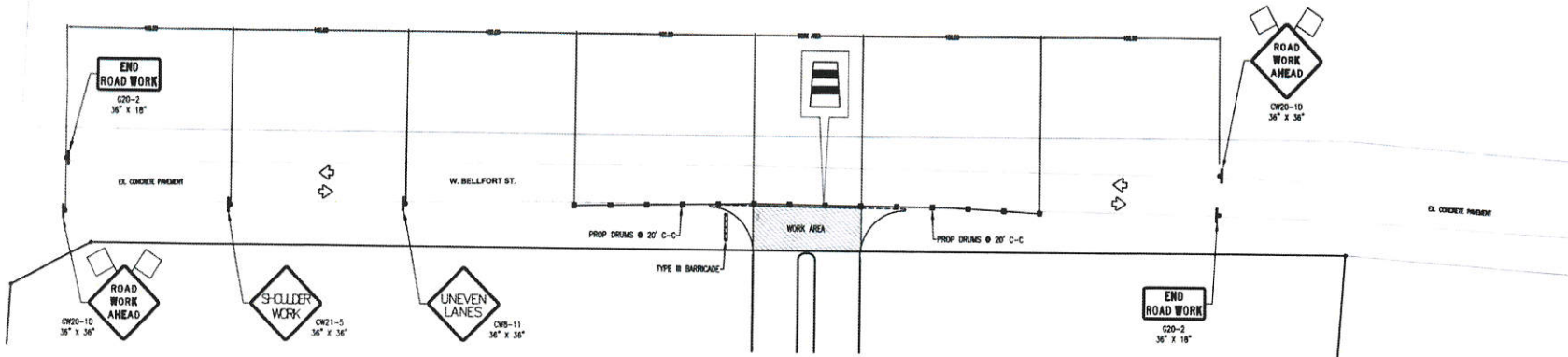
TEMPORARY BENCHMARK 1:
SET COTTON PICKER SPINDLE IN 33" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 870-FT. SOUTH AND
40-FT. WEST OF THE NORTHEAST CORNER OF PROPERTY.

ELEVATION = 92.11' NAVD 1988

TEMPORARY BENCHMARK 2:
SET COTTON PICKER SPINDLE IN 34" DIAMETER PECAN
TREE, LOCATED APPROXIMATELY 1,440-FT. SOUTH AND
160-FT. WEST OF THE NORTHEAST CORNER OF
PROPERTY.

ELEVATION = 88.97' NAVD 1988

FLOOD PLAIN STATEMENTS:
ACCORDING TO FEMA F.I.R.M. MAP PANEL NUMBER
48157-C-0120, WITH AN EFFECTIVE DATE OF APRIL 1,
2014, THE MAP INDICATES THIS TRACT TO BE
PARTIALLY WITHIN ZONE "X2" AREAS DETERMINED TO
BE INSIDE THE 100-YEAR FLOOD PLAIN WITH A BASE
FLOOD ELEVATION (BFE) OF 85.00'.



POSTED SPEED (MPH)	SIGN SPACING "X"	MIN. DESIRABLE TAPER LENGTH "X"			SUGGESTED MAXIMUM SPACING OF DEVICE	
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT
30	120	150'	185'	180'	30	60' - 75'
35	160	205'	255'	245'	35	70' - 90'
40	240	285'	325'	320'	40	80' - 100'
45	320	450'	495'	540'	45	90' - 110'
50	400	500'	550'	600'	50	100' - 125'
55	500	500'	605'	660'	55	110' - 140'

POSTED SPEED (MPH)	LENGTH IN FEET (B)
20	40
25	60
30	90
35	120
40	155
45	195
50	240
55	285
60	350
65	410
70	475

	TYPE 3 BARRICADE
	HEAVY WORK VEHICLE
	TRAILER MOUNTED FLASHING ARROW BOARD
	SIGN
	FLAG
	CHANNELIZING DEVICES
	TRUCK MOUNTED ATTENUATOR (TMA)
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	TRAFFIC FLOW
	FLAGGER (POLICE OFFICER)

TRAFFIC NOTES:

- CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TEXAS MUTCD, MOST RECENT EDITION WITH REVISIONS) DURING CONSTRUCTION.
- NO LANES SHALL BE CLOSED DURING THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:30 PM - MONDAY THRU FRIDAY.
- OFF DUTY POLICE OFFICERS/FLAGGERS ARE REQUIRED TO DIRECT TRAFFIC WHEN LANES ARE CLOSED.
- CONTRACTOR SHALL COVER THE EXCAVATION WITH STEEL PLATES ANCHORED PROPERLY DURING NON-WORKING HOURS AND ALLOW NORMAL TRAFFIC FLOW.
- IF CONCRETE IS NOT FEASIBLE, USE TRAVELER FR 336 EXT. 34" DELINEATOR OR APPROVED EQUAL WITH SHEETING AND BASE EXPOSED TO PAVEMENT NEXT TO EXCAVATION DURING NON-WORKING HOURS.
- APPROVED COPIES OF "TRAFFIC CONTROL PLANS" SHALL BE AVAILABLE FOR INSPECTION AT JOB SITE AT ALL TIMES.
- IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING THE CONSTRUCTION THAN WHAT IS OUTLINED IN THE CONTRACT DRAWINGS, THEY SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT AN ALTERNATE SET OF PLANS TO PLAN REVIEW SECTION FOR APPROVAL TEN WORKING DAYS PRIOR TO IMPLEMENTATION.
- *THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLAR AND SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS. PLANS WILL BECOME A PART OF THE CONTRACT DRAWINGS.

DPK Engineering LLC
LAND DEVELOPMENT - SITE DEVELOPMENT - MUNICIPAL
3103 Bowser Road
Fulshear, Texas 77441
Office and Fax: (281) 346-2816
Cell: (281) 300-1869
Firm Registration No. F9323

DATE: May, 2017
JOB NO. DTP_20161018

DESIGNED BY: J.A.
CHECKED BY: J.A.
AUTHORIZED SIGNATURE BY:
DAVID P. KELLY R. P.E. ON
November 29, 2017



DRAWN BY:
KARLEA & ASSOCIATES, INC.

GRACE COMMUNITY FELLOWSHIP
PROPOSED DEVELOPMENT

TRAFFIC CONTROL PLAN

FILE NO.:	SHEET NUMBER:
G.F. NO.:	18
SCALE: 1" = 30'	OF 18

APPROVED: *[Signature]*
DATE: 7/6/18