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

REVIEW BY FORT BEND COUNTY COMMISSIONERS COURT

☐ **Right of Way Permit**

☒ **Commercial Driveway Permit**

Permit No: 2017-14381

Applicant: **Sun Builders Co./Identity Architects**

Job Location Site: **9333 Spring Green Boulevard, Katy, TX 77494**

Bond No. [redacted] **Date of Bond:** **7/10/2017** **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 inconsistant with Chapter 181, Vernon's Texas Statutes and Codes Annoted.

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 portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 25th day of July, 2017, 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

By: Charles O. Ay
for County Engineer

N/A
By: _____
Drainage District Engineer/Manager

Presented to Commissioners Court and approved.

Date Recorded _____ Comm. Court No. _____

Clerk of Commissioners Court

By: _____
Deputy

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

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

[ ] **Right of Way Permit**

[X] **Commercial Driveway Permit**

Permit No: 2017-14381

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:

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

(2) BOND:

- [ ] County Attorney, approval when applicable.
- [ ] Perpetual bond currently posted. Bond No: _____ Amount: _____
- [X] Performance bond submitted. Bond No: [redacted] 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.

Charly O. Ay
Permit Administrator

7/17/17
Date

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 §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND §

THAT WE, Sun Builders Co. whose (*address, phone*) is 5870 Hwy 6 N, Suite 206, Houston, TX 77084, (281) 815 - 1020, hereinafter called the Principal, and Travelers Casualty and Surety Company of America, a Corporation existing under and by virtue of the laws of the state of Connecticut and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at (*name/address/phone*) One Tower Square, Hartford, CT 06183, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Cheryl M. Toler and whose address is 4650 Westway Park Blvd., Houston, TX 77041-2036, 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 & No/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 10th day of July , 2017 .

Sun Builders Co.
PRINCIPAL

BY GILDA A. THOMPSON, PRESIDENT

Travelers Casualty and Surety Company of America
SURETY

BY Vickie Lacy, Attorney-In-Fact

TRAVELERS

POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company
St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. [redacted]

Certificate No. [redacted]

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Marc W. Boots, Vickie Lacy, Susan Golla, Maria D. Zuniga, Richard Covington, Joseph R. Aulbert, Ashley Koletar, and Ryan J. Varela

of the City of Houston, State of Texas, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 9th day of November, 2016.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company
St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

State of Connecticut
City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the 9th day of November, 2016, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2021.

Marie C. Tetreault, Notary Public

58440-5-16 Printed in U.S.A.

LOCATION MAP
N T S

KEYMAP NO.: 524G
ZIP CODE: 77494

CIVIL PLANS
FOR
STARBUCKS & SALATA
LOCATED AT
9333 SPRING GREEN BLVD
LOCATED IN
CITY OF HOUSTON ETJ, FORT BEND COUNTY, TEXAS

PATRICK L. CARRIGAN
95617
LICENSED
PROFESSIONAL ENGINEER
23 MAY 2017

ALJLindsey
Civil Engineers
5629 FM 1960 W., Suite 314
Houston, TX 77069
281.301.5955
FIRM # F-1186

OWNER:
Thor Ranch II, LLC
28 W. 39th St
10th Floor
New York, NY 10018

CIVIL:
ALJ Lindsey
5629 FM 1960 West
Suite 314
Houston, Texas 77069
281.301.5955

STRUCTURE:
CAS Engineers
2000 Wilcrest, Suite 300
Houston, Texas 77042
713.785.3348
FIRM # F-170

MEP:
Sabre O'Brien
10280 W. Sam Houston
Pkwy N
Suite 250
Houston, Texas 77064
832.964.0842

LANDSCAPE:
CMB Landscape Architecture
19135 FM 362
Navasota, Texas 77868
832.428.1299

identityARCHITECTS
111 Travis Street, Houston, Texas 77002
713.595.2150
www.identityarchitects.com

INDEX OF SHEETS

CIVIL ENGINEERING (ALJ LINDSEY, LLC)	
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C1.0	DEMOLITION PLAN
C1.1	DIMENSION CONTROL PLAN
C2.0	UTILITY PLAN
C3.0	STORM SEWER PLAN
C3.1	DRAINAGE CALCULATIONS
C4.0	GRADING PLAN
C5.0	PAVING PLAN
C6.0	EROSION CONTROL PLAN
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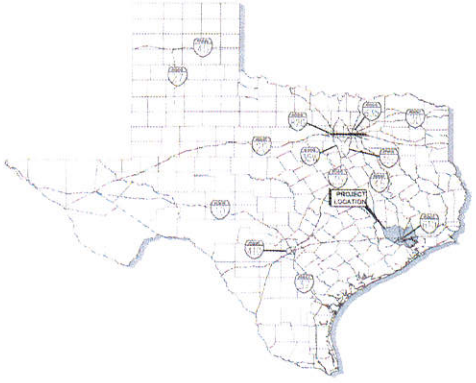
C7.3	CONSTRUCTION DETAILS (4 OF 4)

PLANS SUBMITTAL/REVIEW LOG

SUBMIT TO FORT BEND COUNTY & MUD -NOT FOR CONSTRUCTION	03/21/2017
SUBMIT FOR PERMIT & BID -NOT FOR CONSTRUCTION	04/05/2017



ACCORDING TO MAP NO. 48157C0105L OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR FORT BEND COUNTY AND INCORPORATED AREAS, DATED APRIL 2, 2014, THE SUBJECT TRACT IS SITUATED WITHIN: UNSHADED ZONE 'X'

PROJECT TEAM:

ARCHITECT
IDENTITY ARCHITECTS
ATTN: CORY DEGUIRE
111 TRAVIS ST
HOUSTON, TX 77002
713.595.2150

CIVIL ENGINEER
ALJ LINDSEY, LLC.
5629 FM 1960 WEST, SUITE 314
HOUSTON, TEXAS 77069
281.301.5955
CONTACT: PAT CARRIGAN

FORT BEND COUNTY ENGINEER

ENGINEER: Bill J. Stengle, PE, PMP E for RICHARD W. STOLLEIS, P.E.

DATE: 5/30/17

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN ONE (1) YEAR FROM DATE OF APPROVAL

AUTHORIZATION IS VALID FOR 1 YEAR.

APPROVED: Mary Ann Dodd DEVELOPMENT COORDINATOR

DATE: 5/30/17

CALL BEFORE YOU DIG
TEXAS ONE CALL PARTICIPANTS REQUEST 72 HOURS NOTICE BEFORE YOU DIG, DRILL OR BLAST - STOP CALL
TEXAS ONE CALL SYSTEM
1-800-545-6005
IN HOUSTON
(713)-223-4567

NOT FOR CONSTRUCTION

NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS
1 STORY RETAIL SHELL
9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN | CHECKED

REFERENCE NUMBER: 14021-06

TITLE
COVER SHEET

DRAWING NUMBER
C0.0

PLAT NAME: CROSSING AT CINCO RANCH PARTIAL REPLAT No. 1

GENERAL NOTES

1. THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS WAS TAKEN FROM AVAILABLE SURVEY INFORMATION AND/OR EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES MUST BE DETERMINED BY CONTRACTOR. IT SHALL BE THE DUTY AND RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF A DISCREPANCY AND/OR CONFLICT IS DISCOVERED. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES DURING CONSTRUCTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES, PAVEMENT TO REMAIN, CURBS, SIDEWALKS, SIGNS, TREES, ETC., IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES. DURING CONSTRUCTION ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE OWNING/OPERATING AUTHORITY, WITH NO COST TO THE CITY, COUNTY, PRIVATE UTILITY OWNERS, ENGINEER, OR THE OWNER.
3. CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES AND SHALL NOTIFY THE FOLLOWING AGENCIES 72 HOURS PRIOR TO EXCAVATING OR AUGERING NEAR EXISTING FACILITIES.

   A. TEXAS ONE CALL SYSTEM AT 1-800-245-4545
   B. LONE STAR NOTIFICATION CENTER AT 1-800-669-8344
   C. TEXAS EXCAVATION SAFETY SYSTEM AT 1-800-344-8377
4. PRIOR TO ANY CONSTRUCTION ACTIVITY, CONTRACTOR IS TO ACQUIRE ALL REQUIRED CONSTRUCTION PERMITS FROM APPROPRIATE AUTHORITIES. CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PUBLIC AND PRIVATE UTILITY LINES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
5. THE ENGINEER AND THE CITY/COUNTY OR MUD SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE CONTRACTOR CONNECTING TO ANY EXISTING UTILITY LINES.
6. NO CONNECTIONS SHALL BE MADE TO EXISTING PUBLIC WATER LINES OR PUBLIC SANITARY SEWERS UNTIL ALL PROPOSED WATER OR SEWER LINES HAVE BEEN THOROUGHLY CLEANED, TESTED (AS REQUIRED) AND APPROVED BY THE APPROPRIATE AUTHORITIES.
7. HORIZONTAL AND VERTICAL INFORMATION REGARDING UTILITY CONNECTIONS TO PROPOSED BUILDINGS ON THIS SET OF PLANS TERMINATE AT FIVE (5) FEET FROM THE NEAREST BUILDING WALL.
8. ALL MANHOLES, CLEAN-OUTS, VALVE BOXES, FIRE HYDRANTS, ETC MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.
9. ALL APPURTENANCES WILL BE ASSUMED TO BE IN GOOD CONDITION UNLESS OTHERWISE CONFIRMED IN WRITING PRIOR TO COMMENCEMENT OF WORK.
10. OVERHEAD LINES EXIST ON THE PROPERTY. WE HAVE NOT ATTEMPTED TO MARK THOSE LINES SINCE THEY ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH AND SAFETY CODE, FORBIDS ALL ACTIVITIES IN WHICH PERSON OR EQUIPMENT MAY COME WITHIN 6 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES. CONTRACTORS ARE LEGALLY RESPONSIBLE FOR SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CIVIL AND CRIMINAL LIABILITY.
11. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND ALL REGULATIONS OF UTILITY COMPANIES CONCERNING SAFETY AND HEALTH PRACTICES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SITE TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY/COUNTY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION.
12. PRIOR TO THE START OF CONSTRUCTION, OWNER AND CONTRACTOR ARE RESPONSIBLE FOR SUBMITTING THE "NOTICE OF INTENT" (N.O.I.) AND ANY ADDITIONAL INFORMATION REQUIRED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). UPON COMPLETION OF THE PROJECT OWNER AND CONTRACTOR ARE RESPONSIBLE FOR SUBMITTING THE "NOTICE OF TERMINATION" (N.O.T.).
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
14. CONTRACTOR SHALL REMOVE ALL MUD, DIRT, AND DEBRIS DEPOSITED OR DROPPED ON THE EXISTING ROADWAY AT THE END OF EACH WORK DAY. MATERIAL THAT IS HAZARDOUS TO TRAFFIC OR OTHERWISE PRESENTS A SAFETY CONCERN, SHALL BE REMOVED IMMEDIATELY.
15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND LOCAL REGULATIONS RELATED TO STORM WATER POLLUTION AND QUALITY. REFER TO EROSION CONTROL PLAN.
16. CONTRACTOR SHALL REESTABLISH ALL TURF DISTURBED DURING CONSTRUCTION TO ACCEPTABLE OPERATING CONDITION, AS DETERMINED BY OWNER AND/OR REGULATORY AGENCIES.
17. CONTRACTOR SHALL MAINTAIN A WORKSITE FREE OF TRASH AND DEBRIS.
18. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES. NO TREE SHALL BE REMOVED OR ALTERED WITHOUT WRITTEN PERMISSION FROM OWNER OR ENGINEER. EQUIPMENT OR MATERIALS SHALL NOT BE STAGED UNDER THE DRIP LINE OF EXISTING TREES.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A SET OF "AS BUILT" PLANS FOR ALL WORK PERFORMED ON AND OFF SITE. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM ORIGINAL PLANS TO THE OWNER AND THE ENGINEER.
20. ALL TRAFFIC CONTROL AND WARNING SIGNS SHALL BE IN ACCORDANCE WITH TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
21. ALL SIDEWALKS, RAMPS, AND HANDRAILS TO MEET OR EXCEED CITY/COUNTY, TAS, AND ADA REQUIREMENTS.
22. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY/COUNTY RULES AND REGULATIONS, CONSTRUCTION SPECIFICATIONS AND CONSTRUCTION DETAILS.
23. ALL SPOIL MATERIAL GENERATED FROM CONSTRUCTION ACTIVITY TO BE HAULED OFFSITE AND DISPOSED IN ACCORDANCE WITH LOCAL LAWS, RULES, AND REGULATIONS.
24. AT THE END OF ALL CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL RESTORE THE EXISTING FACILITIES TO EQUAL TO BETTER THAN EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. ALL FINISHED GRADES SHALL VARY UNIFORMLY BETWEEN THE FINISHED ELEVATIONS SHOWN.
25. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING LANDSCAPING AND IRRIGATION. NO SEPARATE PAY.
26. PRIOR TO SUBMITTAL OF BID OR PROPOSAL, CONTRACTOR SHALL VISIT PROJECT SITE AND BECOME FAMILIAR WITH THE PROJECT AND THE EXISTING CONDITIONS ON THE SITE. NO ADDITIONAL CONSIDERATION WILL BE GIVEN FOR ADDITIONAL WORK CAUSED BY FIELD CONDITIONS VISIBLE ON SITE DURING BIDDING BUT NOT SHOWN ON THESE PLANS.
27. THERE WILL BE NO SEPARATE PAYMENT FOR WORK SHOWN ON THESE PLANS, UNLESS SPECIFICALLY ESTABLISHED IN THE BID SECTION OF THE CONTRACT DOCUMENTS. INCLUDE COST OF SAME TO WHICH THIS WORK IS A COMPONENT PART.
28. IN THE EVENT OF A DISCREPANCY WITHIN THESE PLANS, OR BETWEEN THESE PLANS AND THE GEOTECHNICAL REPORT, THE MOST CONSERVATIVE CRITERIA SHALL APPLY.
29. ALL UTILITY TRENCHES BELOW PROPOSED OR FUTURE PAVING SHALL BE BACKFILLED WITH CEMENT SAND.
30. UTILITY TRENCHES ARE A COMMON SOURCE OF WATER INFILTRATION AND MIGRATION. ALL UTILITY TRENCHES THAT PENETRATE BENEATH THE BUILDING SHOULD BE EFFECTIVELY SEALED TO RESTRICT WATER INTRUSION AND FLOW THROUGH THE TRENCHES THAT COULD MIGRATE BELOW THE BUILDING. WE RECOMMEND CONSTRUCTING AN EFFECTIVE CLAY "TRENCH PLUG" THAT EXTENDS AT LEAST 5 FEET OUT FROM THE FACE OF THE BUILDING EXTERIOR. THE PLUG MATERIAL SHOULD CONSIST OF CLAY COMPACTED AT A WATER CONTENT AT OR ABOVE THE SOIL'S OPTIMUM WATER CONTENT. THE CLAY FILL SHOULD BE PLACED TO COMPLETELY SURROUND THE UTILITY LINE AND BE COMPACTED IN ACCORDANCE WITH RECOMMENDATIONS IN THIS REPORT.
31. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY TIE IN LOCATIONS FOR MATERIAL, SIZE, ELEVATION AND FIELD CONDITIONS. IN THE EVENT THE PLANS DO NOT REPRESENT FIELD CONDITIONS THE CONTRACTOR IS TO CONTACT THE ENGINEER AND OWNER IMMEDIATELY AND PRIOR TO PERFORMING ANY WORK.
32. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR TO CONFIRM POSSESSION OF LATEST DRAWINGS, INCLUDING ANY REVISIONS. IF THE DRAWINGS ARE NOT LABELED AS "CONSTRUCTION SET" ON THE COVER PAGE, CONTRACTOR TO CONTACT ENGINEER IMMEDIATELY.
33. CONTRACTOR TO OBTAIN ALL PERMITS. OWNER WILL PROVIDE PAYMENT AS NECESSARY AND REQUESTED BY CONTRACTOR.

GRADING NOTES

1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
2. BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY BENCHMARK ELEVATION AND NOTIFY ENGINEER 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 ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
5. ALL EXISTING CONCRETE PAVING, SIDEWALK, AND CURB DEMOLITION SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR. DISPOSAL SHALL BE AT AN APPROVED OFF-SITE, LAWFUL LOCATION, UNLESS DIRECTED OTHERWISE BY THE OWNER.

FOR BUILDING PAD SUBGRADE PREPARATION AND GENERAL EARTHWORK OBSERVATIONS, REFER TO THE GEOTECHNICAL REPORT PREPARED BY GC LABORATORIES, INC., DATED MARCH 2017 (PROJECT NUMBER 17G13799). ALL MATERIAL SPECIFICATIONS AND TESTING SHALL BE ADHERED TO AS OUTLINED IN THIS REPORT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THIS REPORT PRIOR TO PRICING ITEMS IMPACTED BY THE REPORT.

FRANCHISE UTILITY NOTES

1. CONTRACTOR SHALL CALL THE TEXAS ONE CALL AND DIG-TESS AT LEAST 72 HOURS PRIOR TO COMMENCING DEMOLITION OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR BEARS SOLE RESPONSIBILITY FOR VERIFYING LOCATIONS OF EXISTING UTILITIES, SHOWN OR NOT SHOWN, AND FOR ANY DAMAGE TO THESE FACILITIES.
2. CONTRACTOR SHALL INSTALL LONG SWEEPS FOR DRY UTILITY CONDUITS WHERE A BEND IS GRAPHICALLY SHOWN.

PAVING AND STRIPING NOTES

1. PAVEMENT DESIGN AND SOIL PREPARATION RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT PREPARED BY GC LABORATORIES, INC., DATED MARCH 2017 (PROJECT NUMBER 17G13799) SHALL BE ADHERED TO FOR BOTH MATERIALS AND PRACTICE OF INSTALLATION. CONTRACTOR SHALL ENSURE ALL SPECIFICATIONS AND TESTING ARE MET AS OUTLINED IN THIS REPORT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THIS REPORT PRIOR TO PRICING ITEMS IMPACTED BY THE REPORT.
2. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND CITY/COUNTY STANDARDS.
3. CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LANES, ROADWAY LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AS SHOWN ON THE PLANS.
4. ALL JOINTS SHALL BE SEALED PER CITY/COUNTY SPECIFICATIONS. ALL JOINTS SHALL EXTEND THROUGH THE CURB.
5. THE MATERIALS AND PROPERTIES OF CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE AS WELL AS CITY/COUNTY STANDARDS.
6. ANY DAMAGED PAVEMENT, CURB AND/OR SIDEWALK WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.
7. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. & T.A.S) EXIST TO AND FROM EVERY DOOR. IN NO CASE SHALL:

   A. HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL.
   B. SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT.
   C. LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT.
   D. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVEMENT CONSTRUCTION IF ANY SLOPES EXCEED THE ABOVE LIMITS.
8. REINFORCING BAR SPLICES SHALL BE STAGGERED WITH NO MORE THAN 2 SPLICES ADJACENT TO EACH OTHER.
9. STABILIZED SUBGRADE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND EDGE OF ALL PAVEMENT, OR AS DIRECTED IN GEOTECHNICAL REPORT.
10. ALL CONCRETE PAVEMENT SHALL BE FLOAT FINISHED MECHANICALLY WITH APPROVED SELF-PROPELLED MACHINES. HAND FLOATING SHALL BE PERMITTED ONLY IN AREAS INACCESSIBLE TO A FINISHING MACHINE. AFTER FLOATING, CONTRACTOR SHALL PROVIDE A FINE OR MEDIUM-COARSE "BROOM FINISH," UNLESS OTHERWISE INDICATED BY THE OWNER, FOR ALL EXTERIOR SIDEWALKS, EXTERIOR RAMPS, EQUIPMENT AND TRANSFORMER PADS, AND SITE PAVING. BROOMING SHALL BE DONE TRANSVERSELY TO THE DIRECTION OF MAIN TRAFFIC. ALL FINISHING SHALL CONFORM TO A.C.I.301. CONTRACTOR SHALL DETERMINE THE APPROPRIATE MEANS & METHODS TO PROTECT THE FINISHED CONCRETE FROM PRECIPITATION FOR A MINIMUM OF 24 HOURS.
11. CONTRACTOR SHALL PROTECT THE FINISHED CONCRETE PAVEMENT AGAINST LOSS OF MOISTURE FOR NO LESS THAN 72 HOURS IN CONFORMANCE WITH THE A.C.I. MANUAL OF CONCRETE PRACTICE.

STORM SEWERS

1. STORM SEWER PIPE USED FOR CONNECTION TO STORM SEWER IN PUBLIC RIGHT-OF-WAY OR CONSTRUCTED WITHIN PUBLIC EASEMENTS SHALL BE REINFORCED CONCRETE PIPE ASTM C-76, CLASS III, WITH RUBBER GASKET PER ASTM C-443 AND SHALL EXTEND TO FIRST PRIVATE INLET OR MANHOLE. ALL OTHER PRIVATE STORM SEWER MAY BE SELECTED PER THE FOLLOWING CRITERIA:

   A. CORRUGATED HIGH-DENSITY POLYETHYLENE (HDPE) (4 INCHES TO 48 INCHES IN DIAMETER). AASHTO M 294, DUAL WALL WITH WATER TIGHT (ASTM D3212) BELL-TO-BELL COUPLER, TRADE NAME N-12 BY ADS OR EQUAL.
   B. POLYVINYL CHLORIDE (PVC) CORRUGATED PIPE WITH SMOOTH INTERIOR PER ASTM F 949 (4 INCHES TO 36 INCHES (102-MM TO 914-MM)) WITH ELASTOMETRIC GASKET JOINTS, TRADE NAME A-2000 BY CONTECH OR EQUAL.
   C. STEEL REINFORCED HIGH-DENSITY POLYETHYLENE (HDPE) (24 INCHES TO 48 INCHES IN DIAMETER). AASHTO M 294. HIGH PERFORMANCE JOINTS (ASTM D3212), TRADE NAME DUROMAXX OR EQUAL.
   D. REINFORCED CONCRETE PIPE (RCP). ASTM C76, CLASS III WITH RUBBER GASKET JOINTS PER ASTM C-443.
2. STORM SEWERS IN PUBLIC R.O.W. OR PUBLIC EASEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST FORT BEND COUNTY STANDARD CONSTRUCTION SPECIFICATIONS FOR STORM DRAINAGE INCLUDING ALL CURRENT AMENDMENTS THERETO. ALL STORM SEWER ON PRIVATE PROPERTY SHALL BE CONSTRUCTED PER SPECIFICATIONS AND DETAILS IN THESE DRAWINGS AND IN ACCORDANCE WITH THE PIPE MANUFACTURERS RECOMMENDATIONS.
3. ALL SEWERS UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE BACKFILLED WITH 1 1/2 SACK CEMENT/C.Y. STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE. CEMENT STABILIZED SAND TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C33, LATEST EDITION.
4. TRENCH BACKFILL SHALL BE SUITABLE EARTH MATERIAL PLACED IN 8 INCH LIFTS, WITH TESTS TAKEN AT 100 FOOT INTERVALS ON EACH LIFT. BACKFILL TO BE MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM DESIGNATION D-698/AASHTO T99). MOISTURE CONTENT OF BACKFILL SHALL BE WITHIN PARAMETERS ESTABLISHED BY THE PROCTOR TEST.
5. PROPOSED PIPE STUB-OUTS ARE TO BE PLUGGED WITH 8" BRICK WALLS, UNLESS OTHERWISE NOTED.

WATER LINES

1. WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST FORT BEND COUNTY, MUD DISTRICT AND TCEQ REGULATIONS, STANDARD SPECIFICATIONS, AND CONSTRUCTION DETAILS.
2. 4" THRU 12" WATER LINES SHALL BE P.V.C. CLASS 150, DR-18, AWWA C-900 AND 1" THRU 3" WATER LINES SHALL BE PVC SCHEDULE 40. 4" THRU 54" D.I.P. WATER LINES SHALL BE AWWA C151 (ANSI A21.51) AND DOUBLE WRAPPED IN 8-MIL POLYETHYLENE. PIPE SHALL BE LINED IN ACCORDANCE WITH AWWA C104 (ANSI A21.4).
3. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AS NECESSARY TO PREVENT PIPE MOVEMENT. WHERE PREVENTING MOVEMENT OF 16" OR GREATER PIPE IS NECESSARY DUE TO THRUST, USE RESTRAINED JOINTS.
4. ALL WATER LINES UNDER PROPOSED OR FUTURE PAVING AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN BANK SAND TO 12" OVER PIPE AND BACKFILLED WITH CEMENT STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE.
5. ALL WATER LINE AND SEWER LINE CROSSINGS SHALL BE CONSTRUCTED PER TCEQ REGULATIONS.
6. ALL WATER VALVES SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE.
7. ALL WATER LINES TO BE DISINFECTED IN CONFORMANCE WITH AWWA C-651 AND THE TEXAS STATE DEPARTMENT OF HEALTH. AT LEAST ONE BACTERIOLOGICAL SAMPLE SHALL BE COLLECTED FOR EACH 1,000 LINEAR FEET OF WATER LINE AND SHALL BE REPEATED IF CONTAMINATION PERSISTS.
8. ALL BELOW GRADE VALVES SHALL BE GASKETED, HUB-END GATE VALVES WITH A CAST IRON BOX, EXCEPT WHERE FLANGES ARE CALLED OUT ON THE PLANS.
9. 4" THRU 12" FITTINGS SHALL BE CEMENT MORTAR LINED COMPACT DUCTILE IRON PRESSURE FITTINGS PER ANSI A21.53, OR PUSH ON FITTINGS PER ANSI A21.10 PRESSURE RATED AT 250 PSIG.
10. HYDROSTATIC TESTING: ALL WATER PIPE SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE LATEST FORT BEND COUNTY, MUD DISTRICT AND TCEQ REQUIREMENTS. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF WATER PIPE LINE INCLUDED IN THE PROJECT.
11. ALL WATER LINES TO HAVE 4' MINIMUM COVER TO FINISHED GRADE AND MINIMUM 12" CLEAR TO OTHER UTILITIES AT CROSSING UNLESS OTHERWISE NOTED ON PLANS. ALL WATER LINE INSTALLED OVER 8' DEEP SHALL UTILIZE RESTRAINED JOINT FITTINGS.
12. CONTRACTOR SHALL KEEP WATER PIPE CLEAN AND CAP (OR OTHERWISE EFFECTIVELY COVER) OPEN PIPE ENDS TO EXCLUDE INSECTS, ANIMALS OR OTHER SOURCES OF CONTAMINATION FROM UNFINISHED PIPE LINES AT TIMES WHEN CONSTRUCTION IS NOT IN PROGRESS.
13. ALL FIRE LINES TO BE INSTALLED AND TESTED PER NFPA REGULATIONS.

PATRICK L. CARRIGAN
95817

23 MAY 2017

TRAFFIC NOTES

1) CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD – LATEST EDITION WITH REVISIONS) DURING CONSTRUCTION.

2) NO LANES SHALL BE BLOCKED FROM 7 A.M. TO 9 A.M. AND 4 P.M. TO 6:30 P.M. MONDAY THRU FRIDAY.

3) OFF DUTY POLICE OFFICERS/FLAGGERS ARE REQUIRED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED.

4) CONTRACTOR SHALL COVER THE EXCAVATION WITH STEEL PLATES ANCHORED PROPERLY DURING NON-WORKING HOURS AND ALLOW NORMAL TRAFFIC FLOW. IF COVERING IS NOT FEASIBLE, USE TRANTEX FF 336 EFX 36" DELINEATOR OR APPROVED EQUAL WITH SPEEDING AND BASE EPOXIED TO PAVEMENT NEXT TO EXCAVATION DURING NON-WORKING HOURS.

5) APPROVED COPIES OF "TRAFFIC CONTROL PLANS" SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES.

*THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLARS AND SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS. PLANS WILL BECOME A PART OF THE CONTRACT DRAWINGS.

**THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND OPERATION FOR ANY AND ALL TRAFFIC CONTROL MEASURES AS REQUIRED BY REGULATING AGENCIES OR FOR THE SAFE EXECUTION OF THE WORK SHOWN WITHIN THESE CONSTRUCTION DOCUMENTS. NO SEPERATE PAY.

FORT BEND COUNTY NOTES:

1. FORT BEND COUNTY MUST BE INVITED TO THE PRE-CONSTRUCTION MEETING.
2. CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 48 HOUR NOTICE TO ANY CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF THE PAVING AT CONSTRUCTION@FORTBENDCOUNTYTX.GOV
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FROM FORT BEND COUNTY PRIOR TO COMMENCING CONSTRUCTION OF ANY IMPROVEMENTS WITHIN COUNTY ROAD RIGHT OF WAYS.
4. ALL PAVING IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY "RULES, REGULATIONS AND REQUIREMENTS RELATING TO THE APPROVAL AND ACCEPTANCE OF IMPROVEMENTS IN SUBDIVISIONS AS CURRENTLY AMENDED.
5. ALL ROAD WIDTHS, CURB RADII AND CURB ALIGNMENT SHOWN INDICATES BACK OF CURB.
6. A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURBS.
7. ALL CONCRETE PAVEMENT SHALL BE 5 1/2 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVERSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET.
8. ALL WEATHER ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
9. 4" X 12" REINFORCED CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED CONCRETE CURB.
10. AT ALL INTERSECTION LOCATIONS, TYPE 7 RAMPS SHALL BE PLACE IN ACCORDANCE WITH TXDOT PED-12A STANDARD DETAIL SHEET. A.D.A. – HANDICAP RAMPS SHALL BE INSTALLED WITH STREET PAVING AT ALL INTERSECTIONS AND COMPLY WITH CURRENT A.D.A. REGULATIONS.
11. CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAP RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
12. ALL INTERSECTIONS UTILIZING TRAFFIC CONTROL MEASURES SHALL HAVE A.D.A. WHEEL CHAIR RAMPS INSTALLED.
13. GUIDELINES ARE SET FORTH IN THE TEXAS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AS CURRENTLY AMENDED, SHALL BE OBSERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC. DURING CONSTRUCTION – BOTH DAY AND NIGHT.
14. ALL R1-1 STOP SIGNS SHALL BE 30" X 30" WITH DIAMOND GRADE SHEETING PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
15. STREET NAME SIGNAGE SHALL BE ON A 9" HIGH SIGN FLAT BLADE W/ REFLECTIVE GREEN BACKGROUND. STREET NAMES SHALL BE UPPER AND LOWERCASE LETTERING WITH UPPERCASE LETTERS OF 6" MINIMUM AND LOWERCASE LETTERS OF 4.5" MINIMUM. THE LETTERS SHALL BE REFLECTIVE WHITE. STREET NAME SIGNS SHALL BE MOUNTED ON STOP SIGN POST.
16. A BLUE DOUBLE REFLECTORIZED BUTTON SHALL BE PLACED AT ALL FIRE HYDRANT LOCATIONS. THE BUTTON SHALL BE PLACED 12 INCHES OFF OF THE CENTERLINE OF THE STREET ON THE SAME SIDE AS THE HYDRANT.

NOTE: FORT BEND COUNTY NOTES SUPERSEDE ANY CONFLICTING NOTES.

INSPECTION: THE PROJECT AND ALL PARTS THEREOF SHALL BE SUBJECT TO INSPECTION FROM TIME TO TIME BY INSPECTORS DESIGNATED BY FORT BEND COUNTY. NO SUCH INSPECTIONS SHALL RELIEVE THE CONTRACTOR OF ANY OF ITS OBLIGATIONS HEREUNDER. NEITHER FAILURE TO INSPECT NOR FAILURE TO DISCOVER OR REJECT ANY OF THE WORK AS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, REQUIREMENTS AND SPECIFICATIONS OF FORT BEND COUNTY OR ANY PROVISION OF THIS PROJECT SHALL BE CONSTRUED TO IMPLY AND ACCEPTANCE OF SUCH WORK OR TO RELIEVE THE CONTRACTOR OF ANY OF ITS OBLIGATIONS HEREUNDER.

SANITARY SEWERS

1. ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST FORT BEND COUNTY, MUD DISTRICT AND TCEQ CRITERIA AND BE SUBJECT TO A REQUIRED FIELD TESTING. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF SEWER LINE INCLUDED IN THE PROJECT. REQUIREMENTS OF TEXAS ADMINISTRATIVE CODE, TITLE 30 CHAPTER 217, "DESIGN CRITERIA FOR SEWERAGE SYSTEMS" SHALL GOVERN WHERE CONFLICTS EXIST EXCEPT WHERE CITY REQUIREMENTS ARE OF HIGHER STANDARDS.
2. SANITARY SEWER PIPE USED FOR CONNECTION TO SEWER IN PUBLIC RIGHT-OF-WAY SHALL BE C900 P.V.C. PIPE MEETING ASTM SPECIFICATION D3034 WITH RUBBER GASKET JOINTS. ALL OTHER PRIVATE SANITARY SEWER PIPE MATERIAL SHALL CONFORM TO THE FOLLOWING CRITERIA:

   A) POLYVINYL CHLORIDE (PVC) SCHEDULE 40 TO BE USED FOR PIPE SIZES 6 INCHES AND SMALLER.

   B) STANDARD DIMENSION RATIO (SDR) 35 PVC OR 26 PVC CAN BE USED FOR PIPE SIZES 8 INCHES AND LARGER. SEE NOTE 5 BELOW REGARDING SDR 26 FITTINGS.
3. ALL SANITARY SEWER LINES UNDER PROPOSED OR FUTURE PAVING AND TO A POINT (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE ENCASED IN BANK SAND TO 12" OVER PIPE AND BACKFILLED WITH CEMENT STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE.
4. ALL SANITARY SEWERS AND WATER LINES CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY, MUD DISTRICT, AND TCEQ REGULATIONS.
5. SANITARY SEWER MANHOLE RIMS OUTSIDE OF PROPOSED PAVING WILL BE SET 3" - 6" ABOVE THE SURROUNDING LEVEL FINISHED GRADE AFTER PAVING AND GRADING OPERATIONS.
6. SDR 26 P.V.C. PIPE USES "FULL BODIED" SDR 26 P.V.C. FITTINGS OR D.I.P. FITTINGS WITH APPROPRIATE ADAPTERS. AWWA C-900 DR-18 P.V.C. PIPE USES EITHER AWWA C900 DR-18 P.V.C. FITTINGS OR D.I.P. FITTINGS.
7. DEFLECTION TEST: DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI-RIGID SEWER PIPE BETWEEN MANHOLES. SERVICE LEADS SHALL NOT BE TESTED. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. THE DEFLECTION TEST SHALL USE A RIGID 7-SIDED MANDREL, WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. NO MECHANICAL PULLING IS ALLOWED.
8. INFILTRATION, EXFILTRATION OR LOW-PRESSURE AIR TEST: EITHER OF THE FOLLOWING TESTS SHALL BE PERFORMED AS PER TAC, TITLE 30 217.2 WITHIN THE SPECIFIED TOLERANCES ON ALL GRAVITY SEWERS.
9. NO CONNECTIONS SHALL BE MADE TO THE EXISTING SANITARY SEWER LINES UNTIL ALL PROPOSED SEWER LINES HAVE BEEN THOROUGHLY CLEANED, TESTED AND APPROVED BY THE ENGINEER. THE ENGINEER AND MUD DISTRICT SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE CONTRACTOR CONNECTING TO ANY EXISTING SEWER LINES.
10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY/COUNTY AT LEAST 48 HOURS PRIOR TO PRESSURE AND DEFLECTION TEST ON ALL SANITARY LINES.
11. ALL SEWER LINES ENTERING A MANHOLE AT A FLOWLINE HIGHER THAN 3.0' OR 36" ABOVE THE MANHOLE INVERT MUST BE PROVIDED WITH A DROP PIPE OUTSIDE OF THE MANHOLE.

AUTHORIZATION IS VALID FOR 1 YEAR.

APPROVED: Maggi
DEVELOPMENT COORDINATOR

DATE: 5/30/17

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Firm F-11528

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identityARCHITECTS
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NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS
1 STORY RETAIL SHELL
9333 SPRING GREEN BLVD.
KATY, TX 77494

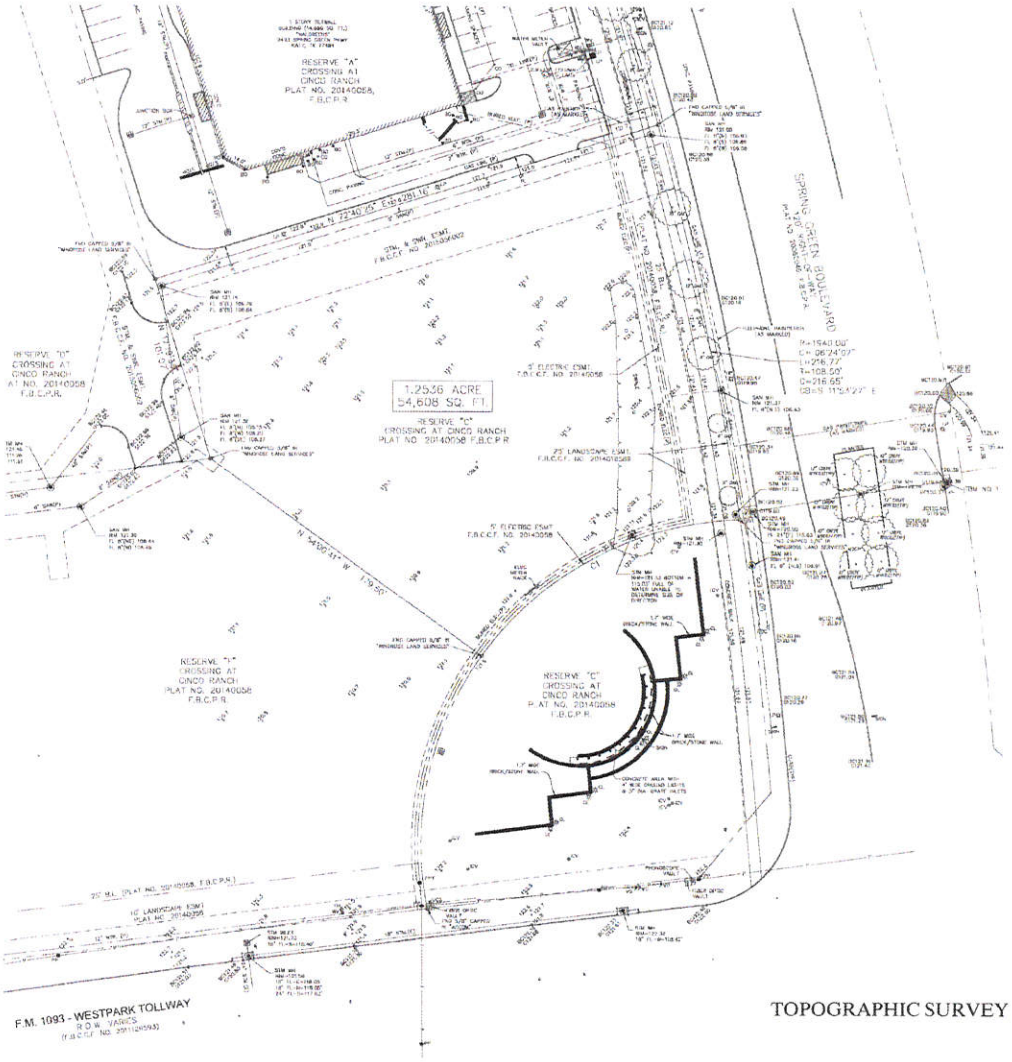
DRAWN
CHECKED

REFERENCE NUMBER 14021-06

TITLE:
GENERAL NOTES

DRAWING NUMBER
C0.1

NTS

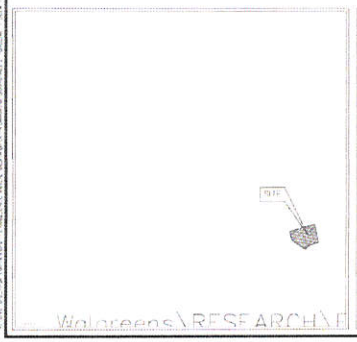


LEGEND

* SOME OF THESE ELEMENTS MAY NOT BE USED ON THIS SURVEY

	GRID INLET		FIELDING MARKER
	FIREPLACE		UNDERGROUND FIBER OPTIC
	GAS METER		CATHODIC TEST LEAD
	GAS VALVE		MONITORING WELL
	FIRE HYDRANT		PIN FLAG/PLANT MARK
	WATER METER		TOP OF CURB
	WATER VALVE		BUTTON
	IRRIGATION CONTROL VALVE		TOP OF GRATE
	GRATE INLET		FLOW LINE
	CURB INLET		FIGURING
	MANHOLE		SANITARY SEWER
	CLEANOUT		STORM SEWER
	TELEPHONE PEDESTAL		CORRUGATED METAL PIPE
	ELECTRIC BOX		CORRUGATED PLASTIC PIPE
	TRAFFIC SIGNAL BOX		REINFORCED CONCRETE PIPE
	LIGHT POLE		ELEVATION
	TRAFFIC LIGHT POLE		SOUTHWESTERN BELL TELEPHONE CO.
	MOONLIGHT LIGHT		WATER
	POWER POLE		UNKNOWN
	POWER POLE W/TRANSFORMER		TOWER
	POWER POLE W/LIGHT		HARRIS COUNTY ID FIN. TXT
	POWER POLE W/GUYLIGHT		HARRIS COUNTY FIELD NOTES
	METER POLE		HARRIS COUNTY MAP RECORDS
	SIGNAL POLE		IRON PIPE
	GUY ANCHOR		IRON ROD
	OVERHEAD POWER LINE		NUMBER
	BARBED WIRE FENCE		FACE
	WROUGHT IRON FENCE		RIGHT-OF-WAY
	WOOD FENCE		SQUARE FEET
	CHAINLINK FENCE		VOLUME
	GATE POST		FLOW LINE
	TOP OF BANK		BUILDING LINE
	APPROACHES		UTILITY EASEMENT
	HUNTERS		
	TREE		TREE/SHRUB

FLOOD INFORMATION



BENCHMARK

PUBLISHED ELEVATION = 115.28'

HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 190245, BRASS DISK STAMPED "10140 ON BRIDGE AT CINCO RANCH BOULEVARD AND LATOR BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN KEY MAP 483 IN THE WHITE OAK BAYOU - NEW STREAM 100-00-00. (NAVD 1988, 2001 ADJUSTED)

TEMPORARY BENCHMARK NO. 1 ELEVATION = 120.41'

BRASS DISK ON DURB INLET LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BOULEVARD 1.5M +/- NORTH OF F.M. 1093

TEMPORARY BENCHMARK NO. 2 ELEVATION = 123.30'

CUT BOX ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT CENTER'S MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093, APPROX. 1000' WEST OF SPRING GREEN BOULEVARD

GENERAL NOTES

1. SURVEYOR DID NOT ABSTRACT SUBJECT PROPERTY. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT FOR ABSTRACTING CERTIFICATE AND WOULD BE SUBJECT TO ANY AND ALL CONDITIONS OR RESTRICTIONS THAT A CURRENT TITLE REPORT OR ABSTRACTING CERTIFICATE MAY DISCLOSE.
2. BEARINGS WERE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD83).
3. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FLOOD INSURANCE RATE MAP (FIRM) FOR FORT BEND COUNTY, TEXAS, MAP NO. 48157C0105G REVISED/DATED APR. 02, 2014, THE SUBJECT TRACT APPEARS TO LIE WITHIN UNSHADED ZONE "X". THIS DETERMINATION WAS DONE BY GRAPHIC PLOTTING AND IS APPROXIMATE ONLY AND WE DO NOT EVEN FIELD VERIFY. THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF WINDROSE LAND SERVICES, INC.
4. DEVELOPMENT OF THIS TRACT IS SUBJECT TO REQUIREMENTS PER CITY OF HOUSTON ORDINANCE NO. 1999-1067 WHICH STIPULATES PATIO AND ATTACHED COVERAGES IMPERVIOUS COVER OF THIS TRACT WILL DETERMINE ACTUAL BUILDING SETBACK LINE(S) ALONG ANY ADJOINING STREETS. REFER TO CITY OF HOUSTON BUILDING CODES TO ESTABLISH MINIMUM PUBLISHED SETBACK REQUIREMENTS. ULTIMATELY THE CITY OF HOUSTON PLANNING COMMISSION WILL DETERMINE REQUIRED SETBACKS UPON REVIEW OF PLANS OR PLATS SUBMITTED TO SAID COMMISSION. THIS TRACT MAY REQUIRE PLATTING AS A CONDITION FOR REQUESTING BUILDING PERMITS.
5. VISIBLY VISIBLE IMPROVEMENTS AND UTILITIES WERE LOCATED WITH THIS SURVEY. NO SUBSURFACE PROBING, EXCAVATION OR EXPLORATION WAS PERFORMED BY WINDROSE LAND SERVICES, INC.
6. ENVIRONMENTAL AND DRAINAGE ISSUES ARE BEYOND THE SCOPE OF THIS SURVEY.
7. THE SQUARE FOOTAGE TOTALS SHOWN HEREON ARE BASED ON THE MATHEMATICAL CLOSURE OF THE COURSES AND DISTANCES REFLECTED ON THE SURVEY. IT DOES NOT INCLUDE THE TOLERANCES THAT MAY BE PRESENT DUE TO THE PROPORTIONAL ACCURACY OF THE SURVEYING INSTRUMENTATION.
8. FENCES SHOWN HEREON WITH DIMENSIONAL TIES ARE SHOWN WHERE THEY ARE PHYSICALLY MEASURED. THE FENCE MAY MEANDER BETWEEN MEASURED LOCATIONS.
9. ELEVATIONS SHOWN TO THE NEAREST TENTH ARE NATURAL GROUND SURFACE ELEVATIONS AND ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE SOLID SURFACE ELEVATIONS.
10. GAS, SANITARY, STORM, TELEPHONE AND WATER LINES SHOWN HEREON ARE BASED ON UTILITY PLANS ACQUIRED FROM CENTERPOINT ENERGY, AT&T AND CINCO SOUTHWEST MUD. NO. 2 AND WERE FIELD VERIFIED WHERE POSSIBLE. OTHER UTILITY PLANS OR INFORMATION MAY EXIST NOT KNOWN TO THIS COMPANY.
11. SURVEYOR DID NOT PHYSICALLY ENTER MANHOLES, UNDERGROUND VAULTS, GATES WERE DETERMINED ON A "MEASURE DOWN" METHOD FROM TOP OF MANHOLE RIM OR TOP OF GRATE OR TOP OF CURB AND WERE COMPARED WITH UTILITY PLANS WHERE POSSIBLE.
12. SURVEYOR HAS CONTACTED SITETEX FOR LOCATION OF BURIED UTILITY AND FIBER OPTIC LINES PRIOR TO THIS SURVEY. SURVEYOR CANNOT VERIFY OR GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS REQUEST. OTHER UNDERGROUND UTILITY LINES MAY EXIST NOT KNOWN TO THIS COMPANY. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT SITETEX OR OTHER UTILITY NOTIFICATION SERVICES FOR THE LOCATION OF UNDERGROUND UTILITIES, PRIOR TO CONSTRUCTION.

SURVEYOR'S CERTIFICATION

I DO HEREBY CERTIFY TO THE ABOVE LISTED THAT THIS SURVEY WAS THIS DAY MADE ON THE GROUND AND WAS PERFORMED UNDER MY SUPERVISION. THAT THIS PLAT CORRECTLY REPRESENTS THE PROPERTY VISUALLY DESCRIBED HEREON, THAT THE FACTS FOUND AT THE TIME OF THIS SURVEY SHOW THE IMPROVEMENTS AND THAT THERE ARE NO VISIBLE ENCROACHMENTS APPARENT ON THE GROUND, EXCEPT AS SHOWN. THIS SURVEY SUBSTANTIALLY CONFORMS TO THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1B, CONDITION "SURVEY" TO THE BEST OF MY KNOWLEDGE.

PRELIMINARY

THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.

03/01/17

ROBERT JONES DATE
Registered Professional Land Surveyor
Texas Registration No. 5486

WINDROSE
LAND SURVEYING | PLATTING
3200 WILCREST, SUITE 325 | HOUSTON, TX 77042 | 713.458.2281
TBPLS REGISTRATION NO. 10108800 | WINDROSESERVICES.COM

TOPOGRAPHIC SURVEY

C0.2

REVISIONS		
DATE	REASON	BY

TOPOGRAPHIC SURVEY OF
1.2536 ACRE / 54,608 SQ. FT.
ALL OF RESERVE "C" OF CROSSING AT CINCO RANCH
PLAT NO. 20140058, F.B.C.P.R.
SITUATED IN THE
T. & G.N. R.R. CO. SURVEY, ABSTRACT NO. 365
FORT BEND COUNTY, TEXAS

FIELD BY	MO	CHECKED BY	KR	JOB NO.	50050-RESERVE_C TOPO
DRAWN BY	RK	DATE	03/01/17	SHEET NO.	1 OF 1

Maggi 5/30/17

STATE OF TEXAS
COUNTY OF FORT BEND

We, HRC Partners # 3, LLC acting by and through Richard Rainer, Manager and Thor Ranch, LLC, a Delaware limited liability company, acting by and through its sole member Thor Ranch Holdings, LLC, a Delaware limited liability company, acting by and through its sole member Thor Urban Operating Fund, LP, a Delaware limited partnership, acting by and through its general partner Thor Operating Fund, LLC, a Delaware limited liability company, acting by and through Morris Missry, Vice President, hereinafter referred to as the Owners of the 32.7025 acre tract described in the above and foregoing map of CROSSING AT CINCO RANCH PARTIAL REPLAT NO 1, do hereby make and establish said subdivision and development plan of said property according to all lines, dedications, restrictions, and notations on said maps or plat and hereby dedicate to the use of the public forever, all streets (except those streets designated as private streets, or permanent access easements), alleys, parks, water courses, drains, easements and public places shown thereon for the purposes and considerations therein expressed; and do hereby bind ourselves, our heirs, successors and assigns to warrant and forever defend the title on the land so dedicated.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purpose forever unobstructed aerial easements. The aerial easements shall extend horizontally an additional eleven feet, six inches (11'6") for ten feet (10'0") perimeter ground easements or seven feet, six inches (7'6") for fourteen feet (14'0") perimeter ground easements or five feet, six inches (5'6") for sixteen feet (16'0") perimeter ground easements, from a plane sixteen feet (16'0") above the ground level upward, located adjacent to and adjoining said public utility easements that are designated with aerial easements (U.E. and A.E.) as indicated and depicted hereon, whereby the aerial easement totals twenty one feet, six inches (21'6") in width.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purpose forever unobstructed aerial easements. The aerial easements shall extend horizontally an additional ten feet (10'0") for ten feet (10'0") back-to-back ground easements, or eight feet (8'0") for fourteen feet (14'0") back-to-back ground easements or seven feet (7'0") for sixteen feet (16'0") back-to-back ground easements, from a plane sixteen feet (16'0") above the ground level upward, located adjacent to both sides and adjoining said public utility easements that are designated with aerial easements (U.E. and A.E.) as indicated and depicted hereon, whereby the aerial easement totals thirty feet (30'0") in width.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat is hereby restricted to prevent the drainage of any septic tanks into any public or private street, permanent access easement, road or alley or any drainage ditch, either directly or indirectly.

FURTHER, Owners do hereby dedicate to the public a strip of land twenty (20) feet wide on each side of the center line of any and all bayous, creeks, gullies, ravines, draws, sloughs or other natural drainage courses located in said plat, as easements for drainage purposes, giving the City of Houston, Fort Bend County, or any other governmental agency, the right to enter upon said easement at any and all times for for the purpose of construction and maintenance of drainage facilities and structures.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this subdivision and adjacent to any drainage easement, ditch, gully, creek or natural drainage way shall hereby be restricted to keep such drainage ways and easements clear of fences, buildings, excessive vegetation and other obstructions to the operations and maintenance of the drainage facility and that such abutting property shall not be permitted to drain directly into this easement except by means of an approved drainage structure.

FURTHER, we do hereby acknowledge the receipt of the "Orders for Regulation of Outdoor Lighting in the Unincorporated Areas of Fort Bend County, Texas", and do hereby covenant and agree and shall comply with this order as adopted by Fort Bend County Commissioners' Court on March 23, 2004, and any subsequent amendments.

IN TESTIMONY WHEREOF, Thor Ranch, LLC a Delaware limited liability company, acting by and through its sole member Thor Ranch Holdings, LLC, a Delaware limited liability company, acting by and through its sole member Thor Urban Operating Fund, LP, a Delaware limited partnership, acting by and through its general partner Thor Operating Fund, L.L.C., a Delaware limited liability company has caused these presents to be signed by Morris Missry, its Vice President,

thereunto authorized this ______ day of ________________, 2015.

By: Thor Ranch, LLC
By: Thor Ranch Holdings, LLC, its Sole Member
By: Thor Urban Operating Fund, L.P., its Sole Member
By: Thor Operating Fund, L.L.C., its General Partner

By: Morris Missry
Vice President

STATE OF NEW YORK
COUNTY OF NEW YORK

Before me, the undersigned authority, on this day personally appeared Morris Missry, Vice President of Thor Operating Fund, L.L.C., the General Partner of Thor Urban Operating Fund, L.P., the Sole Member of Thor Ranch Holdings, LLC, the Sole Member of Thor Ranch, LLC, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed, and in the capacity therein and herein set out, and as the act and deed of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 6th day of August 2015

Camille Falzarano
Notary Public, State of New York
No. 01FA6075263
Qualified in Nassau County
Commission Expires June 3, 2018

Camille Falzarano
Notary Public in and for the State of New York

6-3-18
My Commission Expires

I, Mike Kurkowski, am authorized under the laws of the State of Texas to practice the profession of surveying and hereby certify that the above subdivision is true and accurate; was prepared from an actual survey of the property made under my supervision on the ground; that, except as shown all boundary corners, angle points, points of curvature and other points of reference have been marked with iron (or other objects of a permanent nature) pipes or rods having an outside diameter of not less than five eighths (5/8) inch and a length of not less than three (3) feet; and that the plat boundary corners have been tied to the Texas Coordinate System of 1983, south central zone.

MIKE KURKOWSKI 5101

Mike Kurkowski
Registered Professional Land Surveyor
Texas Registration No. 5101

I, Patrick L. Carrigan, a Professional Engineer registered the State of Texas to do hereby certify that this plat meets all requirements of Fort Bend County, Texas, to the best of my knowledge.

PATRICK L. CARRIGAN 95617

Name: Patrick L. Carrigan
Texas Registration No.
ALJ-Lindsey, LLC

This is to certify that the Planning Commission of the City of Houston, Texas, has approved this plat and subdivision of CROSSING AT CINCO RANCH PARTIAL REPLAT NO 1 in conformance with the laws of the State of Texas and the ordinances of the City of Houston as shown hereon and authorized recording of this plat this ______ day of ________________, 2015.

By: ________________
Mark A. Kilkenny or Chair
M. Sonny Garza Vice Chairman

By: ________________
Patrick Walsh, P.E.
Secretary

Y:\PROJECTS\50050-CINCO RANCH WEST - WALGREENS\PLATTING\DRAWINGS\REPLAT NO 1\CROSSING AT CINCO RANCH PARTIAL REPLAT NO 1 - 50050

GENERAL NOTES

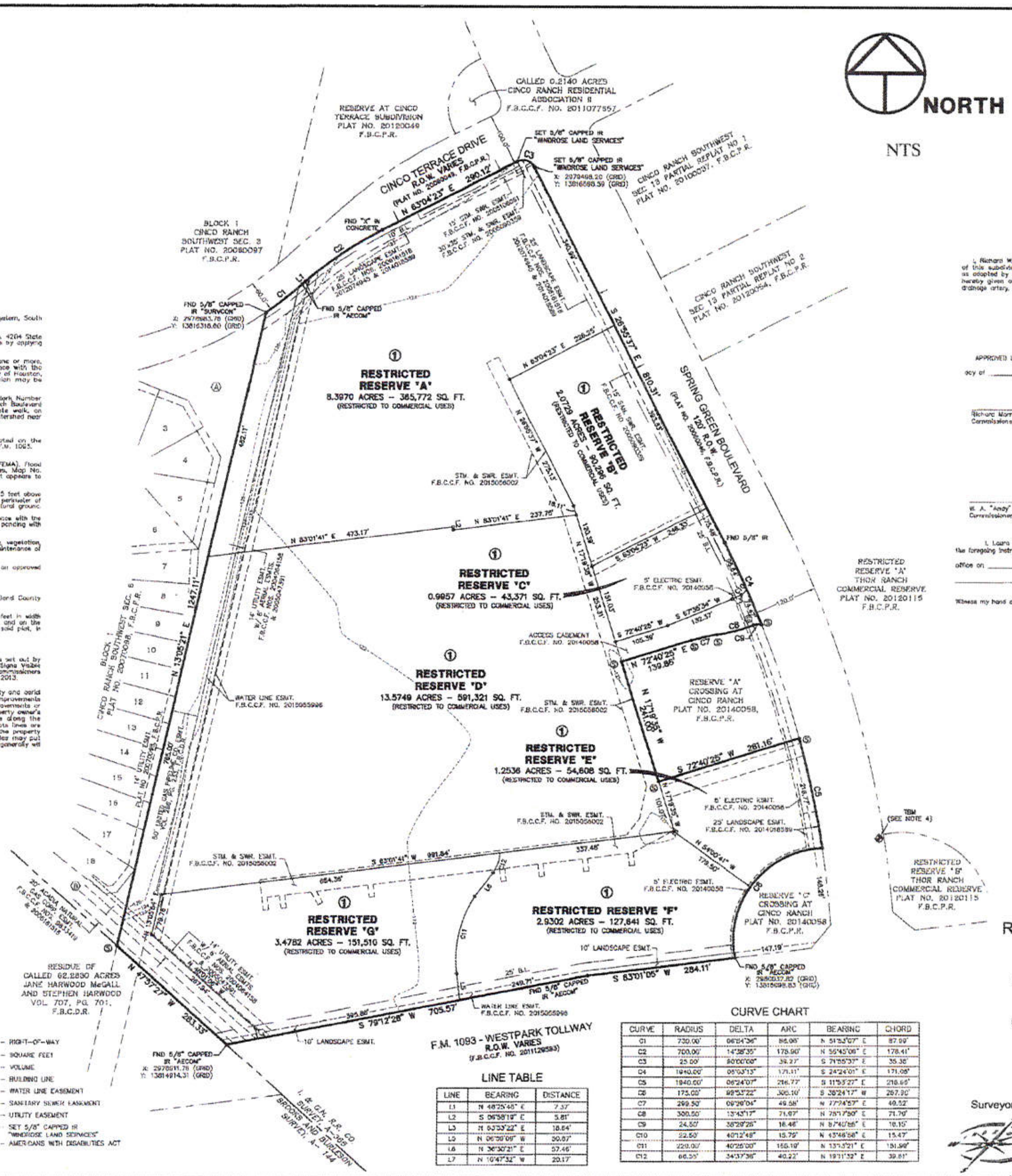
1. Bearings were based on the Texas State Plane Coordinate System, South Central Zone (NAD83).
2. All coordinates shown hereon are Texas South Central Zone No. 4204 State Plane Grid Coordinates (NAD 83), and may brought to surface by applying the following scale factor 0.99988441.
3. Unless otherwise indicated, the building line (b.l.), whether one or more, shown on this subdivision plat are established in accordance with the applicable provisions of Chapter 42, Code of Ordinances, City of Houston, Texas, in effect at the time this plat was approved, which may be amended from time to time.
4. Primary Benchmark is Harris County Floodplain Reference Mark Number 190045, brass disk stamped 190045 on bridge at Cinco Ranch Boulevard and upper Buffalo Bayou located on downstream concrete walk, on northeast corner of bridge in Key Map 4853 in the Barker watershed near stream T100-00-00.
Elevation=115.28 feet, NAVD 1988, 2001 adjusted
Temporary Benchmark is a brass disk on curb inlet located on the easterly side of Spring Green Boulevard, 400' +/- north of F.M. 1093.
Elevation=120.41 feet, NAVD 1988, 2001 adjusted
5. According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) for Fort Bend County, Texas, Map No. 48157C0100J revised/dated January 3, 1997, the subject tract appears to lie within unshaded zone "X".
6. The top of all floor slab elevations shall be a minimum of 122.5 feet above Mean Sea Level. The top of slab elevation at any point on the perimeter of the slab shall not be less than eighteen (18) inches above natural ground.
7. The drainage system for this subdivision is designed in accordance with the Fort Bend County Drainage Criteria Manual which allows street ponding with intense rainfall events.
8. All drainage easements shall be kept clear of fences, building, vegetation, and other obstructions for the purpose of the operation and maintenance of the drainage facility.
9. All property to drain into a drainage easement only through an approved drainage structure.
10. Pipeline easements within the platted area shown hereon.
11. This plat was prepared to meet City of Houston and Fort Bend County requirements.
12. Sidewalks shall be built or caused to be built not less than 5 feet in width on both sides of all dedicated rights-of-way within said plat and on the contiguous right-of-way of all perimeter roads surrounding said plat, in accordance with the A.D.A.
13. This plat lies wholly within Fort Bend County Lighting Zone LZ3
14. This plat is subject to the terms, conditions and provisions as set out by the "Regulations of Fort Bend County for the Placement of Signs Visible from the Main-Traveled Way of a Toll Road", as adopted by Commissioners Court on January 24, 2006, and as amended on August 27, 2013.
15. Absent written authorization by the affected utilities, all utility and aerial easements must be kept unobstructed from any non-utility improvements or obstructions by the property owner. Any unauthorized improvements or obstructions may be removed by any public utility at the property owner's expense. While wooden posts and paneled wooden fences along the perimeter and back to back easements and alongside rear lots lines are permitted, they too may be removed by public utilities at the property owner's expense should they be an obstruction. Public Utilities may put said wooden posts and paneled wooden fences back up, but generally will not replace with new fencing.

DISTRICT NAMES

WCID	N/A
MUD	C.S.M.U.D. 2
LID	N/A
DID	FBC DRAINAGE
SCHOOL	KATY ISD
FIRE	F.B.E.S.D. NO. 4
IMPACT FEE AREA	N/A
CITY OR CITY ETJ	CITY OF HOUSTON ETJ
UTILITIES CO.	CENTERPOINT ENERGY

ABBREVIATIONS

ESMT. - EASEMENT
FND - FOUND
F.B.C.C.F. - FORT BEND COUNTY CLERK FILE
F.B.C.D.R. - FORT BEND COUNTY DEED RECORDS
F.B.C.P.R. - FORT BEND COUNTY PLAT RECORDS
IP - IRON PIPE
IR - IRON ROD
NO. - NUMBER
PG. - PAGE
R.O.W. - RIGHT-OF-WAY
SQ. FT. - SQUARE FEET
VOL. - VOLUME
B.L. - BUILDING LINE
W.L.E. - WATER LINE EASEMENT
S.S.E. - SANITARY SEWER EASEMENT
U.E. - UTILITY EASEMENT
Ⓢ - SET 5/8" CAPPED IR "WINDROSE LAND SERVICES"
A.D.A. - AMERICANS WITH DISABILITIES ACT

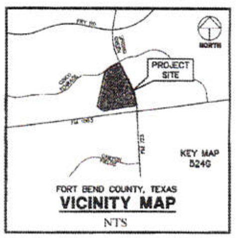


CURVE CHART

CURVE	RADIUS	DELTA	ARC	BEARING	CHORD
C1	730.00'	06°54'36"	88.06'	N 51°53'07" E	87.99'
C2	700.00'	14°38'35"	178.90'	N 55°45'06" E	178.41'
C3	25.00'	90°00'00"	39.27'	S 71°55'37" E	35.36'
C4	1940.00'	05°03'13"	171.11'	S 24°24'01" E	171.06'
C5	1940.00'	06°24'07"	216.77'	S 11°53'27" E	216.66'
C6	175.00'	99°53'22"	305.10'	S 38°24'17" W	267.90'
C7	299.50'	09°29'04"	49.58'	N 77°24'57" E	49.52'
C8	300.50'	13°43'17"	71.97'	N 75°17'50" E	71.79'
C9	24.50'	38°29'26"	16.46'	N 87°40'55" E	16.15'
C10	22.50'	40°12'48"	15.79'	N 43°46'56" E	15.47'
C11	220.00'	40°26'00"	155.19'	N 13°13'21" E	151.99'
C12	66.55'	34°37'36"	40.22'	N 19°11'32" E	39.61'

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 48°25'48" E	7.37'
L2	S 06°58'19" E	5.81'
L3	N 63°53'22" E	18.64'
L5	N 06°59'09" W	50.67'
L6	N 36°30'21" E	57.46'
L7	N 10°47'32" W	20.17'



FORT BEND COUNTY, TEXAS
VICINITY MAP
NTS

I, Richard W. Stolleis, P.E., Fort Bend County Engineer, do hereby certify that the plat of this subdivision complies with all the existing rules and regulations of this Office as adopted by the Fort Bend County Commissioners' Court. However, no certification is hereby given as to the effect of drainage from this subdivision on the intercepting drainage artery, or parent stream, or on any other area or subdivision within the watershed.

Richard W. Stolleis, P.E.
Fort Bend County Engineer

APPROVED by the Commissioners' Court of Fort Bend County, Texas, this, the ______ day of ________________, 2015.

Richard Morrison
Commissioner, Precinct 1

Grady Prestage
Commissioner, Precinct 2

Robert E. Hebert, Ph.D
County Judge

W. A. "Andy" Meyers
Commissioner, Precinct 3

James Patterson
Commissioner, Precinct 4

I, Laura Richard, County Clerk in and for Fort Bend County, hereby certify that the foregoing instrument with its certificate of authentication was filed for recordation in my office on ________________ 2015, at ______ o'clock ___M., in Plat No. ________________ of the Plat Records of Fort Bend County, Texas.

Witness my hand and seal of office, at Richmond, Texas, the day and date last above written.

Dianne Wilson
County Clerk
Fort Bend County, Texas

By: ________________
Deputy

CROSSING AT CINCO RANCH PARTIAL REPLAT NO 1

A SUBDIVISION OF 32.7025 ACRES OR 1,424,520
SQUARE FEET OF LAND BEING A REPLAT OF
RESERVE "B", CROSSING AT CINCO RANCH,
RECORDED IN PLAT NO 20140058, F.B.C.P.R.
SITUATED IN THE I. & G.N. R.R. CO. SURVEY, A-365
FORT BEND COUNTY, TEXAS

1 BLOCK 7 RESERVES 0 LOTS

REASON FOR REPLAT: TO CREATE SEVEN (7) RESERVES

JULY, 2015

Owners

Thor Ranch, LLC
25 West 39th Street, 10th Floor
New York, NY 10018
(212) 529-5044

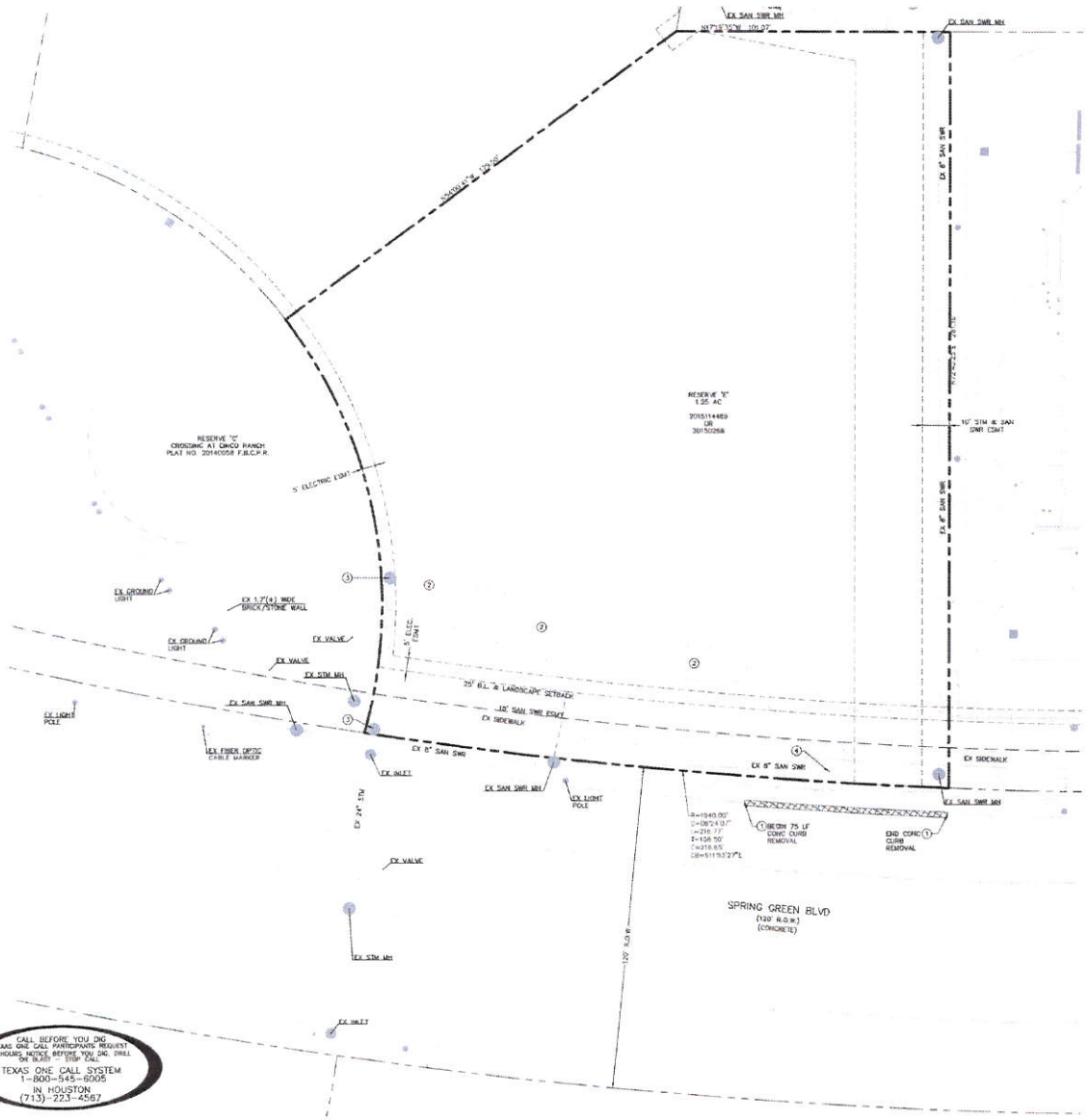
& HRC Partners # 3, LLC
5353 Woodway Dr., Suite 900
Houston, TX 77057
(713) 456-6151

Surveyor

Windrose Land Services, Inc.
3200 Wilcrest, Suite 325
Houston, Texas 77042
Phone (713) 458-2281 Fax (713) 461-1151
Firm Registration No. 10108800

Professional Development Consultants
Land Surveying, Platting, Project Management, GIS Services

5/30/17



CALL BEFORE YOU DIG
TEXAS ONE CALL PARTICIPANTS REQUIRE 72 HOURS NOTICE BEFORE YOU DIG, DRILL OR BLAST — STOP CALL
TEXAS ONE CALL SYSTEM
1-800-545-6005
IN HOUSTON
(713)-223-4567

1 inch = 20 ft.
GRAPHIC SCALE

BENCHMARK:
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 190045. BRASS DISK STAMPED 190045 ON BRIDGE AT CINCO RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN VEY MAP 465 IN THE BAYER WATERSHED NEAR STREAM 7100-00-00.
ELEVATION = 135.28' (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A":
BRASS DISK ON CURB INLET LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BLVD. 1MI +/- NORTH OF I.H. 10EB.
ELEVATION = 120.43'

TEMPORARY BENCHMARK "B":
CUT BOX ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT CENTER MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093, APPROX. 1000' WEST OF SPRING GREEN BLVD.
ELEVATION = 123.90'

KEYED NOTES

EXISTING FEATURES TO BE REMOVED

1. CONCRETE CURB
2. DITCH
3. STORM MANHOLE (SEE NOTE 5)
4. TREE

EXISTING CURB (TO BE REMOVED)

LIMITS OF DISTURBED AREA

SAWCUT

GENERAL NOTES

1. ALL SAWCUTS TO EXTEND FULL DEPTH OF EXISTING PAVEMENT, AND IN NO CASE SHALL THE PROPOSED CONCRETE PAVEMENT SECTION BE LESS THAN 24 INCHES IN WIDTH. CONTRACTOR TO SAWCUT ALONG GUTTER OF EXISTING PAVEMENT AND ADJUST LOCATION OF SAWCUT TO ENSURE ADEQUATE WIDTH OF PROPOSED PAVEMENT.
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL FOR ALL WORK TO BE DONE IN RIGHT-OF-WAY ACCORDING TO THE LATEST MUTCD REQUIREMENTS.
3. CONTRACTOR TO CLEAR AND GRUB PROJECT SITE AS NECESSARY FOR INSTALLATION OF PROPOSED FACILITIES. CLEARING AND GRUBBING CONSISTS OF REMOVAL AND DISPOSAL OF TREES, STUMPS, BRUSH, ROOTS, VEGETATION, LOGS, RUBBISH AND OTHER OBJECTIONABLE MATTER WITHIN THE DESIGNATED AREA. CONTRACTOR TO REMOVE STUMPS AND ROOTS WITHIN CLEARING LIMITS TO MINIMUM DEPTH OF TWO (2') FEET BELOW NATURAL GROUND ELEVATION. CLEARED AND GRUBBED MATERIAL BECOMES PROPERTY OF THE CONTRACTOR, TO BE THE REMOVED FROM THE WORK SITE OR DISPOSED OF AT NO EXTRA COST TO THE OWNER.
4. CONTRACTOR RESPONSIBLE TO CLEAR AND DEMO ALL WITHIN LIMITS OF DISTURBANCE LINE.
5. CONTRACTOR TO FIELD VERIFY EXISTING ONSITE DRAINAGE FACILITIES AND PROVIDE INFORMATION TO ENGINEER IF NOT DRAINAGE.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: [signature] (PROJECT ENGINEER)
DATE: 5/30/17

STATE OF TEXAS
PATRICK J. CRESSMAN
93617
REGISTERED PROFESSIONAL ENGINEER
24 MAY 2017

ALJ Lindsey
Civil Engineers
8800 FM 1960 W., Suite 314
Houston, TX 77070
281.301.5851
FIRM # 11139

OWNER:
Thor Hanch II, LLC
35 W. 36th St
10th Floor
New York, NY 10018

CIVIL:
ALJ Lindsey
8800 FM 1960 West
Suite 314
Houston, Texas 77070
281.301.5851

STRUCTURE:
CJG Engineers
3300 Willowal, Suite 300
Houston, Texas 77063
713.785.0345
FIRM # F-176

MEP:
Sales Offices
10200 W. Sam Houston Pkwy N
Suite 200
Houston, Texas 77064
832.654.0842

LANDSCAPE:
OAR Landscape Architecture
18135 FM 362
Hockley, Texas 77447
832.428.1238

identityARCHITECTS
www.identityarchitects.com
713.595.2150
111 Travis Street, Houston, Texas 77002

NO.	DATE	REVISION ISSUE
	04/05/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS

1 STORY RETAIL SHELL

9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN | CHECKED

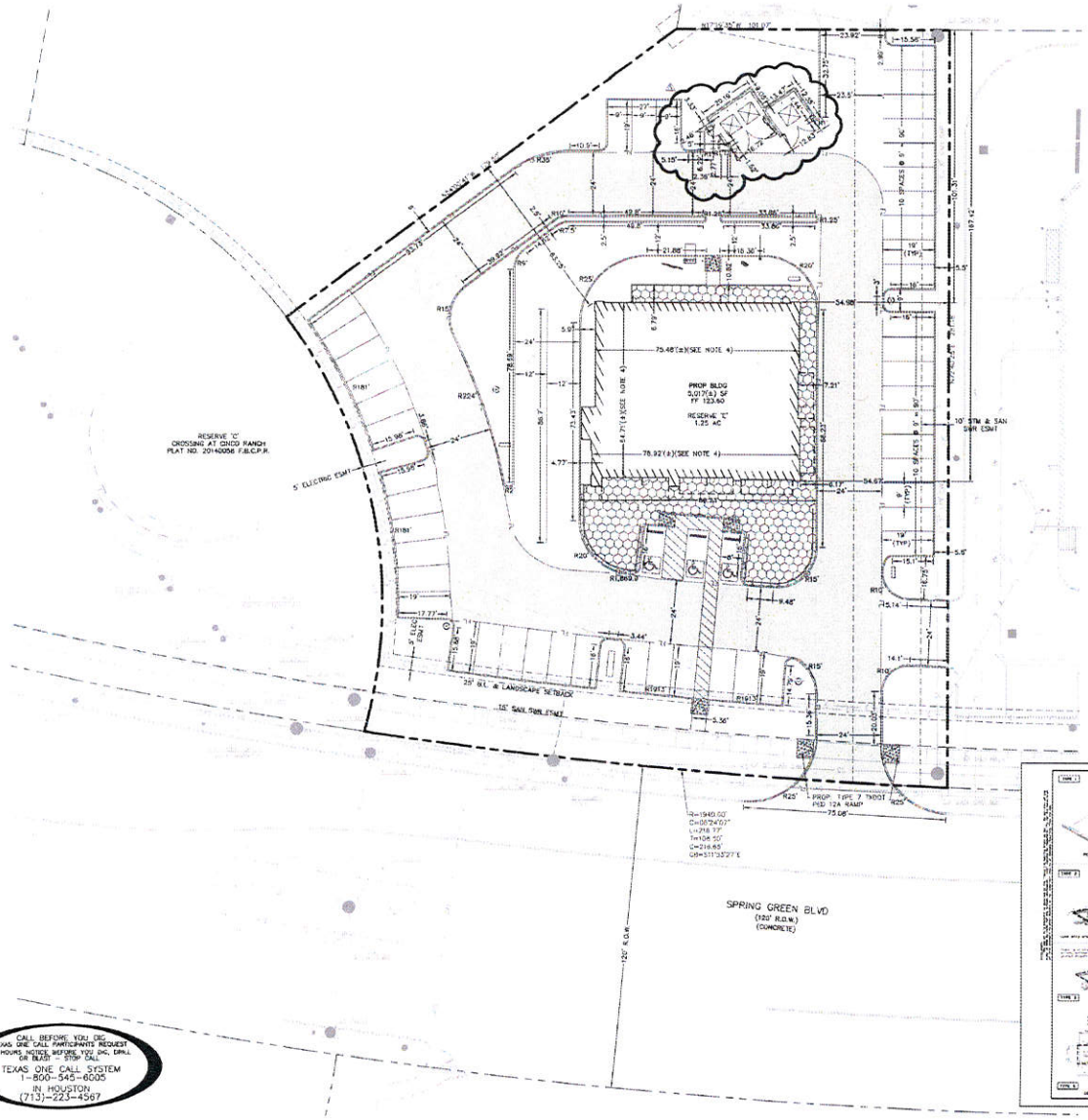
REFERENCE NUMBER 14021-00

TITLE

DEMOLITION PLAN

DRAWING NUMBER

C1.0



1 inch = 20 ft.

GRAPHIC SCALE

BENCHMARK:
FORT BEND COUNTY FLOODPLAIN REFERENCE MARK NUMBER 0000M1, BRASS DISK STAMPED 1000M1 ON BRIDGE AT FIELD RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN KEY MAP 455J IN THE FABRICK WATERSHED NEAR STREAM 1100-00-00
ELEVATION = 115.20 (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A"
RADIO DISK ON CURB INLET LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BLVD. SBA +/- NORTH OF F.M. 2963.
ELEVATION = 128.41

TEMPORARY BENCHMARK "B"
CUT BOX ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT CENTER MONUMENT SIGN ON THE NORTH SIDE OF F.M. 2759, APPROX. 1000' WEST OF SPRING GREEN BLVD.
ELEVATION = 123.30

LEGEND

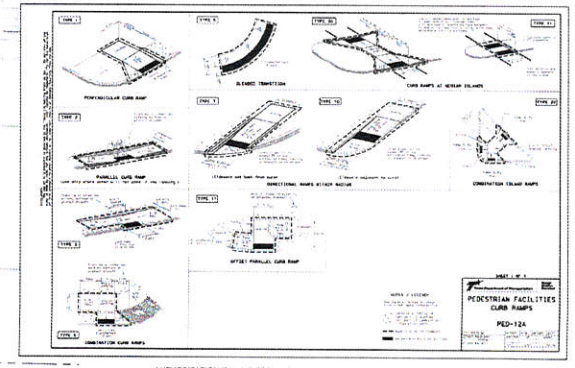
- PROPOSED FIRE LANE (RED STRIPING)
- PROPOSED BUILDING PERIMETER SIDEWALK
- PROPOSED CURB RAMP
- EX. MANHOLE
- EX. STORM SEWER
- EX. WATER LINE
- EX. SANITARY SEWER LINE
- EX. OVERHEAD POWER LINE
- EX. UNDERGROUND GAS LINE
- EX. CONTOUR

GENERAL NOTES

1. PAVEMENT DIMENSIONS AND RADII ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. RADII ARE 3' UNLESS OTHERWISE NOTED.
3. REFER TO SITE ELECTRICAL PLAN FOR PROPOSED SITE LIGHTING LAYOUT.
4. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING/FOUNDATION DIMENSIONS.

FIRE LANE MARKING NOTES

CURBS LOCATED ON EITHER SIDE OF A FIRE LANE SHALL BE PAINTED RED OR A RED STRIPE SHALL BE PLACED ALONG THE PAVEMENT WHERE THERE IS NO CURB. WHERE A FIRE LANE PASSES BETWEEN HEAD-IN PARKING SPACES, THE RED STRIPE SHOULD BE PLACED ALONG THE REAR OF THESE SPACES. CLEARLY DEFINING THE FIRE LANE. PAINTED CURBS AND FIRE LANE STRIPES SHALL ALSO BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "FIRE LANE TOW AWAY ZONE" IN WHITE LETTERS AT LEAST THREE (3) INCHES IN HEIGHT, AT INTERVALS NOT EXCEEDING (50) FEET.



CALL BEFORE YOU DIG
TEXAS ONE CALL PARTICIPANTS REQUEST
72 HOURS NOTICE BEFORE YOU DIG, DRILL
OR BLOW — STOP CALL
TEXAS ONE CALL SYSTEM
1-800-545-6005
IN HOUSTON
(713)-223-4567

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: _____ DEVELOPMENT COORDINATOR
DATE: 5/30/17

PATRICK L. CARRIGAN
95617
REGISTERED PROFESSIONAL ENGINEER
TEXAS
25 MAY 2017

ALJ Lindsey
Civil Engineers
16228 FM 1960 W, Suite 314
Houston, TX 77090
281.301.9655
FIRM # F-1526

OWNER:
Thor Ranch II, LLC
25 W. 39th St
10th Floor
New York, NY 10018

CIVIL:
ALJ Lindsey
5622 FM 1960 West
Suite 314
Houston, Texas 77069
281.301.9655

STRUCTURE:
GCG Engineers
3950 Westheimer, Suite 305
Houston, Texas 77042
713.784.5345
FIRM # F-170

MEP:
Sears O'Brien
13930 W. Gulf Houston
Pkwy S
Suite 100
Houston, Texas 77034
832.654.0642

LANDSCAPE:
Child Landscape Architecture
14135 FM 362
Navasota, Texas 77868
936.428.3208

identityARCHITECTS
111 Travis Street, Houston, Texas 77002
713.565.2150
www.identityarchitects.com

NO.	DATE	REVISION ISSUE
1	04/03/2017	ISSUE FOR PERMIT
2	05/24/2017	ADDENDUM A

PROJECT NAME AND ADDRESS:

1 STORY RETAIL SHELL

9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

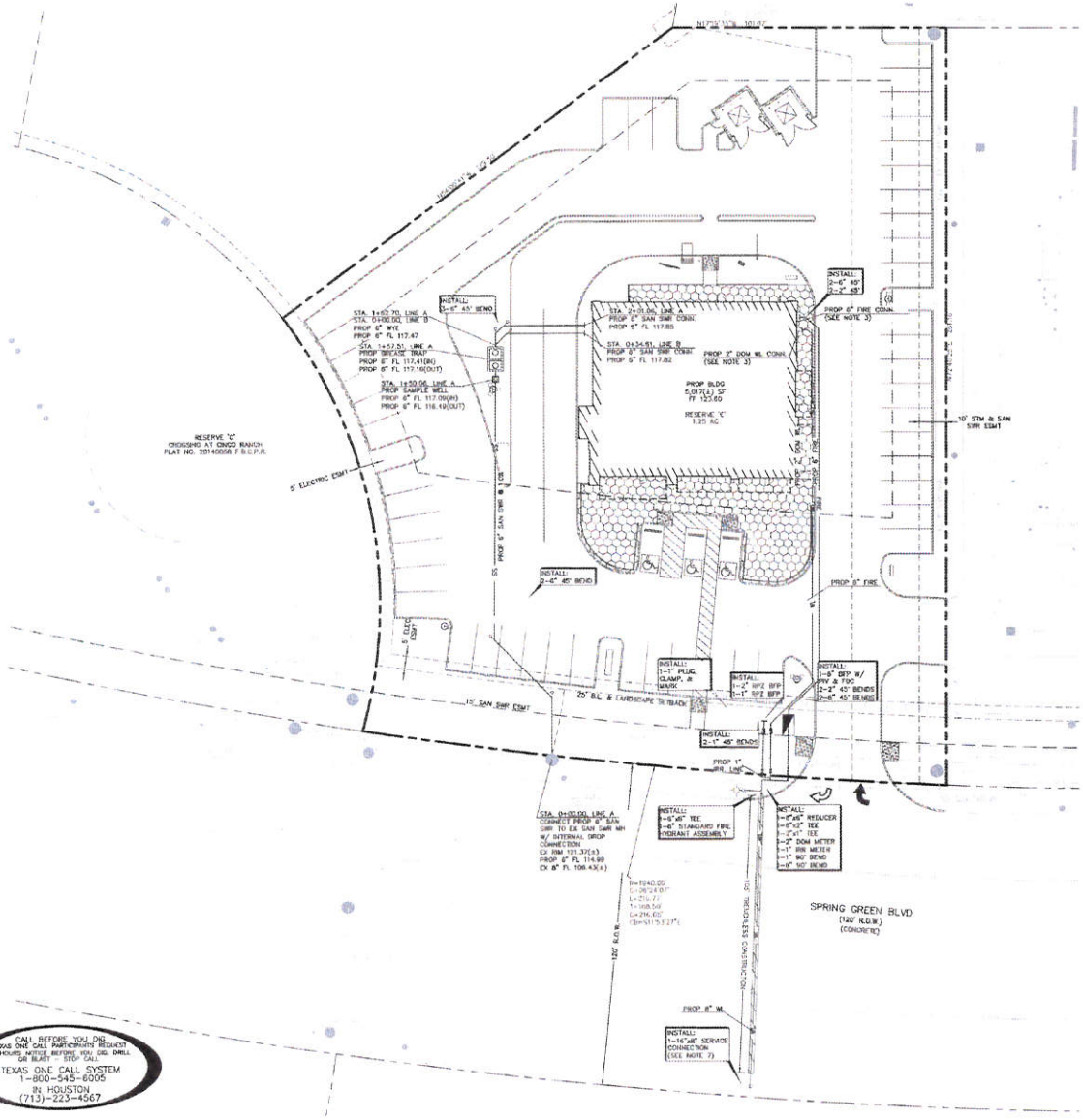
REFERENCE NUMBER: 14021-06

TITLE

DIMENSION CONTROL PLAN

DRAWING NUMBER

C1.1



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TEXAS ONE CALL SYSTEM
1-800-545-6005
IN HOUSTON
(713)-223-4567

GRAPHIC SCALE

BENCHMARK:
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 16D045, BRASS DISK STAMPED 16D045 ON BRIDGE AT CINCO RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALK, ON NE CORNER OF BRIDGE IN KEY MAP 445E IN THE BARKER WATERSHED NEAR STREAM E100-00-00
ELEVATION = 115.28' (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A":
BRASS DISK ON CURB SECT LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BLVD. 384' +/- NORTH OF F.M. 1093.
ELEVATION = 130.41'

TEMPORARY BENCHMARK "B":
CUT BOX ON CONCRETE BASE ON LOWE'S HOME IMPROVEMENT CENTERS MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093, APPROX. 200' WEST OF SPRING GREEN BLVD
ELEVATION = 129.30'

PATRICK L. CARRIGAN
95617
REGISTERED
PROFESSIONAL ENGINEER
21 MAY 2017

LEGEND

SS — w/ CLEAN OUT	PROPOSED SANITARY SEWER
WL	PROPOSED WATER LINE
FIRE	PROPOSED FIRE LINE
	EX. STORM SEWER
	EX. WATER LINE
	EX. SANITARY SEWER LINE
	EX. UNDERGROUND GAS LINE
	EX. CONTOUR

GENERAL NOTES

1. REFERENCE SANITARY SEWER, FIRE, AND WATER LINE NOTES SHEET C0.1 FOR PIPE MATERIAL REQUIREMENTS.
2. REFER TO SITE ELECTRICAL PLAN FOR PROPOSED SITE LIGHTING LAYOUT.
3. REFERENCE MEP PLANS FOR CONTINUATION OF SANITARY AND WATER FACILITIES INSIDE BUILDING.
4. ALL CLEANOUTS LOCATED WITHIN CONCRETE PAVEMENT TO BE TRAFFIC RATED.
5. THE EXISTING SANITARY SEWER MANHOLE ALONG SPRING GREEN BLVD HAS A RIM ELEVATION OF 121.37. THE PROPOSED FINISH FLOOR IS AT 123.50, WHICH EQUATES TO A DIFFERENCE OF 2.13'. THIS MEETS THE MINIMUM OF 12" BELOW THE PROPOSED FINISH FLOOR PER SECTION 910.1 OF THE 2006 IBC CODE.
6. ANY CONFLICT IN PLANS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION.
7. PRIOR TO ORDERING MATERIALS, CONTRACTOR TO FIELD VERIFY SIZE, LOCATION, AND DEPTH OF EXISTING 16" WATER LINE ALONG SPRING GREEN BLVD. IF CONFLICT IS IDENTIFIED, CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY.
8. PRIOR TO CONSTRUCTION A PRE-CONSTRUCTION MEETING MUST BE HELD WITH BGE (KEVIN CUNNINGHAM, 832-782-6607) AND SEVERN TRENT SERVICES (BILL RICHMOND, 281-375-5663). PLEASE CONTACT THOSE INDIVIDUALS TO SCHEDULE THIS MEETING.
9. SEWER AND WATER CONNECTIONS AND FEES ARE HANDLED BY SEVERN TRENT SERVICES (BILL RICHMOND, 281-375-5663). PRIOR TO ANY CONNECTION A RESERVATION OF CAPACITY IS REQUIRED TO BE GRANTED BY CINCO SOUTHWEST MUD 1. BGE (KEVIN CUNNINGHAM, 832-782-6607) HANDLES THE OBSERVATIONS OF THE STORM DRAIN CONNECTIONS.
10. ANY DISTURBANCE OF OR DAMAGE TO EXISTING CINCO SOUTHWEST MUD 1 OR CINCO SOUTHWEST MUD NO. 2 FACILITIES OR UNAUTHORIZED CONNECTION THERETO MAY RESULT IN A STOPPAGE OF WORK, UNCOVERING, REPAIR, OR REPLACEMENT OF FACILITIES.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: _____ DEVELOPMENT COORDINATOR
DATE: 5/30/17

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NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS:

1 STORY RETAIL SHELL

6333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

REFERENCE NUMBER: 14021.06

TITLE

UTILITY PLAN

DRAWING NUMBER:

C2.0

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IN HOUSTON
(713)-223-4567

1 inch = 20 ft.
GRAPHIC SCALE

BENCHMARK:
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 1980045
BRASS DISK STAMPED 1980045 ON BRIDGE AT CINCO RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN KEY MAP 425S IN THE BARKER WATERSHED NEAR STREAM T200-00-00.
ELEVATION = 115.34' (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A":
BRASS DISK ON CURB INLET LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BLVD., 264' +/- NORTH OF F.M. 1093.
ELEVATION = 120.41'

TEMPORARY BENCHMARK "B":
CUT SQUARE ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT CENTERS MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093, APPROX. 1,000 WEST OF SPRING GREEN BLVD.
ELEVATION = 123.90'

LEGEND

D-n / AC / CFS	DRAINAGE AREA NUMBER / ACREAGE (AC) / DRAINAGE AREA FLOW (CFS)
	PROP. DRAINAGE AREA BOUNDARY
	EXISTING OFFSITE DRAINAGE FLOW DIRECTION
EX	EXTREME EVENT OVERLAND FLOW
	PROPOSED STORM SEWER
	PROPOSED GRATE INLET
	EX. STORM SEWER
	EX. WATER LINE
	EX. SANITARY SEWER LINE
	EX. CONTOUR

GENERAL NOTES

1. REFERENCE STORM SEWER NOTES SHEET C0.1 FOR PIPE MATERIAL REQUIREMENTS.
2. REFERENCE MEP PLANS FOR EXACT CONTINUATION OF PROPOSED STORM SEWER INSIDE OF BUILDING.
3. FOR TYPE "A" INLET, JUNCTION BOX, TYPE "C" MANHOLE, TYPE "SB" INLET, TRENCH DRAIN, AND BACKFILL DETAILS, SEE SHEET C7.2.
4. ANY CONFLICT IN PLANS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION.
5. PRIOR TO ORDERING MATERIALS, CONTRACTOR TO FIELD VERIFY LOCATION & DEPTH OF EXISTING MANHOLE.
6. THE SITE ULTIMATELY OUTFALLS INTO CINCO SOUTHWEST CHANNEL DSE. THE MAXIMUM 100-YR WATER SURFACE IN THAT OUTFALL CHANNEL IS ELEVATION 115.46.
7. PRIOR TO CONSTRUCTION A PRE-CONSTRUCTION MEETING MUST BE HELD WITH BGE (KEVIN CUNNINGHAM, 832-782-6807) AND SEVERN TRENT SERVICES (BILL RICHMOND, 281-375-5863). PLEASE CONTACT THOSE INDIVIDUALS TO SCHEDULE THIS MEETING.
8. SEWER AND WATER CONNECTIONS AND FEES ARE HANDLED BY SEVERN TRENT SERVICES (BILL RICHMOND, 281-375-5863). PRIOR TO ANY CONNECTION A RESERVATION OF CAPACITY IS REQUIRED TO BE GRANTED BY CINCO SOUTHWEST MUD 1. BGE (KEVIN CUNNINGHAM, 832-782-6807) HANDLES THE OBSERVATIONS OF THE STORM DRAIN CONNECTIONS.
9. ANY DISTURBANCE OF OR DAMAGE TO EXISTING CINCO SOUTHWEST MUD 1 OR CINCO SOUTHWEST MUD NO. 2 FACILITIES OR UNAUTHORIZED CONNECTION THERETO MAY RESULT IN A STOPPAGE OF WORK, UNCOVERING, REPAIR, OR REPLACEMENT OF FACILITIES.

CROSSING TABLE

	SAN	STM	CLR
A	6" 116.35'	12" 117.65'	1.12'
B	6" 116.59'	12" 116.34'	1.30'
C	6" 117.39'	12" 116.78'	0.60'

MAX PONDING DEPTH

DRAINAGE AREA	MAXIMUM PONDING DEPTH
A1	0.66'
A2	0.30'
A3	0.20'
A4	0.35'
A3A	0.40'
B1	0.60'
B2	0.30'
B3	0.30'
B4	0.70'

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: _____
(DEPARTMENT OF ENVIRONMENTAL MANAGEMENT)
DATE: 5/30/17

PATRICK L. CARRIGAN
LICENSED
PROFESSIONAL ENGINEER
23 MAY 2017

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NO	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS
1 STORY RETAIL SHELL
9333 SPRING GREEN BLVD
KATY, TX 77494

DRAWN
CHECKED
REFERENCE NUMBER 14021-06

TITLE
STORM SEWER PLAN

DRAWING NUMBER
C3.0

CUMULATIVE 3-YEAR STORM SEWER CALCULATIONS

Storm Sewer Design Analysis
Saiata
Spring Green Blvd & FM 1093
Fort Bend County, Texas

Design Frequency: 3 years
100-Year Multiplier: 1.00
Downstream 25-year WS ELEV: 117.76 feet

Manhole No From	Manhole No to	Drainage Area (acres)	Total Area (acres)	Runoff Coefficient C	DA C * A	Total C * A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Diameter (in) or Rise (ft)	Slope %	Manning's Roughness Coefficient "n"	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow Area (sq ft)	Full Pipe Flow Wetted Perimeter (ft)	Full (ft)	Drop from Downstream Manhole (ft)	Flowline Elevation Upstream (ft)	Flowline Elevation Downstream (ft)	Minimum Depth Ratio (y/d or y/h)	Minimum W.S. Elev Downstream (ft)	Actual Depth Ratio y/d or y/h	Actual Flow per Barrel Actual Velocity (ft/sec)	Actual Flow per Barrel Area (sq ft)	Actual Flow per Barrel Wetted Perimeter (ft)	Actual Flow per Barrel Hydraulic Gradient %	Change in Head (ft)	Elevation of Hyd. Grad Upstream (ft)	Elevation of Hyd. Grad Downstream (ft)	Top of Pipe Elevation Upstream (ft)	Top of Pipe Elevation Downstream (ft)	Pvmt / Grate Elevation Upstream (ft)
A4	A3	0.22	0.22	0.80	0.18	0.18	22.66	4.08	0.72	0.72	88	12	0.450	0.013	2.4	3.0	0.8	3.1	0.40	0.00	118.20	117.80	0.37	118.17	0.57	1.59	0.45	1.69	0.112	0.10	118.47	118.37	119.20	118.80	121.36
A3	A2	0.17	0.64	0.80	0.14	0.43	23.07	3.96	0.54	1.71	106	12	0.450	0.013	2.4	3.0	0.8	3.1	0.48	0.00	117.80	117.32	0.62	117.94	0.73	2.62	0.61	2.03	0.306	0.32	118.37	118.05	118.80	118.32	121.20
A2	A1	0.08	0.52	0.80	0.06	0.50	24.19	3.94	0.25	1.95	107	12	0.450	0.013	2.4	3.0	0.8	3.1	0.48	1.00	117.32	116.84	0.88	117.52	0.93	2.58	0.78	2.57	0.261	0.28	118.05	117.77	118.32	117.84	122.20
A1	EX	0.14	1.27	0.80	0.23	0.73	26.43	3.83	0.88	2.79	40	24	0.200	0.013	10.1	3.2	3.1	6.3	0.08		116.84	116.76	0.35	116.46	1.00	0.89	3.14	6.28	0.015	0.01	117.77	117.76	117.84	117.76	121.90
A3A	A3	0.15	0.15	0.80	0.12	0.12	22.16	4.13	0.50	0.50	44	12	0.450	0.013	2.4	3.0	0.8	3.1	0.20	0.00	118.00	117.80	0.30	118.10	0.30	2.62	0.19	1.14	0.576	0.25	118.35	118.10	119.00	118.80	120.50
B4	B3	0.15	0.15	0.80	0.12	0.12	22.16	4.13	0.50	0.50	48	12	0.400	0.013	2.4	3.0	0.8	3.1	0.22	0.00	119.09	118.87	0.30	119.17	0.43	1.54	0.32	1.43	0.131	0.06	119.37	119.30	120.09	119.87	121.60
B3	B2	0.04	0.19	0.80	0.03	0.15	22.46	4.10	0.13	0.62	52	12	0.400	0.013	2.4	3.0	0.8	3.1	0.23	0.00	118.87	118.64	0.34	118.98	0.66	1.13	0.55	1.90	0.051	0.03	119.33	119.30	119.87	119.54	122.20
B2	B1	0.05	0.36	0.80	0.04	0.28	23.35	4.01	0.18	1.18	41	12	0.450	0.013	2.4	3.0	0.8	3.1	0.18	0.00	118.64	118.46	0.49	118.95	0.80	1.74	0.67	2.19	0.113	0.05	119.30	119.25	119.54	119.46	122.20
B1	A1	0.15	0.51	0.80	0.12	0.41	23.88	3.97	0.48	1.62	65	12	0.450	0.013	2.4	3.0	0.8	3.1	0.38	0.00	118.46	118.08	0.60	118.68	1.00	2.08	0.79	3.14	0.209	0.18	119.25	119.08	119.46	119.08	121.65
R1	B2	0.12	0.12	0.80	0.10	0.10	21.88	4.16	0.40	0.40	1	8	0.750	0.013	1.0	3.0	0.3	2.1	0.01															

*THE DRAINAGE CALCULATIONS LISTED ABOVE ARE BASED ON THE 3-YEAR STORM EVENTS PER THE FORT BEND COUNTY DRAINAGE CRITERIA MANUAL.

CUMULATIVE 100-YEAR STORM SEWER CALCULATIONS

Storm Sewer Design Analysis
Saiata
Spring Green Blvd & FM 1093
Fort Bend County, Texas

Design Frequency: 100 years
100-Year Multiplier: 1.25
Downstream 25-year WS ELEV: 117.76 feet

Manhole No. From	Manhole No. to	Drainage Area (acres)	Total Area (acres)	Runoff Coefficient C	Weighted Runoff Coefficient C	DA C * A	Total C * A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Diameter (in) or Rise (ft)	Slope %	Manning's Roughness Coefficient "n"	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow Area (sq ft)	Full Pipe Flow Wetted Perimeter (ft)	Full (ft)	Drop from Downstream Manhole (ft)	Flowline Elevation Upstream (ft)	Flowline Elevation Downstream (ft)	Minimum Depth Ratio (y/d or y/h)	Minimum W.S. Elev Downstream (ft)	Actual Depth Ratio y/d or y/h	Actual Flow per Barrel Actual Velocity (ft/sec)	Actual Flow per Barrel Area (sq ft)	Actual Flow per Barrel Wetted Perimeter (ft)	Actual Flow per Barrel Hydraulic Gradient %	Change in Head (ft)	Elevation of Hyd. Grad Upstream (ft)	Elevation of Hyd. Grad. Downstream (ft)	Top of Pipe Elevation Upstream (ft)	Top of Pipe Elevation Downstream (ft)	Pvmt / Grate Elevation Upstream (ft)
A4	A3	0.22	0.22	0.80	1.25	0.28	0.28	22.66	6.44	2.32	2.32	88	12	0.450	0.013	2.4	3.0	0.8	3.1	0.40	0.00	118.20	117.80	0.79	118.59	1.00	2.98	0.79	3.14	0.425	0.37	124.16	123.80	119.20	118.80	121.36
A3	A2	0.17	0.64	0.80	1.25	0.21	0.68	23.07	6.22	1.76	5.66	106	12	0.450	0.013	2.4	3.0	0.8	3.1	0.48	0.00	117.80	117.32	1.00	118.32	1.00	7.07	0.79	3.14	2.426	2.57	123.80	121.23	118.80	118.32	121.20
A2	A1	0.08	0.52	0.80	1.25	0.10	0.78	24.19	6.19	0.82	6.04	107	12	0.450	0.013	2.4	3.0	0.8	3.1	0.48	1.00	117.32	116.84	1.00	117.84	1.00	8.08	0.79	3.14	3.170	3.39	121.23	117.84	118.32	117.84	122.20
A1	EX	0.14	1.27	0.80	1.25	0.36	1.14	26.43	7.99	2.90	9.09	40	24	0.250	0.013	10.1	3.2	3.1	6.3	0.08		116.84	116.76	0.74	117.24	1.00	2.89	3.14	6.28	0.151	0.06	117.82	117.76	117.84	117.76	121.90
A3A	A3	0.15	0.15	0.80	1.25	0.19	0.19	22.16	6.53	1.60	1.60	44	12	0.450	0.013	2.4	3.0	0.8	3.1	0.20	0.00	118.00	117.80	0.56	118.36	1.00	2.04	0.79	3.14	0.202	0.06	121.32	121.23	119.00	118.80	120.50
B4	B3	0.15	0.15	0.80	1.25	0.19	0.19	22.16	6.53	1.60	1.60	49	12	0.450	0.013	2.4	3.0	0.8	3.1	0.22	0.00	119.09	118.87	0.59	119.46	1.00	2.04	0.79	3.14	0.202	0.10	121.29	121.15	120.09	119.87	121.60
B3	B2	0.04	0.19	0.80	1.25	0.05	0.24	22.46	6.48	0.42	2.01	52	12	0.450	0.013	2.4	3.0	0.8	3.1	0.23	0.00	118.87	118.64	0.70	119.34	1.00	2.58	0.79	3.14	0.319	0.17	121.32	121.15	119.87	119.64	122.20
B2	B1	0.05	0.36	0.80	1.25	0.06	0.42	23.35	6.32	0.52	3.60	41	12	0.450	0.013	2.4	3.0	0.8	3.1	0.18	0.00	118.64	118.46	1.00	119.46	1.00	4.45	0.79	3.14	0.963	0.39	121.15	120.76	119.64	119.46	122.20
B1	A1	0.15	0.51	0.80	1.25	0.19	0.61	23.88	6.24	1.54	5.00	65	12	0.450	0.013	2.4	3.0	0.8	3.1	0.38	0.00	118.46	118.08	1.00	119.08	1.00	6.37	0.79	3.14	1.972	1.68	126.76	119.08	119.46	119.08	121.65
R1	B2	0.12	0.12	0.80	1.00	0.12	0.12	21.88	8.58	1.03	1.03	1	8	0.750	0.013	1.0	3.0	0.3	2.1	0.01																

*THE DRAINAGE CALCULATIONS LISTED ABOVE ARE BASED ON THE 100-YEAR STORM EVENTS PER THE FORT BEND COUNTY DRAINAGE CRITERIA MANUAL.

BENCHMARK:
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 1900M5
BRASS DISK STAMPED 1900M5 ON BRIDGE AT CRESCENT RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN KEY MAP 445E IN THE BRAYS WATERSHED NEAR STREAM F100-00-00
ELEVATION = 123.36' (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A":
BRASS DISK ON CURB INLET LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BLVD. 15± +/- NORTH OF F.M. 1093
ELEVATION = 120.41

TEMPORARY BENCHMARK "B":
CUT X IN ON CONCRETE DATA OF LOWE'S HOME IMPROVEMENT CENTERS MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093, APPROX. 1000' WEST OF SPRING GREEN BLVD.
ELEVATION = 123.37

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

CALL BEFORE YOU DIG
TEXAS ONE CALL PARTICIPANTS REQUIRE 72 HOURS NOTICE BEFORE YOU DIG, DRILL OR BLAST - STOP CALL
TEXAS ONE CALL SYSTEM
1-800-545-6005
IN HOUSTON
(713)-223-4567

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: [signature]
DEVELOPMENT COORDINATOR
DATE: 5/30/17

PATRICK L. CARRIGAN
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PROFESSIONAL ENGINEER
23 MAY 2017

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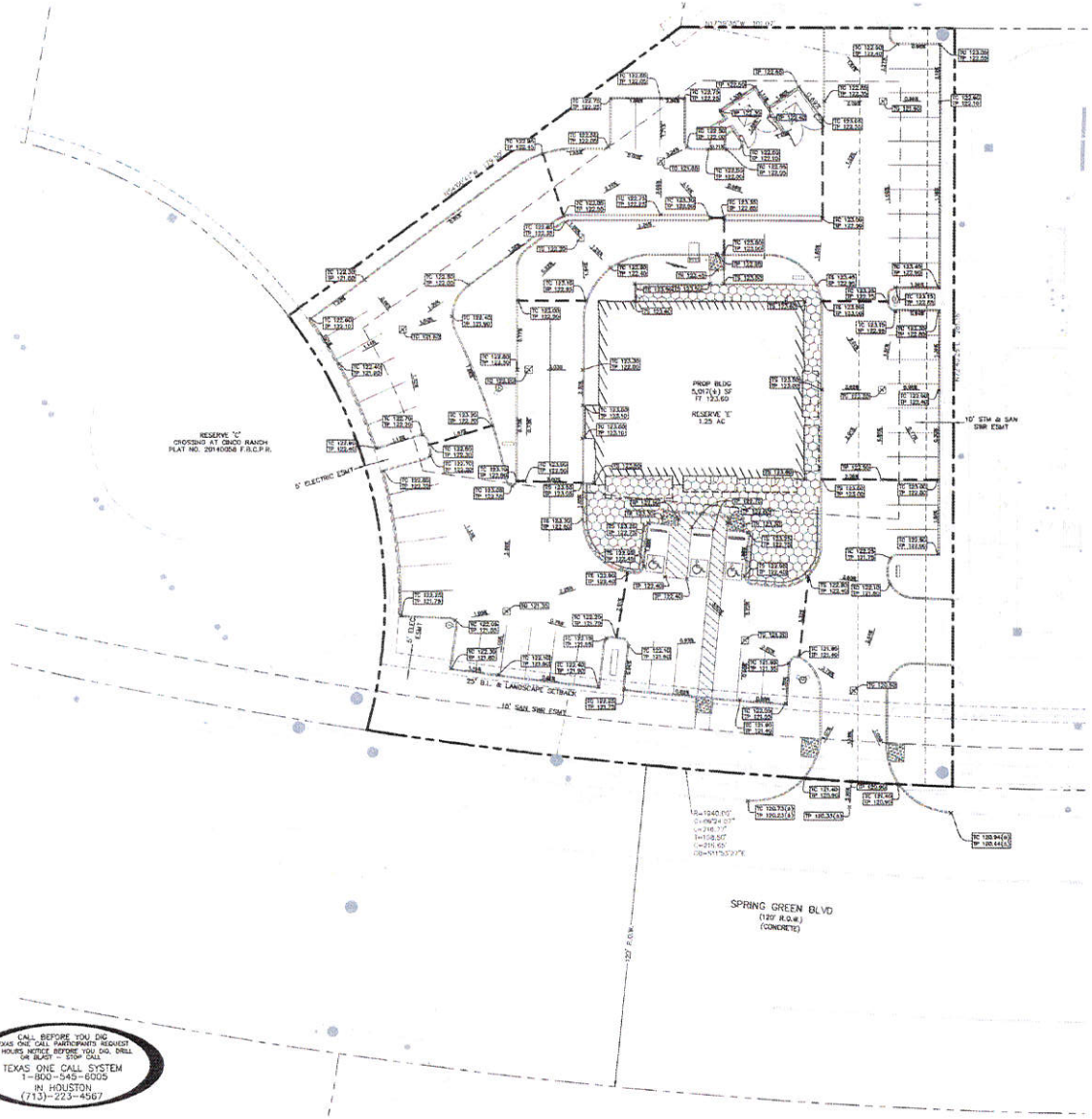
NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS
1 STORY RETAIL SHELL
9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN
CHECKED
REFERENCE NUMBER 14021-06

TITLE
DRAINAGE CALCULATIONS

DRAWING NUMBER
C3.1



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72 HOURS NOTICE BEFORE YOU DIG, DRILL
OR BLAST - STOP CALL
TEXAS ONE CALL SYSTEM
1-800-545-6005
IN HOUSTON
(713)-223-4567

1 inch = 20 ft.
GRAPHIC SCALE

BENCHMARK:
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 590045
BRASS DISK STAMPED 590045 ON BRIDGE AT CINCO RANCH BLVD
AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM
CONCRETE WALL, ON NE CORNER OF BRIDGE IN FEMA MAP 4835 IN
THE BARKER WATERSHED IN AR STREAM T200-00-00.
ELEVATION = 115.26' (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A"
NAIL SET ON TOP OF VALVE LOCATED ON THE EASTERLY SIDE OF
SPRING GREEN BLVD, 1,150' +/- NORTH OF F.M. 1093
ELEVATION = 125.43'

TEMPORARY BENCHMARK "B":
CUT BOX ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT
CENTER MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093,
APPROX. 1,000' WEST OF SPRING GREEN BLVD
ELEVATION = 122.50'

LEGEND

☑	PROPOSED TYPE "A" INLET (SEE DETAIL, SHEET C7.2)
TG	TOP OF GRATE
TP	TOP OF PAVEMENT
TC	TOP OF CURB
TS	TOP OF SIDEWALK
FG	FINISHED GROUND
FF	FINISHED FLOOR
TR	TOP OF RAMP
	EXISTING SANITARY OR STORM SEWER MANHOLE
	PROPOSED HIGH POINT OF PAVEMENT
	DRAINAGE FLOW ARROWS
	EXISTING CONTOUR

GENERAL NOTES

1. REFER TO ARCHITECTURAL PLANS FOR GRADES INSIDE THE BUILDING ENVELOPE.
2. PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.
3. CONTRACTOR TO MATCH EXISTING TOP OF PAVEMENT AND CURB ELEVATIONS.
4. CONTRACTOR TO INSTALL NEW SIDEWALK IN ADA ACCESSIBLE ROUTES AT MAXIMUM 5% LONGITUDINAL SLOPE AND 2% CROSS SLOPE.
5. ANY CONFLICT IN PLANS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: _____ (DEVELOPMENT COORDINATION)
DATE: 5/30/17

STATE OF TEXAS
PATRICK L. OWRIGAN
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NO	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

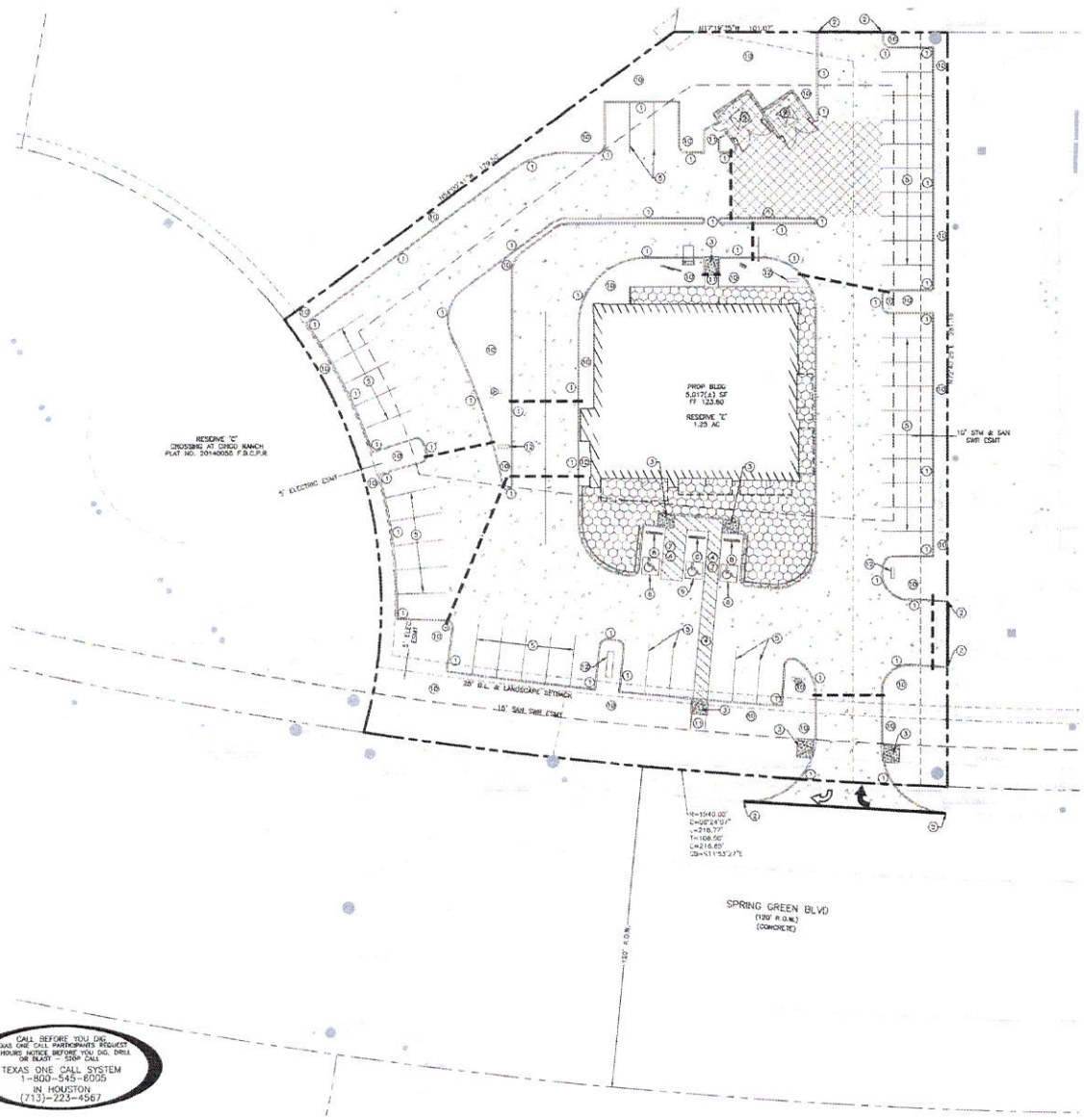
PROJECT NAME AND ADDRESS:
1 STORY RETAIL SHELL
9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

REFERENCE NUMBER: 14021-06

TITLE
GRADING PLAN

DRAWING NUMBER:
C4.0



GRAPHIC SCALE

1 inch = 20 ft.

BENCHMARK:
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 190945, BRASS DISK STAMPED 190945 ON BRIDGE #1 CINCO RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN KTY SAM 4252 IN THE BARKER WATERSHED NEAR STREAM 1100-00-00
ELEVATION = 115.24' (NAVD88, 1988 ADJ.)

TEMPORARY BENCHMARK "A":
BRASS DISK ON CURB INLET LOCATION ON THE EASTERLY SIDE OF SPRING GREEN BLVD. 184' +/- NORTH OF F.M. 2759
ELEVATION = 126.43'

TEMPORARY BENCHMARK "B":
CUT BOX ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT CENTERS MONUMENT SIGN ON THE NORTH SIDE OF F.M. 2759 APPROX. 1000' WEST OF SPRING GREEN BLVD
ELEVATION = 123.50'

KEYED NOTES

1. PROPOSED 6" MONOLITHIC CONCRETE CURB (SEE DETAIL, SHEET C7.0)
2. TIE PROPOSED CURB INTO EXISTING CURB
3. CONSTRUCT CURB RAMP (SEE DETAIL, SHEET C7.0)
4. 4" PAINTED WHITE STRIPING @ 2' O.C. @ 45°
5. 90° WHITE PARKING LOT STRIPING
6. HANDICAP PARKING SYMBOL W/ SIGNAGE (SEE DETAIL, SHEET C7.0)
7. HANDICAP ACCESSIBLE PARKING STALL STRIPING
8. WHEEL STOP (SEE DETAIL, SHEET C7.0)
9. DUMPSTER ENCLOSURE
10. LANDSCAPED AREA (REF. LANDSCAPE PLANS)
11. CONCRETE SIDEWALK (WIDTH PER PLANS)
12. SIGN (REF. ARCHITECTURAL PLANS)
13. NOT USED

PROPOSED 5" LIGHT DUTY REINFORCED CONCRETE PAVEMENT WITH STABILIZED SUBGRADE (SEE NOTE 2 BELOW)

PROPOSED 6" LIGHT DUTY TO MEDIUM DUTY REINFORCED CONCRETE PAVEMENT WITH STABILIZED SUBGRADE (SEE NOTE 2 BELOW)

PROPOSED 7" MEDIUM DUTY REINFORCED CONCRETE PAVEMENT WITH STABILIZED SUBGRADE (SEE NOTE 2 BELOW)

PROPOSED BUILDING PERIMETER SIDEWALK (REF. ARCHITECTURAL PLANS FOR SURFACE FINISH. SEE GRADING ON SHEET C4.0)

PROPOSED IRRIGATION SLEEVE (SEE NOTE 3)

CONCRETE TO CONCRETE PAVEMENT CONNECTION (INCLUDING 2' SAWCUT, EXISTING PAVEMENT REMOVAL, EXISTING CURB REMOVAL, DOWEL INTO EXISTING PAVEMENT, CONCRETE PAVEMENT HEADER AND SEALED JOINTS)

EX. CONTOUR

GENERAL NOTES

1. REFER TO SITE ELECTRICAL PLAN FOR PROPOSED SITE LIGHTING LAYOUT.
2. PAVEMENT AND SUBGRADE THICKNESS INCLUDED ON THIS SHEET FOR REFERENCE ONLY. REFER TO GEOTECHNICAL REPORT PREPARED BY GC LABORATORIES, INC., DATED MARCH 2017 (PROJECT NO. 17013759).
3. REFER TO IRRIGATION PLAN FOR EXACT LOCATION OF IRRIGATION SLEEVES.
4. MAXIMUM CONTROL JOINT SPACING TO BE 15-FT AND EXPANSION JOINT SPACING TO BE 60-FT.
5. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS AND ALL STEEL TO BE GRADE 60, UNLESS OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT.
6. PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

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IN HOUSTON
(713)-223-4567

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: [signature] DEVELOPMENT COORDINATOR
DATE: 5/30/17

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NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS:

1 STORY RETAIL SHELL

9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

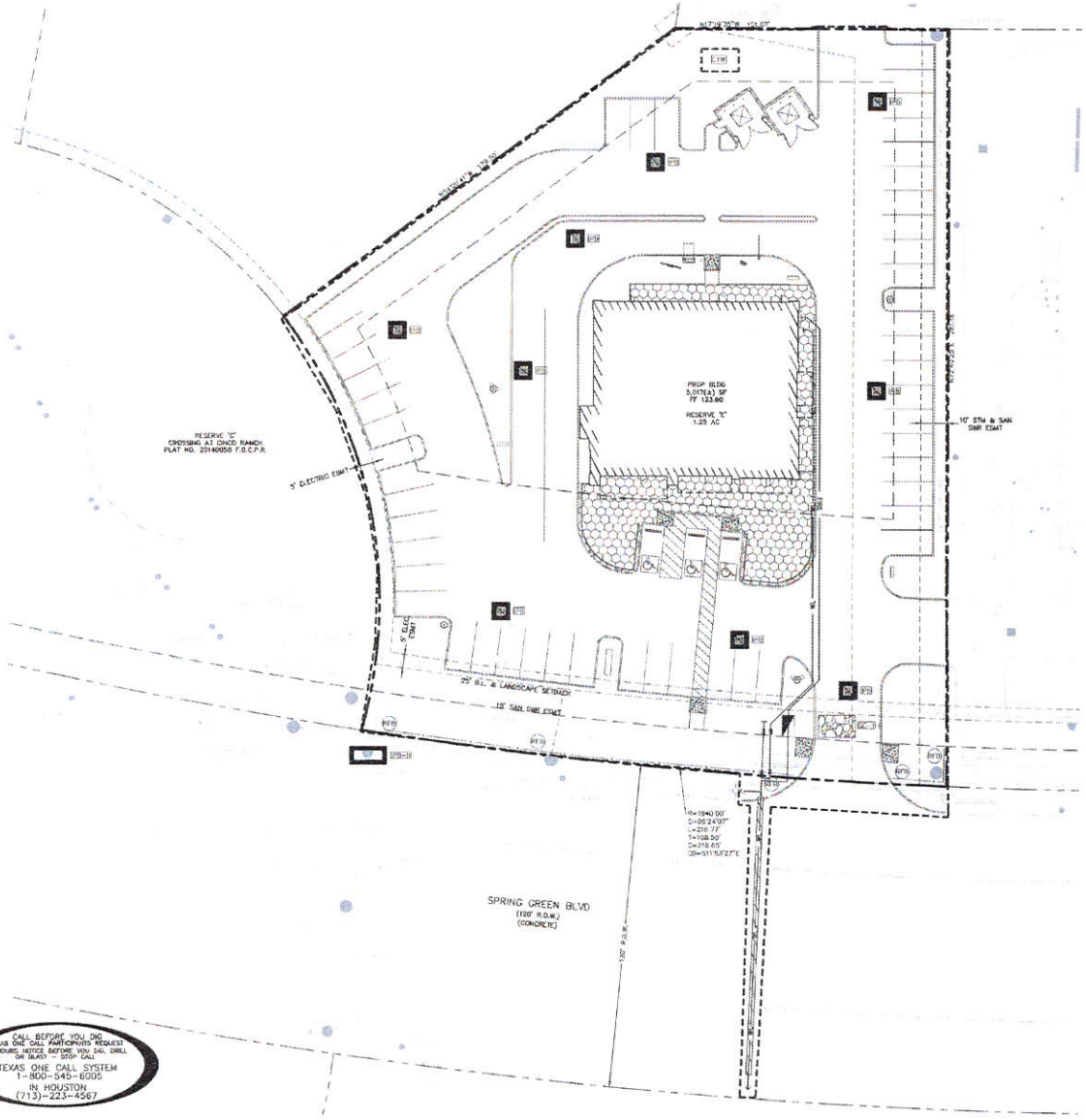
REFERENCE NUMBER: 14021-06

TITLE:

PAVING PLAN

DRAWING NUMBER

C5.0



1 inch = 20 ft.

GRAPHIC SCALE

BENCHMARK
HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 1000R5, BRASS DISK STAMPED 1000R5 ON BRIDGE AT DINOD RANCH BLVD AND UPPER BUFFALO BAYOU LOCATED ON DOWNSTREAM CONCRETE WALL ON NE CORNER OF BRIDGE IN KEY MAP 445S IN THE BARKER WATERSHED NEAR STREAM T100-00-00.
ELEVATION = 125.24' (NAVD88, 2001 ADJ.)

TEMPORARY BENCHMARK "A":
NAIL DISC ON TOP OF REFT LOCATED ON THE EASTERLY SIDE OF SPRING GREEN BLVD. 264' +/- NORTH OF F.M. 1093
ELEVATION = 130.41

TEMPORARY BENCHMARK "B":
CUT BOX ON CONCRETE BASE OF LOWE'S HOME IMPROVEMENT CENTER MONUMENT SIGN ON THE NORTH SIDE OF F.M. 1093, APPROX. 1000' WEST OF SPRING GREEN BLVD.
ELEVATION = 125.10

LEGEND

- STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL, SHEET C7.3)
- CONCRETE TRUCK WASHOUT (SEE DETAIL, SHEET C7.3)
- SILT FENCE (SEE DETAIL, SHEET C7.3)
- INLET PROTECTION BARRIER (SEE DETAIL, SHEET C7.3)
- INLET PROTECTION BARRIER – STAGE 2 (SEE DETAIL, SHEET C7.3)
- LIMITS OF DISTURBED AREA
- E.X. CONTOUR

SITE DATA

TOTAL LOT AREA	1.25 AC
TOTAL AREA DISTURBED	1.30 AC
PAVED AREA AT COMPLETION	X.XX AC
ROOFED AREA AT COMPLETION	0.12 AC
LANDSCAPED AREA AT COMPLETION	X.XX AC

GENERAL NOTES

1. CONTRACTOR TO MAINTAIN A CLEAN PROJECT SITE AND ENSURE THAT ALL DEBRIS IS PLACED IN DESIGNATED AREA PER PLANS. ALL SPOIL MATERIAL GENERATED FROM CONSTRUCTION ACTIVITY TO BE HAULED OFFSITE AND DISPOSED IN ACCORDANCE WITH LOCAL LAWS, RULES, AND REGULATIONS.

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STATE OF TEXAS
PATRICK L. CARRIGAN
95617
REGISTERED PROFESSIONAL ENGINEER
23 MAY 2017

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APPROVED: [signature] DEVELOPMENT COORDINATOR
DATE: 5/30/17

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NO.	DATE	REVISION ISSUE
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PROJECT NAME AND ADDRESS:
1 STORY RETAIL SHELL
9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

REFERENCE NUMBER: 14021-06

TITLE
EROSION CONTROL PLAN

DRAWING NUMBER
C6.0

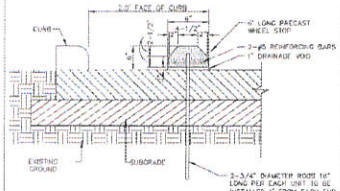
AUTHORIZATION IS VALID FOR 1 YEAR

APPROVED: _____ DEVELOPMENT COORDINATOR

DATE: 3/30/17

PATRICK L. CARRIGAN — 25617 — REGISTERED PROFESSIONAL ENGINEER — TEXAS

23 MAY 2017

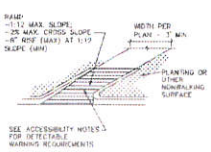


NOTES:

1. CONCRETE USED FOR WHEEL STOP TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI

WHEEL STOP

N.T.S.



CURB RAMP DETAIL - SQUARE SIDES

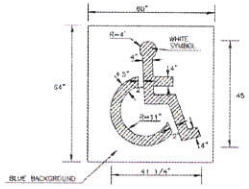
N.T.S.

ACCESSIBILITY NOTES:

1. ALL ACCESSIBLE SPACES AND ACCESSIBLE ROUTES SHALL COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND CITY/COUNTY REQUIREMENTS.
2. ACCESSIBLE PARKING SPACES AND DRIVE AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:48 (2.08%) IN ALL DIRECTIONS. CURB RAMPS SHALL BE PROVIDED AT ALL PASSENGER LOADING ZONES.
3. EACH ACCESSIBLE PARKING SPACE SHALL BE DESIGNATED AS RESERVED BY AN APPROPRIATE SIGN SHOWING THE SYMBOL OF ACCESSIBILITY PER TAS SECTION 216.5. SPACES COMPLYING WITH TAS SECTION 502.6 SHALL HAVE AN ADDITIONAL SIGN "VAN-ACCESSIBLE" MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY.
   A. SIGNS SHALL BE LOCATED 60" MIN. ABOVE THE GROUND, FLOOR, OR PAVING SURFACE MEASURED TO THE BOTTOM OF THE SIGN SO THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.
   B. SIGNS LOCATED WITHIN AN ACCESSIBLE ROUTE SHALL COMPLY WITH TAS SECTION 307.4.
   C. CHARACTERS AND SYMBOLS ON OVERHEAD SIGNS SHALL COMPLY WITH TAS SECTION 703.5.
4. SLOPES OF CURB RAMPS SHALL COMPLY WITH TAS SECTION 405.2. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20.
5. SURFACES OF CURB RAMPS SHALL COMPLY WITH TAS SECTIONS 405.4 AND 302.1.

CURB RAMPS IN PUBLIC RIGHT-OF-WAY
ALL CURB RAMPS SHALL COMPLY WITH ARCHITECTURAL BARRIERS ADMINISTRATIVE RULE 68.102(B)(2):
A. DETECTABLE WARNING STRIP SHALL EXTEND A MINIMUM OF 24" IN DEPTH (IN DIRECTION OF PEDESTRIAN TRAVEL).
B. DETECTABLE WARNING STRIP SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING.

CURB RAMPS NOT IN PUBLIC RIGHT-OF-WAY
ALL CURB RAMPS NOT CONSTRUCTED IN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH TAS 406.
A. DETECTABLE WARNING STRIPS ARE NOT REQUIRED ON CURB RAMPS NOT IN PUBLIC RIGHT-OF-WAY.



HANDICAP SURFACE PAINT DETAIL

N.T.S.

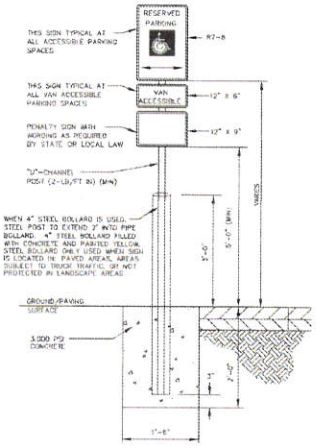
NOTES:

1. PROVIDE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS)
2. INSTALL WHERE HANDICAP STALLS ARE INDICATED ON PLAN
3. VAN ACCESSIBLE SIGNAGE ON VAN SPACES ONLY – SEE PLAN FOR LOCATION

COLOR CHART

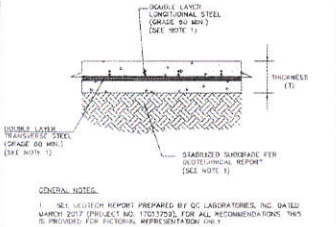
BLUE: LETTERS, BORDER, & SYMBOL

WHITE: SIGN BACKGROUND



ACCESSIBLE PARKING SIGN

N.T.S.

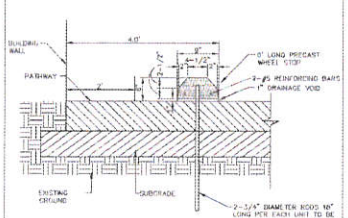


GENERAL NOTES:

1. SEE GEOTECH REPORT PREPARED BY GC LABORATORIES, INC. DATED MARCH 2017 (PROJECT NO. 17037592) FOR ALL RECOMMENDATIONS. THIS IS PROVIDED FOR PICTORIAL REPRESENTATION ONLY.
2. IN THE EVENT THE GEOTECHNICAL REPORT DOES NOT SPECIFY, THE FOLLOWING CRITERIA SHALL BE APPLIED:
   A. LONGITUDINAL & TRANSVERSE STEEL:
      LIGHT DUTY: #4 @ 24" O.C.E.W. OR #3 @ 18" O.C.E.W.
      MEDIUM DUTY: #4 @ 18" O.C.E.W. OR #3 @ 12" O.C.E.W.
      HEAVY DUTY: #4 @ 12" O.C.E.W.
   B. SUBGRADE SHALL BE LIME/FLY ASH STABILIZED TO A MIN. DEPTH OF 6" IN CONFORMANCE WITH TXDOT 2004 STANDARD SPECIFICATIONS ITEM 260.

CONCRETE PAVING SECTION

N.T.S.

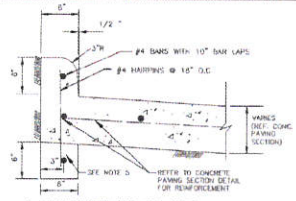


NOTES:

1. CONCRETE USED FOR WHEEL STOP TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI

WHEEL STOP WITH PATHWAY

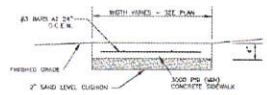
N.T.S.



1. PROVIDE EXPANSION JOINTS AT ALL CURVES, TANGENTS AND CORNERS.
2. SUBGRADE TO EXTEND 1' PAST BACK OF CURB.
3. SACK FINISH EXPOSED SURFACES.
4. FINISH TO BE ACCOMPLISHED BY FLOATING, STEEL TROWELLING AND THEN BRUSHING. HAND FINISH NOT REQUIRED WHEN CURB IS NOT POURED BY A MACHINE, BUT CURB WILL HAVE THE SAME OUTSIDE DIMENSIONS, AND HAVE A BRUSHED FINISH.
5. ADD ONLY IF RECOMMENDED BY GEOTECH REPORT

6" MONOLITHIC CONCRETE CURB

N.T.S.

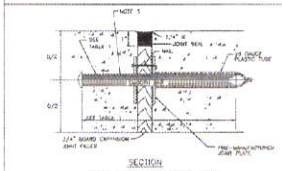


NOTES:

1. PROVIDE 3/8" GROOVED CONTROL JOINTS AT 5' CENTERS.
2. PROVIDE 1/2" EXPANSION JOINTS AT 25' MAXIMUM SPACING AND FILLED WITH PREMOLDED BITUMINOUS EXPANSION JOINT FILLER MATERIAL OR REDWOOD. EXPANSION JOINTS SHALL HAVE #4 DOWELS, LUBRICATED, 18" LONG, AT 12" CENTERS, 6" FROM EDGE.
3. PROVIDE 1/2" BITUMINOUS EXPANSION JOINT FILLER MATERIAL WHERE WALK ABUTS EXISTING IMPROVEMENTS AND AT ALL CHANGES IN GRADE.
4. REFER TO CITY OR COUNTY DETAILS FOR ALL PUBLIC SIDEWALKS.
5. SIDEWALK SHALL NEVER EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
6. ALL SIDEWALK TO BE BROOM FINISH UNLESS OTHERWISE NOTED ON PLANS.
7. CONTRACTOR TO CONFIRM ALL SIDEWALK TO HAVE POSITIVE DRAINAGE AWAY FROM THE BUILDING.

CONCRETE SIDEWALK

N.T.S.



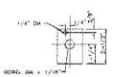
SECTION

DOWEL TYPE EXPANSION JOINT

N.T.S.

PLAN – JOINT PLATE

N.T.S.



ELEVATION – JOINT PLATE

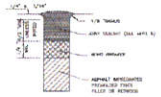
N.T.S.

TABLE 1

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
6	1/4	18	12
7	1	18	12
8	1	18	12
10	1/4	18	12
11	1 3/4	18	12
12	1 3/4	18	12

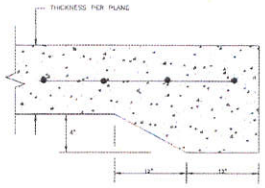
NOTES:

1. STEEL SHALL MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. SPACING AND BAR SIZE MAY BE REDUCED IF GEOTECHNICAL REPORT PROVIDES RECOMMENDATIONS.
2. CENTER DOWEL HORIZONTALLY ON JOINT.
3. TREATED DOWEL VERTICALLY IN CONCRETE MASS. LEAVE PROTRUDE DOWELS AS NEEDED TO MINIMUM 2" MIN COVER.
4. THE LOCATION OF CONSTRUCTION JOINTS MAY BE SHIFTED WITH THE APPROVAL OF THE COUNTY ENGINEER.
5. ALWAYS SEALANT TO BE TWO-PART POURABLE URETHANE JOINT SEALANT, TYPE M, GRADE P, CLASS 25, USE T.



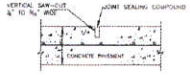
EXPANSION JOINT

N.T.S.



STANDARD PAVING HEADER

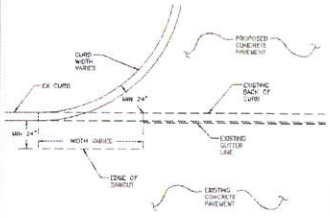
N.T.S.



ALL JOINT TO BE PROPERLY SEALED WITH JOINT SEALING COMPOUND CONSISTING OF TWO-PART POURABLE URETHANE JOINT SEALANT, TYPE M, GRADE P, CLASS 25, USE T

CONTROL JOINT

N.T.S.



SAWCUT DETAIL

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NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS:

1 STORY RETAIL SHELL

9330 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

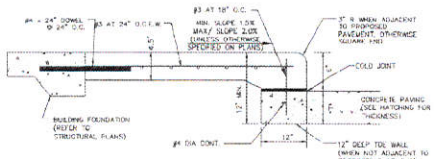
REFERENCE NUMBER: 14021-06

TITLE

CONSTRUCTION DETAILS (1 OF 4)

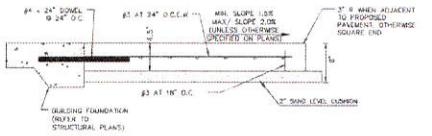
DRAWING NUMBER

C7.0



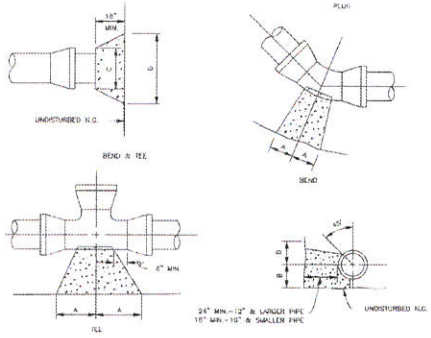
* = FOR REQUIRED PAVEMENT/SUBGRADE THICKNESS, SEE HATCHING ON PLAN. REFERENCE GEOTECHNICAL REPORT FOR SPECIFICATIONS.

BUILDING PERIMETER SIDEWALK
N.T.S.



BUILDING PERIMETER SIDEWALK TO LANDSCAPE

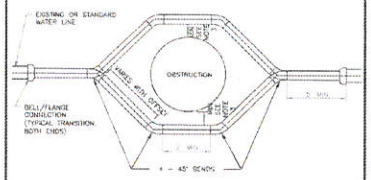
SIZE	90° BEND		45° BEND		22 1/2° BEND		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
2 1/2"	12"	9"	8"	7"	5"	5"	9"	8"	5"	14"
4"	14"	8"	7"	8"	4"	6"	12"	13"	8"	18"
6"	18"	10"	9"	10"	6"	8"	15"	13"	12"	21"
8"	22"	13"	12"	13"	8"	10"	13"	18"	12"	29"
12"	29"	21"	18"	21"	11"	16"	18"	24"	18"	41"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"



NOTE:
THRUST BLOCKS AT TRENCH FACE MUST HAVE A MINIMUM BEARING SURFACE OF 1.0 SQ. FOOT AND THE LEAST DIMENSION SHALL BE NO SMALLER THAN 1.5 TIMES PIPE DIAMETER, BUT NOT LESS THAN 1.0 FT.

THRUST-BLOCKING
N.T.S.

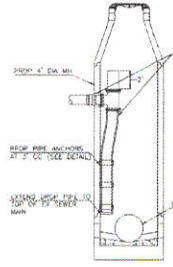
NOTE:
1. MATERIALS AND DRAINAGE TO BE IN ACCORDANCE WITH WATER LINE STANDARD SPECIFICATIONS.
2. RESTRAIN EXISTING PIPING BEYOND STEEL SECTION AS REQUIRED TO PREVENT MOVEMENT
3. AS PER DESIGN GUIDELINE



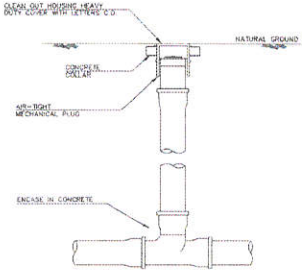
TYPICAL STEEL PIPE OFFSET SECTION FOR WATER LINES
N.T.S.

PIPE OFFSET ALTERNATIVES

1. DUCTILE IRON PIPE PRESSURE 250 PSI WITH APPROVED RESTRAINED JOINTS.
2. PVC PIPE WITH INTEGRAL RESTRAINED JOINT SYSTEM, OR DUCTILE - IRON RESTRAINED JOINT FITTINGS. EPOXY LINED AND COATED. USE 250 PSI AWWA C900 OR 14 FOR PVC RESTRAINED JOINTS.
3. PVC NOT ALLOWED FOR GREATER THAN 20 FT OF COVER OR FOR DIAMETER LARGER THAN 20 IN.
4. USE ONLY DUCTILE IRON AND PVC PRODUCTS LISTED ON DCE DIVISION APPROVED PRODUCTS LIST AND IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS.

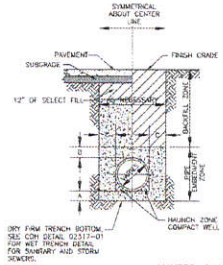


INTERNAL DROP CONNECTION DETAIL
N.T.S.



CLEANOUT SERIES 6310 MADE BY JOSAM MANUFACTURING CO., OR APPROVED EQUAL WITH SCORIATED COVER AND BRASS INTERNAL PLUG.

CLEANOUT DETAIL
N.T.S.



DIMENSIONAL REQUIREMENTS

PIPE SIZE	A	B	C
20" AND SMALLER	6"	12"	24"
21" THRU 48"	8"	12"	12"
54" THRU 60"	9"	12"	12"
72" AND LARGER	12"	18"	15"

MATERIAL REQUIREMENTS

BACKFILL ZONE

1. IN PAVED AREAS, USE CEMENT STABILIZED SAND, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY, TO WITHIN 12" OF SUBGRADE.
2. IN UNPAVED AREAS, USE SOIL EXCAVATED FROM TRENCH, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.

PIPE EMBEDMENT ZONE

1. FOR STORM AND SANITARY SEWERS, USE CEMENT STABILIZED SAND, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.
2. FOR WATER LINES, USE SAND, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.

WATER, SANITARY AND STORM BEDDING AND BACKFILL FOR DRY STABLE TRENCH
N.T.S.

NOTES:
1. CONTRACTOR TO ADD EXTRA DIAGONAL BAR IF DISTANCE TO NEAREST CORNER EXCEEDS 12'.
2. FOR RADIUS OVER 10', CONTRACTOR TO PLACE LONG BAR AT 3" FROM BACK OF CURB ALONG ENTIRE RADIUS.

BAR SCHEMATIC FOR SMALL RADIUS CURVE
N.T.S.

AUTHORIZATION IS VALID FOR 1 YEAR.
APPROVED: [signature] PUBLIC WORKS COORDINATOR
DATE: 5/30/17

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23 MAY 2017

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NO.	DATE	REVISION ISSUE
	04/03/2017	ISSUE FOR PERMIT

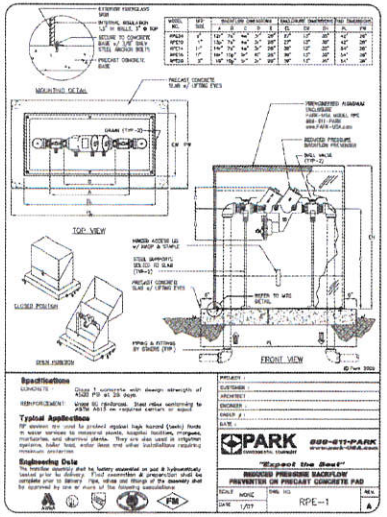
PROJECT NAME AND ADDRESS:
1 STORY RETAIL SHELL
9303 SPRING GREEN BLVD.
KATY, TX 77494

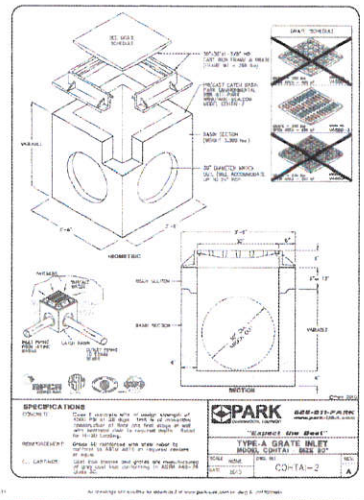
DRAWN: CHECKED:

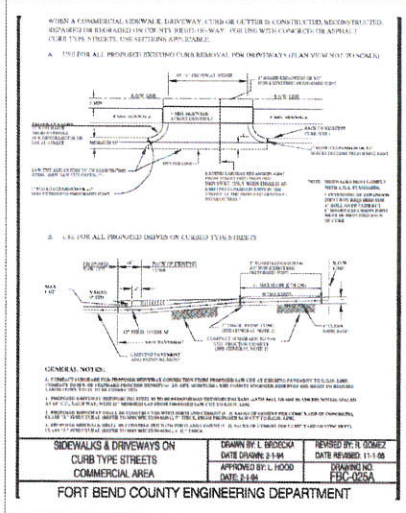
REFERENCE NUMBER: 14021-06

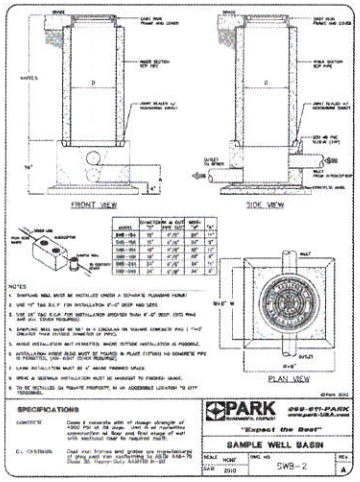
TITLE:
CONSTRUCTION DETAILS
(2 OF 4)

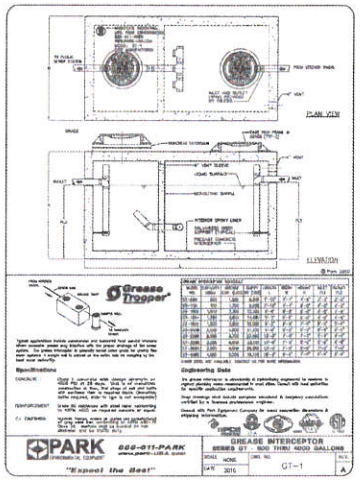
DRAWING NUMBER:
C7.1

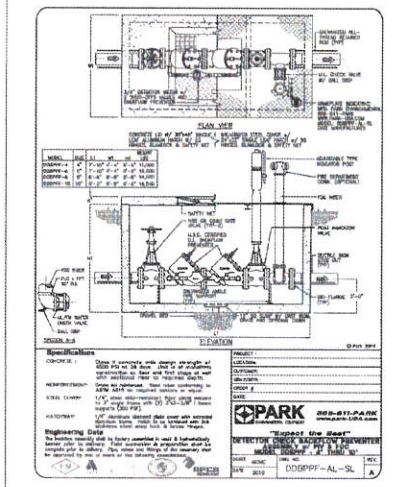












AUTHORIZATION IS VALID FOR 1 YEAR

APPROVED: _____ DEVELOPMENT COORDINATOR

DATE: 5/30/17

23 MAY 2017

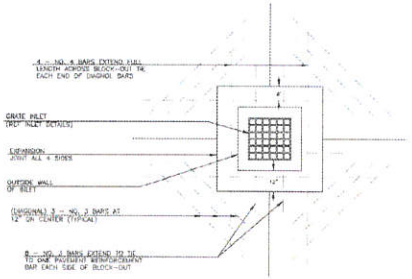
GENERAL NOTES FOR SIDEWALKS AND DRIVEWAYS

1. SAW CUT EXISTING CURB AT EACH END AND KNOCK OUT CURB FROM BEGINNING TO END OF PROPOSED DRIVEWAY.
2. SAW CUT EXISTING PAVEMENT A MINIMUM OF 18" INCHES AWAY FROM SAW CUT CURB. (TYPE 1 ONLY) NO "BROK OUT" TO EXPOSE EXISTING REINFORCEMENT STEEL.
3. COMPACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO RIGHT OF WAY. INSTALL COMPACT TO 95% OF STANDARD PROCTOR DENSITY (+/- 2% OF MOISTURE). THE COUNTY ENGINEER REQUIRES THE RIGHT TO PERFORM LABORATORY TESTS TO BE CONDUCTED.
4. PLACE AND COMPACT 4" CLEAN BANK SAND.
5. MAINTAIN GUTTER LINE WITH FACE OF EXISTING CURB.
6. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE TIED TO EXISTING PAVEMENT REINFORCING STEEL WITH A MINIMUM LAP OF 12 INCHES.
7. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DEFORMED RE-BAR (#3 DEFORMED BARS ARE ALSO ACCEPTABLE) UNLESS NOTED, SPACED AT 24 INCHES O.C. EACH WAY WITH 2 INCHES MINIMUM LAP OF 24" & 18" (#4 & #3 AS ALTERNATE) FROM PROPOSED SAW CUT TO RIGHT OF WAY LINE.
8. PROPOSED DRIVEWAY CURB, GUTTER, (IN) AND GRADE (BAL) MATCH EXISTING STREET.
9. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 6 INCHES THICK AND A MINIMUM WIDTH SEE DRAWING NO. FBC 24A FOR ADDITIONAL INFORMATION AND DETAILS.
10. PROPOSED SIDEWALK SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 4 INCHES THICK AND A FIXED MINIMUM WIDTH SEE DRAWING NO. FBC 24A FOR ADDITIONAL INFORMATION AND DETAILS.

CONSTRUCTION NOTES FOR SIDEWALKS & DRIVEWAYS WITH CURB TYPE STREETS COMMERCIAL AREA

DRAWN BY: L. BRODECKA
DATE DRAWN: 2-1-04
REVISED BY: L. BRODECKA
DATE REVISED: 3-10-05
APPROVED BY: L. HOOD
DATE: 2-1-04
DRAWING NO. FBC-025B

FORT BEND COUNTY ENGINEERING DEPARTMENT



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NO.	DATE	REVISION ISSUE
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PROJECT NAME AND ADDRESS:

1 STORY RETAIL SHELL

8333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

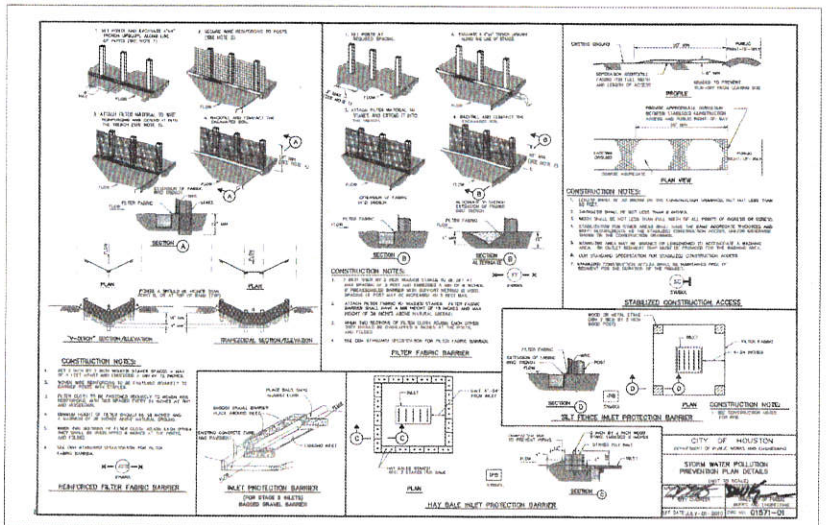
REFERENCE NUMBER: 14021-00

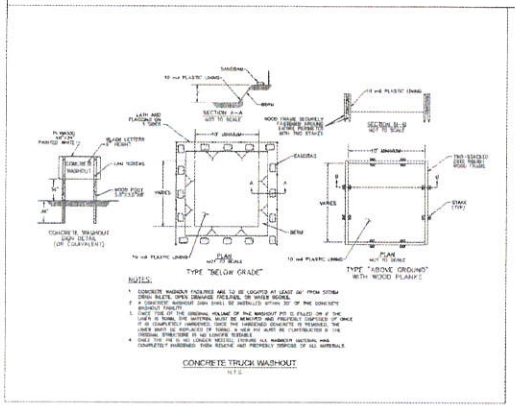
TITLE

CONSTRUCTION DETAILS (3 OF 4)

DRAWING NUMBER

C7.2





SWPPP NOTES

1) POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION SITE:

ADHESIVES, PESTICIDES, DETERGENTS, PAINTS, FUELS, SOLVENTS, SEALANTS, FERTILIZERS, OILS, HERBICIDES, CLEANING SOLUTIONS, CONCRETE/CEMENT/PLASTER

2) STORM WATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES:

A) PRIOR TO CONSTRUCTION: SILT FENCING SHALL BE INSTALLED IN ALL LOCATIONS SHOWN ON SITE MAP THAT WILL NOT BE DISTURBED DURING THE INITIAL GRADING PROCESS. THE STABILIZED CONSTRUCTION EXIT SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

B) DURING CONSTRUCTION:

a)IMMEDIATELY AFTER PAVING CONSTRUCTION IS COMPLETE, INLET PROTECTION TRAPS WILL BE INSTALLED ON ALL NEWLY CONSTRUCTED INLETS.

b)WHEN EXISTING SILT FENCING NEEDS TO BE REMOVED FOR CONSTRUCTION OR ACCESS PURPOSES, IT WILL BE REPLACED AS SOON AS POSSIBLE AFTER CONSTRUCTION IN THE VICINITY OF THE REMOVED FENCE IS COMPLETE.

c)AS SOON AS PRACTICABLE AFTER SITE GRADING IS COMPLETE, FINAL STABILIZATION PROCEDURES SUCH AS TURF ESTABLISHMENT AND INSTALLATION OF PLANT MATERIAL WILL BE COMMENCED.

C) AFTER CONSTRUCTION: AFTER CONSTRUCTION ACTIVITY AND SITE STABILIZATION PROCEDURES ARE COMPLETE, STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE REMOVED. SOIL DISTURBED BY THE REMOVAL OF CONTROLS WILL BE STABILIZED.

3) PERMANENT STORM WATER CONTROLS: AFTER CONSTRUCTION ACTIVITY IS COMPLETE, AREAS NOT COVERED BY CONCRETE PAVEMENT OR BY STRUCTURES WILL BE LANDSCAPED AND IRRIGATED. ONCE ESTABLISHED, THIS VEGETATION WILL HELP PREVENT SEDIMENT RUNOFF IN THE FUTURE STORM EVENTS. NEWLY GRADED AREA WILL BE TEXTURED TO REDUCE FLOW VELOCITY.

4) MATERIAL HANDLING AND SPILL PREVENTION PLAN:

A) HAZARDOUS MATERIALS WILL BE STORED AND USED IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS, DISPOSAL WILL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, AND IN ACCORDANCE WITH STATE AND LOCAL LAWS AND REGULATIONS.

B) THE FOLLOWING PROCEDURES WILL BE FOLLOWED FOR CONTAINMENT AND CLEAN-UP OF SPILLS:

a)ALL SPILLS WILL BE CLEANED UP AND PROPERLY REMOVED IN ACCORDANCE WITH STATE REGULATIONS AND LOCAL ORDINANCES.

b)SOIL AND SPILLED MATERIALS WILL BE COLLECTED UNTIL NO VISIBLE EVIDENCE OF SPILLED MATERIAL REMAINS.

c)THE TYPE OF MATERIAL AND QUANTITY OF RELEASE SHALL BE IDENTIFIED, AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) SHALL BE WORN AS RECOMMENDED BY THE PRODUCT SPECIFIC MSDS.

d)SPILL CONTAINMENT MAY BE INCLUDE CONSTRUCTION OF EARTH DIKES AROUND THE SPILL AREA, DEPLOYMENT OF ABSORBENT MATERIALS, OR USE OF COMMERCIALLY AVAILABLE KITS.

e)CONTAMINATED SOIL AND SPILLED MATERIAL WILL BE STORED IN APPROPRIATE AND PROPERLY LABELED CONTAINERS, AND DISPOSED OF IN ACCORDANCE WITH STATE, LOCAL, AND FEDERAL RULES AND REGULATIONS.

5) GENERAL PERMIT MAINTENANCE REQUIREMENTS (FROM GENERAL PERMIT):

A) ALL PROTECTIVE MEASURES IDENTIFIED IN THIS SWPPP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. IF, THROUGH INSPECTION OR OTHER MEANS, THE PERMITTEE DETERMINES THAT BMPS ARE NOT OPERATING EFFECTIVELY, THEN THE PERMITTEE SHALL PERFORM MAINTENANCE AS NECESSARY TO MAINTAIN THE CONTINUED EFFECTIVENESS OF STORM WATER CONTROLS, AND PRIOR TO THE NEXT RAIN EVENT, IF FEASIBLE. IF MAINTENANCE PRIOR TO THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, THE REASON SHALL BE DOCUMENTED IN THE SWPPP AND MAINTENANCE MUST BE SCHEDULED AND ACCOMPLISHED AS SOON AS PRACTICABLE. EROSION AND SEDIMENT CONTROLS THAT HAVE BEEN INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY UPON DISCOVERY.

B) IF PERIODIC INSPECTIONS OR OTHER INFORMATION INDICATES A CONTROL HAS BEEN USED INCORRECTLY, IS PERFORMING INADEQUATELY, OR IS DAMAGED, THEN THE OPERATOR MUST REPLACE OR MODIFY THE CONTROL AS SOON AS PRACTICABLE AFTER MAKING THE DISCOVERY.

C) SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS AND SEDIMENTATION PONDS NO LATER THAN THE TIME THAT DESIGN CAPACITY HAS BEEN REDUCED BY 50%. FOR PERIMETER CONTROLS SUCH AS SILT FENCES, BERMS, ETC., THE TRAPPED SEDIMENT MUST BE REMOVED BEFORE IT REACHES 50% OF THE ABOVE GROUND HEIGHT.

D) IF SEDIMENT ESCAPES THE SITE, ACCUMULATIONS MUST BE REMOVED AT A FREQUENCY THAT MINIMIZES OFF-SITE IMPACTS, AND PRIOR TO THE NEXT RAIN EVENT, IF FEASIBLE. IF THE PERMITTEE DOES NOT OWN THE OFFSITE CONVEYANCE, THEN THE PERMITTEE MUST WORK WITH THE OWNER OR OPERATOR OF THE PROPERTY TO REMOVE THE SEDIMENT.

6) EROSION AND SEDIMENT CONTROLS:

A) THE FOLLOWING NON-STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE UTILIZED ON THE PROJECT SITE:

a)WHERE PRACTICAL, CARE WILL BE TAKEN TO PROTECT NATURAL VEGETATION THAT DOES NOT NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES.

b)PLACEMENT OF CONCRETE PARKING AND DRIVEWAY AREAS WILL BE PERFORMED AS SOON AS POSSIBLE AFTER SUB-GRADE STABILIZATION, TO MINIMIZE THE AMOUNT OF TIME DISPOSED SOIL IS EXPOSED TO THE ELEMENTS. THIS PRACTICE WILL REDUCE THE FREQUENCY THAT MAINTENANCE IS REQUIRED ON THE STRUCTURAL BMPS.

c)THE GENERAL PERMIT REQUIRES THAT EROSION AND STABILIZATION MEASURES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED. IF CONSTRUCTION ACTIVITY IS SCHEDULED TO RESUME WITHIN 21 DAYS FROM THE CESSATION OF CONSTRUCTION ACTIVITY, EROSION AND STABILIZATION MEASURES ARE NOT REQUIRED FOR THAT PORTION OF THE SITE.

e)STABILIZATION PROCEDURES SUCH AS TURF ESTABLISHMENT AND INSTALLATION OF PLANT MATERIAL SHOULD BE COMMENCED AS SOON AS PRACTICABLE AFTER SITE GRADING IS COMPLETE AND FINAL.

B) THE FOLLOWING STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE UTILIZED ON THE PROJECT SITE:

a)A STABILIZED CONSTRUCTION EXIT WILL BE INSTALLED AT THE LOCATION WHERE CONSTRUCTION TRAFFIC EXITS THE PROJECT SITE.

b)INLET PROTECTION TRAPS WILL BE INSTALLED AT ALL INLETS IMMEDIATELY AFTER CONCRETE PAVEMENT IS PLACED.

c)SILT FENCING (FILTER FABRIC FENCE OR REINFORCED FILTER FABRIC FENCE) WILL BE INSTALLED ALONG THE PROPERTY BOUNDARY AND ADJACENT TO EXISTING DITCHES, BAYOUS, STREAMS, RIVERS, AND/OR CHANNELS.

d)ANY SEDIMENT THAT ENTERS THE STORM SEWER SYSTEM WILL BE REMOVED IMMEDIATELY (NOT FLUSHED).

e)SINCE ALL PROPOSED INLETS DRAIN LESS THAN 10-ACRES, SEDIMENT BASINS ARE NOT REQUIRED FOR THIS SITE.

f)WHERE PRACTICAL, CARE WILL BE TAKEN TO PROTECT NATURAL VEGETATION THAT DOES NOT NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES.

AUTHORIZATION IS VALID FOR 1 YEAR.

APPROVED: _____ DEVELOPMENT COORDINATOR

DATE: 5/30/17

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23 MAY 2017

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NO	DATE	REVISION/ISSUE
	04/03/2017	ISSUE FOR PERMIT

PROJECT NAME AND ADDRESS:

1 STORY RETAIL SHELL

9333 SPRING GREEN BLVD.
KATY, TX 77494

DRAWN: CHECKED:

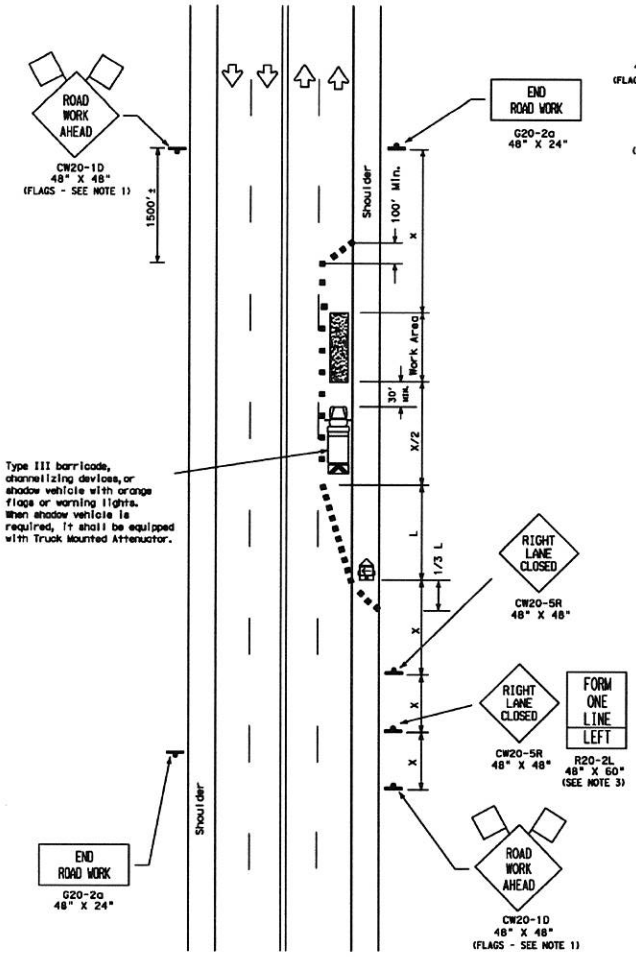
REFERENCE NUMBER: 14021.00

TITLE:

CONSTRUCTION DETAILS (4 OF 4)

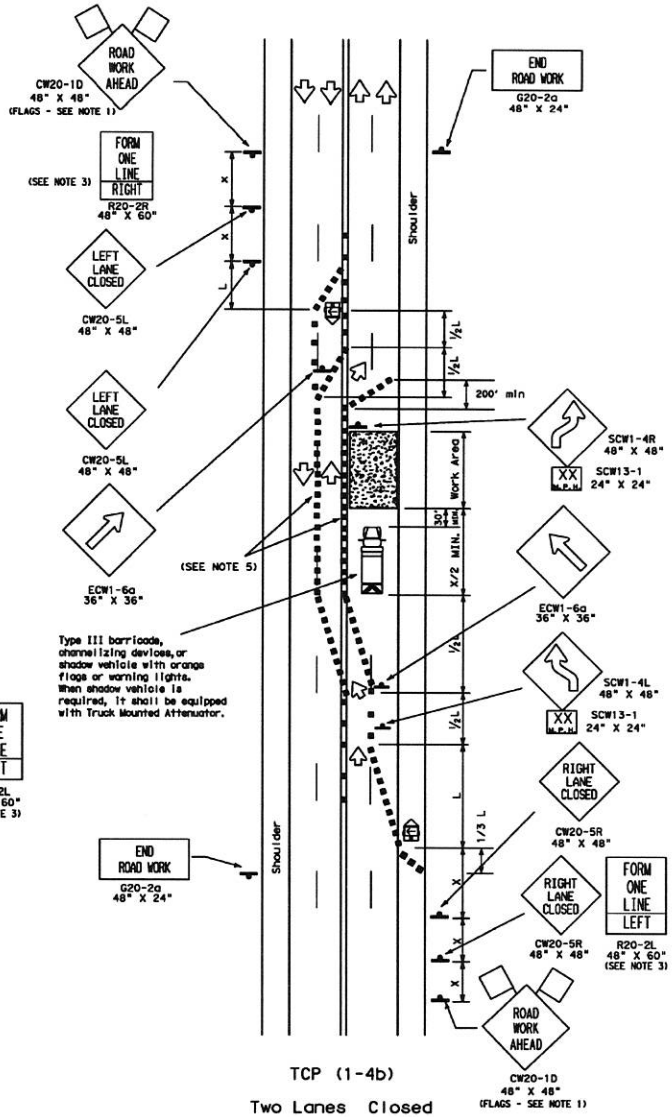
DRAWING NUMBER:

C7.3



TCP (1-4a)

One Lane Closed



TCP (1-4b)

Two Lanes Closed

LEGEND

- Type III Barricade
- Channelizing Devices
- Flag
- Heavy Work Vehicle
- Truck Mounted Attenuator
- Trailer Mounted Flashing Arrow Panel
- Portable Changeable Message Sign
- Flagger
- Sign Post

Posted Speed ✱	Formula	Minimum Desirable Taper Lengths ✱✱ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✱600'
65		650'	715'	780'	65'	130'-165'	✱700'
70		700'	770'	840'	70'	140'-175'	✱800'

✱ Conventional Roads Only

✱✱ Taper lengths have been rounded off.
L-Length of Taper (FT.) W-Width of Offset (FT.) S-Posted Speed (MPH)

TYPICAL USAGE:				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES:

1. Unless otherwise stated in the plans, flags attached to the signs are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
3. The FORM ONE LANE LEFT sign may be used following the RIGHT LANE CLOSED sign. Spacing distance between signs should be the minimum distance indicated.
4. ROAD WORK AHEAD sign may be repeated if the visibility of the work zone is less than 1500'.
5. If pavement markings are not removed and traffic is directed over a double yellow centerline, the maximum spacing of channelizing devices in a tangent section should be no greater than 10 feet.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARDS@mail.gw.dot.state.tx.us

The requirement for shadow vehicles will be listed in the project GENERAL NOTES, Item 502, Barricades, Signs and Traffic Handling.

Texas Department of Transportation
Traffic Operations Division

TRAFFIC CONTROL PLAN

TCP (1-4)-98

REVISIONS				
2-94				
8-95				
1-97				
4-98				

FHWA TXDOT	CNV TXDOT	FHWA TXDOT	CNV TXDOT	
CONT	SECT	JOB	HIGHWAY	
DIST	COUNTY		SHEET NO.	

DATE:
FILE: