12K

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: 2017-16335

Applicant: Gardner Capital Construction, LLC/Foresite Group, Inc.

Job Location Site: 15010 Old Richmond Road, Sugar Land, TX 77948

Bond No. [redacted] **Date of Bond:** 10/13/2017 **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 7th day of November, 2017, Upon Motion of Commissioner Meyers, seconded by Commissioner Morales, 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. Dean
for County Engineer

By: N/A
Drainage District Engineer/Manager

Presented to Commissioners Court and approved.

Date Recorded 11-14-2017 Comm. Court No. 12K

Clerk of Commissioners Court

By: Linda Wilkes
Deputy

11-14-2017 Original sent to Charles Dean, Engineering dept.

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: 2017-16335

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.

Charles O. Dy
Permit Administrator

10/27/2017
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)

4 pgs
2017125046

BOND NO [redacted]

THE STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF FORT BEND §

THAT WE, Gardner Capital Construction, LLC, Limited Liability Company whose (*address, phone*) is 7800 Shoal Creek Blvd., Suite 237-S, Austin, TX 78757, 417-447-5538, 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, 480-585-8906, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought whining said state is Texas and whose address is 1301 E Collins Boulevard, Richardson, TX USA 75081, 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 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 13th day of October, 2017.

Gardner Capital Construction, LLC, Limited Liability Company
PRINCIPAL

BY
Travelers Casualty and Surety Company of America
SURETY

BY David J. McKee, Attorney-In-Fact

CCM 11-7-2017# 12K
Fort Bend County Clerk
Return Admin Serv Coord RAC

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

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. 232446 **Certificate No.** 007305818

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

David J. McKee, Patrick R. Hedges, Joseph A. Clarken III, Jennifer Castillo, Melanie Ankeney, and Chrystal Hedges

of the City of Phoenix, State of Arizona, 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 26th day of July, 2017.

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 26th day of July, 2017, 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 CONNECTICUT

_____
Marie C. Tetreault, Notary Public

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

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors 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, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, 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 do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 13th day of October, 2017

Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

Laura Richard

Laura Richard, County Clerk
Fort Bend County Texas
November 13, 2017 04:42:38 PM
FEE: $0.00 SB

2017125046

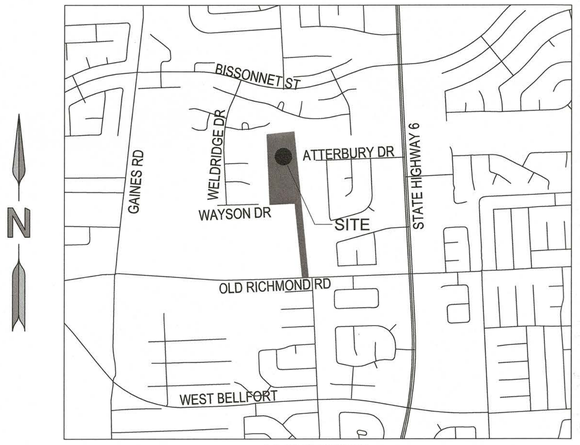
SITE DEVELOPMENT PLANS FOR:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

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VICINITY MAP
NOT TO SCALE
KEY MAP PAGE #527V

SITE DISTURBED AREA = 8.43 AC.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEVELOPMENT OF THE STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH TCEQ GENERAL PERMIT TXR150000

PROJECT DIRECTORY

OWNER
GALA AT FOUR CORNERS, LP
2501 N. HARWOOD STREET, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

CIVIL ENGINEER
FORESITE GROUP, INC.
1999 BRYAN STREET, SUITE 890
DALLAS, TX 75201
(214) 939-7123
CONTACT: MR. JOHN B. RHODES, JR., PE

ARCHITECT
CROSS ARCHITECTS, PLLC
1255 W. 15TH STREET, SUITE 125
PLANO, TX 75075
(972) 398-6644
CONTACT: MR. BRIAN RUMSEY

SURVEYOR
TERRA SURVEYING CO. INC.
3000 WILCREST DRIVE, SUITE 210
HOUSTON, TX 77042
(713) 993-0327
CONTACT: MR. GEORGE COLLISON, RPLS

GEOTECHNICAL ENGINEER
ALPHA TESTING INC.
6513 W. LITTLE YORK ROAD
HOUSTON, TX 77040
(713) 360-0460
CONTACT: MR. TONY JANISH, PE

LOCAL ISSUING AUTHORITY
FORT BEND COUNTY ENGINEERING
301 JACKSON STREET, 4TH FLOOR
RICHMOND, TX 77469
(281) 633-7500
CONTACT: MR. RICK STAIGLE, PE, PTOE

FORT BEND COUNTY

ENGINEER Rick Staigle, PE, PTOE

DATE 10/3/17

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

DEVELOPMENT COORDINATOR Maggie

DATE 10/3/17

DETENTION POND MAINTENANCE AND OWNERSHIP:

1) THE DETENTION POND WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER.

NOTE:

1) CONTRACTOR SHALL NOTIFY FORT BEND COUNTY OF PRE-CONSTRUCTION MEETING AND ALL PAVING ACTIVITIES BY EMAIL AT construction@fortbendcountytx.gov.

PREPARED BY:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan Street — o | 214.939.7123
Suite 890 — f | 888.765.8135
Dallas, TX 75201 — w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

24 HR CONTACT:
MR. JOHN B. RHODES, JR., PE
(214) 939-7123

ISSUED:
JANUARY 3, 2017
693.011

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. — o | 214.939.7123
Suite 890 — f | 888.765.8135
Dallas, TX 75201 — w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
10/18/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE: COVER

SHEET NUMBER: G-1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES

A. DESIGN DATA PROVIDED IN ELECTRONIC FORMAT IS FOR INFORMATION PURPOSES ONLY AND SHOULD BE USED AT YOUR OWN RISK, AND IS PROVIDED WITHOUT REPRESENTATIONS AND WARRANTIES. ANY CONFLICT BETWEEN THE INFORMATION REFLECTED ON THE LATEST REVISION OF THE SEALED PLAN SHEETS AND THAT PROVIDED VIA ELECTRONIC FORMAT SHALL BE RESOLVED IN FAVOR OF THE SEALED PLAN SHEETS.
B. UTILITIES: THERE MAY BE ADDITIONAL EXISTING UTILITIES NOT SHOWN ON THESE PLANS. EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN. FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. NOTIFY THE OWNER AND ENGINEER IF DISCREPANCIES ARE FOUND THAT WILL AFFECT THE CONSTRUCTION PROJECT. PROTECT ALL EXISTING UTILITIES.
C. TEMPORARY PROVISIONS: SEQUENCE THE WORK AND PROVIDE TEMPORARY MEASURES AS NEEDED TO MAINTAIN ACCESS TO THE SITE THROUGH ALL ENTRANCES AT ALL TIMES DURING CONSTRUCTION. TEMPORARY PROVISIONS MAY INCLUDE, BUT ARE NOT LIMITED TO: BARRICADES, FLASHING LIGHTS, FLAGMAN, TEMPORARY PAVEMENT, AND DIRECTIONAL SIGNAGE.
D. EQUIPMENT STORAGE: DO NOT PARK EQUIPMENT OR STORE MATERIALS IN STATE, COUNTY, OR CITY RIGHT-OF-WAY.
E. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS IN THE FIELD AND THE SURVEY SHOWN ON THE PLANS BEFORE PROCEEDING WITH ANY NEW CONSTRUCTION.
F. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED CONSTRUCTION RELATED PERMITS, INCLUDING DEMOLITION PERMIT, BEFORE STARTING WORK. RETAIN COPIES OF ALL PERMITS AT THE PROJECT SITE AT ALL TIMES.
G. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS. CONTACT THE APPROPRIATE REGULATORY AGENCY FOR APPROVAL OF ANY WETLAND AREA DISTURBANCE.
H. SIGNS (LOCATION, NUMBER, AND SIZE) ARE NOT APPROVED UNDER THE GENERAL DEVELOPMENT PERMIT. A SEPARATE PERMIT IS REQUIRED FOR ONSITE SIGNAGE.
I. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED ON THE SITE.
J. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL, AND LOCAL BUILDING AND UTILITY INSTALLATION CODES. ALL WATER CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS UNLESS DEPARTMENT OF TRANSPORTATION STANDARDS OR LOCAL MUNICIPAL STANDARDS ARE MORE STRINGENT.
K. DO NOT DEVIATE FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
L. WORK WITHIN D.O.T. RIGHT-OF-WAY:
   1. ALL PAVEMENT MARKINGS WITHIN D.O.T. RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND IN ACCORDANCE WITH D.O.T. SPECIFICATIONS.
   2. RE-ESTABLISH ALL RIGHT-OF-WAY AREA, WHICH IS DAMAGED OR DISTURBED, TO ORIGINAL CONDITION OR BETTER.
   3. ALL WORK IN D.O.T. RIGHT-OF-WAY SHALL COMPLY WITH D.O.T. SPECIFICATIONS.
M. ARRANGE HIGH INTENSITY LIGHTING TO CONCEAL THE SOURCE OF LIGHT FROM PUBLIC VIEW AND PREVENT INTERFERENCE WITH TRAFFIC.
N. ENSURE CORRECT HORIZONTAL AND VERTICAL ALIGNMENT OF ALL TIES BETWEEN PROPOSED AND EXISTING PAVEMENTS, CURB AND GUTTER, SIDEWALKS, WALLS, AND UTILITIES BEFORE BEGINNING WORK. NOTIFY ENGINEER IF DISCREPANCIES EXIST.

TRAFFIC CONTROL

A. IF DRAWINGS DO NOT INDICATE SITE SPECIFIC TRAFFIC CONTROL MEASURES, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TEMPORARY TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
B. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE AND MARKINGS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION IN ACCORDANCE WITH THE MUTCD, LATEST EDITION.
C. CONTACT PROPERTY OWNERS TO BE AFFECTED BY CONSTRUCTION AND COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING. MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.
D. THE CONTRACTOR SHALL CONTROL DUST AS NECESSARY TO PREVENT INTERFERENCE WITH TRAFFIC.
E. THE CONTRACTOR SHALL INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS IS MAINTAINED THROUGHOUT CONSTRUCTION.
F. THE CONTRACTOR SHALL COORDINATE ALL LANE CLOSURES WITH THE LOCAL JURISDICTION HAVING AUTHORITY.

STRUCTURE & SITE DEMOLITION

A. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED BEFORE STARTING DEMOLITION OPERATIONS.
B. VERIFY THAT HAZARDOUS MATERIALS HAVE BEEN REMEDIATED BEFORE PROCEEDING WITH BUILDING DEMOLITION OPERATIONS.
C. ENVIRONMENTAL & GEOTECHNICAL: REVIEW ALL PROJECT ENVIRONMENTAL AND GEOTECHNICAL REPORTS AN BECOME FAMILIAR WITH ALL ISSUES BEFORE DEMOLITION.
D. EXISTING UTILITIES: LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF INDICATED UTILITIES SERVING BUILDINGS AND STRUCTURES TO BE DEMOLISHED.
   1. ARRANGE TO SHUT OFF INDICATED UTILITIES WITH UTILITY COMPANIES.
   2. IF REMOVAL, RELOCATION, OR ABANDONMENT OF UTILITY SERVICES WILL AFFECT ADJACENT OCCUPIED BUILDINGS, THEN PROVIDE TEMPORARY UTILITIES THAT BYPASS BUILDINGS AND STRUCTURES TO BE DEMOLISHED AND THAT MAINTAIN CONTINUITY OF SERVICE TO OTHER BUILDINGS AND STRUCTURES.
   3. DO NOT COMMENCE DEMOLITION OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENT CONTROL AND PLANT-PROTECTION MEASURES ARE IN PLACE.
   4. OBTAIN THE DEMOLITION PERMIT FROM THE LOCAL AUTHORITY PRIOR TO STARTING DEMOLITION ACTIVITIES.
   5. EXISTING FACILITIES: PROTECT ADJACENT WALKWAYS, LOADING DOCKS, BUILDING ENTRIES, AND OTHER BUILDING FACILITIES DURING DEMOLITION OPERATIONS. MAINTAIN EXITS FROM EXISTING BUILDINGS. PROMPTLY REPAIR ANY FACILITIES DAMAGED BY CONSTRUCTION OPERATIONS TO OWNER'S SATISFACTION AT NO ADDITIONAL COST TO THE OWNER.
   6. EXISTING UTILITIES: MAINTAIN UTILITY SERVICES TO REMAIN AND PROTECT FROM DAMAGE DURING DEMOLITION OPERATIONS.
   7. TEMPORARY PROTECTION: ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION AND AS INDICATED.
   8. REMOVE TEMPORARY BARRIERS AND PROTECTIONS WHERE HAZARDS NO LONGER EXIST. WHERE OPEN EXCAVATIONS OR OTHER HAZARDOUS CONDITIONS REMAIN, LEAVE TEMPORARY BARRIERS AND PROTECTIONS IN PLACE.
   9. REMOVE DEMOLITION WASTE MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION
   10. DO NOT BURN DEMOLISHED MATERIALS UNLESS SPECIAL WRITTEN PERMISSION IS OBTAINED FROM OWNER AND ENGINEER.
   11. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE BUILDING DEMOLITION OPERATIONS BEGAN

KINGSBRIDGE MUD GENERAL NOTES

1. CONTRACTOR TO CONTACT LONE STAR NOTIFICATION CENTER AT 713/223-4567 48 HOURS PRIOR TO COMMENCING ANY WORK ON THIS SITE.
2. CONTRACTOR SHALL CONTACT SI ENVIRONMENTAL, BUILDER SERVICES AT 832/490-1610 48 HOURS PRIOR TO COMMENCING CONSTRUCTION FOR: INSPECTIONS OF WATER, SANITARY SERVICE LINES (INCLUDING GREASE TRAP, SAMPLING WELL, CLEANOUTS), AND STORM DRAINAGE INSTALLATIONS, AND ALL CONNECTIONS TO EXISTING DISTRICT FACILITIES; AND FOR COORDINATION OF NEW WATER SERVICE LINE TAP, METER, FIRE LINE TAP AND DETECTOR METER, AND FOR PLUMBING LINE TAP ON EXISTING SANITARY LINE OR MANHOLE.
3. CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY FORT BEND COUNTY PRIOR TO COMMENCING WORK.
4. CONTRACTOR SHALL CONTACT KINGSBRIDGE MUD ENGINEER AT 713/977-4700 48 HOURS PRIOR TO TIE-IN TO DISTRICT STORM SEWER LINES AND PRIOR TO BACKFILL OF PRIVATE STORM DRAINAGE LINES AND APPURTENANCES.

SITE CLEARING

1.) PROJECT CONDITIONS
A. TRAFFIC: MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
B. ENVIRONMENTAL & GEOTECHNICAL: REVIEW ALL PROJECT ENVIRONMENTAL AND GEOTECHNICAL REPORTS AND BECOME FAMILIAR WITH ALL ISSUES BEFORE SITE CLEARING.
C. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
D. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION- AND SEDIMENTATION-CONTROL AND PLANT-PROTECTION MEASURES ARE IN PLACE.
2.) TEMPORARY EROSION AND SEDIMENTATION CONTROL
A. PROVIDE TEMPORARY EROSION- AND SEDIMENTATION-CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS, ACCORDING TO EROSION- AND SEDIMENTATION-CONTROL DRAWINGS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
B. VERIFY THAT FLOWS OF WATER REDIRECTED FROM CONSTRUCTION AREAS OR GENERATED BY CONSTRUCTION ACTIVITY DO NOT ENTER OR CROSS PROTECTION ZONES.
C. INSPECT, MAINTAIN, AND REPAIR EROSION- AND SEDIMENTATION-CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
D. REMOVE EROSION AND SEDIMENTATION CONTROLS WHEN SITE IS STABILIZED AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.
3.) TREE AND PLANT PROTECTION
A. REPAIR OR REPLACE TREES, SHRUBS, AND OTHER VEGETATION INDICATED TO REMAIN OR BE RELOCATED THAT ARE DAMAGED BY CONSTRUCTION OPERATIONS, IN A MANNER APPROVED BY ENGINEER.
4.) EXISTING UTILITIES
A. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE. ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
B. INTERRUPTING EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED:
   1. NOTIFY UTILITY OWNER NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.
   2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT UTILITY OWNER'S WRITTEN PERMISSION.
C. POTHOLE EXISTING WATER LINES, UNDERGROUND ELECTRICAL LINES, GAS LINES, UNDERGROUND TELEPHONE LINES, FIBER OPTIC, AND ANY OTHER EXISTING UTILITY LINES WITHIN THE PROJECT LIMITS DURING SITE CLEARING AND DEMOLITION ACTIVITIES. SURVEY THE EXISTING UTILITY ELEVATIONS AND PROVIDE THE SURVEYED FIELD LOCATIONS AND DEPTHS TO THE ENGINEER FOR REVIEW. THESE EXISTING UTILITIES MAY REQUIRE RELOCATION.
5.) CLEARING AND GRUBBING
A. REMOVE OBSTRUCTIONS, CONCRETE, ASPHALT, TREES, SHRUBS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION.
   1. DO NOT REMOVE TREES, SHRUBS, AND OTHER VEGETATION INDICATED TO REMAIN OR TO BE RELOCATED.
   2. GRIND DOWN STUMPS AND REMOVE ROOTS, OBSTRUCTIONS, AND DEBRIS TO A DEPTH OF 12 INCHES BELOW EXPOSED SUBGRADE.
   3. USE ONLY HAND METHODS FOR GRUBBING WITHIN PROTECTION ZONES.
   4. THE SUBGRADE TO REMAIN SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY FOLLOWING CLEARING AND GRUBBING ACTIVITIES.
6.) TOPSOIL STRIPPING
A. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
B. STRIP TOPSOIL IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
C. STOCKPILE TOPSOIL AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST AND EROSION BY WATER.
D. DISPOSE OF SURPLUS TOPSOIL. SURPLUS TOPSOIL IS THAT WHICH EXCEEDS QUANTITY INDICATED TO BE STOCKPILED OR REUSED.

SITE WATER DISTRIBUTION

1.) GENERAL
A. REGULATORY REQUIREMENTS:
   1. COMPLY WITH REQUIREMENTS OF UTILITY COMPANY SUPPLYING WATER. INCLUDE TAPPING OF WATER MAINS AND BACKFLOW PREVENTION.
   2. COMPLY WITH STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR POTABLE-WATER-SERVICE PIPING, INCLUDING MATERIALS, INSTALLATION, TESTING, AND DISINFECTION.
B. PIPING MATERIALS SHALL BEAR LABEL, STAMP, OR OTHER MARKINGS OF SPECIFIED TESTING AGENCY.
C. INTERRUPTION OF EXISTING WATER-DISTRIBUTION SERVICE: NOTIFY OWNER AT LEAST 2 DAYS PRIOR TO INTERRUPTION OF EXISTING WATER SERVICES.
D. COORDINATE WITH UTILITY COMPANY FOR REQUIRED INSPECTIONS AND FOR CONNECTION OF WATER MAIN AND SERVICES BEFORE STARTING CONSTRUCTION.
2.) COPPER TUBE AND FITTINGS
A. SOFT COPPER TUBE: ASTM B 88, TYPE K , WATER TUBE, ANNEALED TEMPER.
B. COPPER, PRESSURE-SEAL FITTINGS:
   1. NPS 2 AND SMALLER: WROUGHT-COPPER FITTING WITH EPDM O-RING SEAL IN EACH END
   2. NPS 2-1/2 TO NPS 4 : BRONZE FITTING WITH STAINLESS-STEEL GRIP RING AND EPDM O-RING SEAL IN EACH END.
C. BRONZE FLANGES: ASME B16.24, CLASS 150, WITH SOLDER-JOINT END. FURNISH CLASS 300 FLANGES IF REQUIRED TO MATCH PIPING.
D. COPPER UNIONS: MSS SP-123, CAST-COPPER-ALLOY, HEXAGONAL-STOCK BODY WITH BALL-AND-SOCKET, METAL-TO-METAL SEATING SURFACES, AND SOLDER-JOINT OR THREADED ENDS.
3.) DUCTILE-IRON PIPE AND FITTINGS
A. MECHANICAL-JOINT, DUCTILE-IRON PIPE: AWWA C151, WITH MECHANICAL-JOINT BELL AND PLAIN SPIGOT END UNLESS GROOVED OR FLANGED ENDS ARE INDICATED.
   1. MECHANICAL-JOINT, DUCTILE-IRON FITTINGS: AWWA C110, DUCTILE- OR GRAY-IRON STANDARD PATTERN OR AWWA C153, DUCTILE-IRON COMPACT PATTERN.
   2. GLANDS, GASKETS, AND BOLTS: AWWA C111, DUCTILE- OR GRAY-IRON GLANDS, RUBBER GASKETS, AND STEEL BOLTS
B. PUSH-ON-JOINT, DUCTILE-IRON PIPE: AWWA C151, WITH PUSH-ON-JOINT BELL AND PLAIN SPIGOT END UNLESS GROOVED OR FLANGED ENDS ARE INDICATED.
C. FLANGES: ASME B16.1, CLASS 125, CAST IRON.
4.) PVC PIPE AND FITTINGS
A. PVC, SCHEDULE 40 PIPE: ASTM D 1785. PVC, SCHEDULE 40 SOCKET FITTINGS: ASTM D 2466.
B. PVC, AWWA PIPE: AWWA C900, CLASS 200, WITH BELL END WITH GASKET, AND WITH SPIGOT END. MECHANICAL-JOINT, DUCTILE-IRON FITTINGS: AWWA C110, DUCTILE- OR GRAY-IRON STANDARD PATTERN OR AWWA C153, DUCTILE-IRON COMPACT PATTERN.
5.) GATE VALVES
A. AWWA, CAST-IRON GATE VALVES: NONRISING-STEM, RESILIENT-SEATED GATE VALVES: GRAY- OR DUCTILE-IRON BODY AND BONNET; WITH BRONZE OR GRAY- OR DUCTILE-IRON GATE, RESILIENT SEATS, BRONZE STEM, AND STEM NUT.
   1. STANDARD: AWWA C509.
   2. MINIMUM PRESSURE RATING: 250 PSIG .
   3. END CONNECTIONS: MECHANICAL JOINT.
   4. INTERIOR COATING: COMPLYING WITH AWWA C550.
6.) GATE VALVE ACCESSORIES AND SPECIALTIES
A. TAPPING-SLEEVE ASSEMBLIES: SLEEVE AND VALVE COMPATIBLE WITH DRILLING MACHINE.
   1. STANDARD: MSS SP-60.
   2. SLEEVE: CAST- OR DUCTILE-IRON OR STAINLESS-STEEL, TWO-PIECE BOLTED SLEEVE WITH FLANGED OUTLET FOR NEW BRANCH CONNECTION. INCLUDE SLEEVE MATCHING SIZE AND TYPE OF PIPE MATERIAL BEING TAPPED AND WITH RECESSED FLANGE FOR BRANCH VALVE.
   3. VALVE: AWWA, CAST-IRON, NONRISING-STEM, RESILIENT-SEATED GATE VALVE WITH ONE RAISED FACE FLANGE MATING TAPPING-SLEEVE FLANGE.
B. VALVE BOXES: COMPLY WITH AWWA M44 FOR CAST-IRON VALVE BOXES. INCLUDE TOP SECTION, ADJUSTABLE EXTENSION OF LENGTH REQUIRED FOR DEPTH OF BURIAL OF VALVE, PLUG WITH LETTERING "WATER," AND BOTTOM SECTION WITH BASE THAT FITS OVER VALVE AND WITH A BARREL APPROXIMATELY 5 INCHES IN DIAMETER.
7.) BACKFLOW PREVENTERS
A. DOUBLE-CHECK, DETECTOR-ASSEMBLY BACKFLOW PREVENTERS:
   1. STANDARDS: ASSE 1048 AND UL LISTED OR FMG APPROVED.
   2. OPERATION: CONTINUOUS-PRESSURE APPLICATIONS.
   3. PRESSURE LOSS: 5 PSIG MAXIMUM, THROUGH MIDDLE 1/3 OF FLOW RANGE.
   4. BODY: CAST IRON WITH INTERIOR LINING COMPLYING WITH AWWA C550 OR THAT IS FDA APPROVED.
   5. END CONNECTIONS: FLANGED.
   6. CONFIGURATION: DESIGNED FOR HORIZONTAL, STRAIGHT THROUGH FLOW.
8.) WATER METER BOXES
A. DESCRIPTION: CAST-IRON BODY AND COVER FOR DISC-TYPE WATER METER, WITH LETTERING "WATER METER" IN COVER; AND WITH SLOTTED, OPEN-BOTTOM BASE SECTION OF LENGTH TO FIT OVER SERVICE PIPING.
9.) CONCRETE VAULTS
A. DESCRIPTION: PRECAST, REINFORCED-CONCRETE VAULT, DESIGNED FOR A-16 LOAD DESIGNATION ACCORDING TO ASTM C 857 AND MADE ACCORDING TO ASTM C 858.
   1. LADDER: ASTM A 36/A 36M, STEEL OR POLYETHYLENE-ENCASED STEEL STEPS.
   2. MANHOLE: ASTM A 48/A 48M CLASS NO. 35A MINIMUM TENSILE STRENGTH, GRAY-IRON TRAFFIC FRAME AND COVER.
      a. DIMENSION: 24-INCH MINIMUM DIAMETER, UNLESS OTHERWISE INDICATED.
   3. DRAIN: ASME A112.6.3, CAST-IRON FLOOR DRAIN WITH OUTLET OF SIZE INDICATED. INCLUDE BODY ANCHOR FLANGE, LIGHT-DUTY CAST-IRON GRATE, BOTTOM OUTLET, AND INTEGRAL OR FIELD-INSTALLED BRONZE BALL OR CLAPPER-TYPE BACKWATER VALVE.
10.) FIRE HYDRANTS
A. DRY-BARREL FIRE HYDRANTS: FREESTANDING, WITH ONE NPS 4-1/2 AND TWO NPS 2-1/2 OUTLETS, 5-1/4-INCH MAIN VALVE, DRAIN VALVE, AND NPS 6 MECHANICAL-JOINT INLET. INCLUDE INTERIOR COATING ACCORDING TO AWWA C550. HYDRANT SHALL HAVE CAST-IRON BODY, COMPRESSION-TYPE VALVE OPENING AGAINST PRESSURE AND CLOSING WITH PRESSURE.
   1. STANDARD: AWWA C502.
   2. PRESSURE RATING: 250 PSIG .
11.) FIRE DEPARTMENT CONNECTIONS
A. FIRE DEPARTMENT CONNECTIONS: FREESTANDING, WITH CAST-BRONZE BODY, THREAD INLETS ACCORDING TO NFPA 1963 AND MATCHING LOCAL FIRE DEPARTMENT HOSE THREADS, AND THREADED BOTTOM OUTLET. INCLUDE LUGGED CAPS, GASKETS, AND CHAINS; LUGGED SWIVEL CONNECTION AND DROP CLAPPER FOR EACH HOSE-CONNECTION INLET; 18-INCH- HIGH BRASS SLEEVE; AND ROUND ESCUTCHEON PLATE.
12.) VALVE APPLICATIONS
A. DRAWINGS INDICATE VALVE TYPES TO BE USED. WHERE SPECIFIC VALVE TYPES ARE NOT INDICATED, THE FOLLOWING REQUIREMENTS APPLY:
   1. UNDERGROUND VALVES, NPS 3 AND LARGER: AWWA, CAST-IRON, NONRISING-STEM, RESILIENT-SEATED GATE VALVES WITH VALVE BOX.
   2. USE THE FOLLOWING FOR VALVES IN VAULTS AND ABOVEGROUND:
      a. GATE VALVES, NPS 2 AND SMALLER: BRONZE, NONRISING STEM.
      b. GATE VALVES, NPS 3 AND LARGER: AWWA, CAST IRON, OS&Y RISING STEM, RESILIENT SEATED.
      c. CHECK VALVES: AWWA C508, SWING TYPE.
13.) FIELD QUALITY CONTROL
A. PIPING TESTS: CONDUCT PIPING TESTS BEFORE JOINTS ARE COVERED AND AFTER CONCRETE THRUST BLOCKS HAVE HARDENED SUFFICIENTLY. FILL PIPELINE 24 HOURS BEFORE TESTING AND APPLY TEST PRESSURE TO STABILIZE SYSTEM. USE ONLY POTABLE WATER.
B. HYDROSTATIC TESTS: TEST AT NOT LESS THAN ONE-AND-ONE-HALF TIMES WORKING PRESSURE FOR TWO HOURS. INCREASE PRESSURE IN 50-PSIG INCREMENTS AND INSPECT EACH JOINT BETWEEN INCREMENTS. HOLD AT TEST PRESSURE FOR 1 HOUR; DECREASE TO 0 PSIG . SLOWLY INCREASE AGAIN TO TEST PRESSURE AND HOLD FOR 1 MORE HOUR. MAXIMUM ALLOWABLE LEAKAGE IS 2 QUARTS PER HOUR PER 100 JOINTS. REMAKE LEAKING JOINTS WITH NEW MATERIALS AND REPEAT TEST UNTIL LEAKAGE IS WITHIN ALLOWED LIMITS.
C. DISINFECTION: CLEAN AND DISINFECT POTABLE WATER MAINS AS DIRECTED BY THE LOCAL AUTHORITY. OR, IF METHOD IS NOT PRESCRIBED BY THE LOCAL AUTHORITY, USE PROCEDURE DESCRIBED IN AWWA C651.
D. PREPARE REPORTS OF TESTING ACTIVITIES AND SUBMIT TO THE ENGINEER FOR APPROVAL.
14.) IDENTIFICATION
A. INSTALL CONTINUOUS UNDERGROUND DETECTABLE WARNING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND WATER-DISTRIBUTION PIPING. LOCATE BELOW FINISHED GRADE, DIRECTLY OVER PIPING.

SITE SANITARY SEWERS

1.) PROJECT CONDITIONS
A. INTERRUPTION OF EXISTING SANITARY SEWERAGE SERVICE: COORDINATE AS REQUIRED WITH THE LOCAL SANITARY SEWER AUTHORITY BEFORE STARTING CONSTRUCTION.
B. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE BEGINNING SANITARY SEWER INSTALLATION OPERATIONS. FIELD VERIFY ALL EXISTING UTILITIES SHOWN ON THE DRAWINGS BY POT-HOLING THE LINES. SURVEY EXISTING UTILITIES AND PROVIDE HORIZONTAL AND VERTICAL LOCATION INFORMATION TO THE ENGINEER TO DETERMINE OF ANY UTILITIES WILL CONFLICT WITH THE PROPOSED DESIGN.
2.) DUCTILE-IRON, GRAVITY SEWER PIPE AND FITTINGS
A. PIPE: ASTM A 746, FOR PUSH-ON JOINTS.
B. COMPACT FITTINGS: AWWA C153, DUCTILE IRON, FOR PUSH-ON JOINTS.
C. GASKETS: AWWA C111, RUBBER.
3.) PVC PIPE AND FITTINGS
A. PVC GRAVITY SEWER PIPING: ASTM F 679, T-1 WALL THICKNESS, PVC GRAVITY SEWER PIPE WITH BELL-AND-SPIGOT ENDS AND WITH INTEGRAL ASTM F 477, ELASTOMETRIC SEALS FOR GASKETED JOINTS.
4.) CLEANOUTS
A. CAST-IRON CLEANOUTS:
   1. DESCRIPTION: ASME A112.36.2M, ROUND, GRAY-IRON HOUSING WITH CLAMPING DEVICE AND ROUND, SECURED, SCORIATED, GRAY-IRON COVER. INCLUDE GRAY-IRON FERRULE WITH INSIDE CALK OR SPIGOT CONNECTION AND COUNTERSUNK, TAPERED-THREAD, BRASS CLOSURE PLUG.
   2. TOP-LOADING CLASSIFICATION: TRAFFIC RATED, HEAVY DUTY, IN ALL PAVED AREAS AND AREAS SUBJECT TO VEHICULAR TRAFFIC.
   3. SEWER PIPE FITTING AND RISER TO CLEANOUT: ASTM A 74, SERVICE CLASS, CAST-IRON SOIL PIPE AND FITTINGS.
B. PVC CLEANOUTS: PVC BODY WITH PVC THREADED PLUG. INCLUDE PVC SEWER PIPE FITTING AND RISER TO CLEANOUT OF SAME MATERIAL AS SEWER PIPING. USE IN LIGHT DUTY APPLICATIONS WHERE THERE IS PEDESTRIAN TRAFFIC ONLY OR IN LANDSCAPED AREAS.
5.) MANHOLES
A. STANDARD PRECAST CONCRETE MANHOLES:
   1. DESCRIPTION: ASTM C 478 , PRECAST, REINFORCED CONCRETE, OF DEPTH INDICATED, WITH PROVISION FOR SEALANT JOINTS.
   2. DIAMETER: 48 INCHES MINIMUM UNLESS OTHERWISE INDICATED.
   3. BALLAST: INCREASE THICKNESS OF PRECAST CONCRETE SECTIONS OR ADD CONCRETE TO BASE SECTION, AS REQUIRED TO PREVENT FLOTATION.
   4. BASE SECTION: 6-INCH MINIMUM THICKNESS FOR FLOOR SLAB AND 4-INCH MINIMUM THICKNESS FOR WALLS AND BASE RISER SECTION, WITH SEPARATE BASE SLAB OR BASE SECTION WITH INTEGRAL FLOOR.
   5. RISER SECTIONS: 4-INCH MINIMUM THICKNESS, OF LENGTH TO PROVIDE DEPTH INDICATED.
   6. TOP SECTION: ECCENTRIC-CONE TYPE UNLESS CONCENTRIC-CONE OR FLAT-SLAB-TOP TYPE IS INDICATED; WITH TOP OF CONE OF SIZE THAT MATCHES GRADE RINGS.
   7. JOINT SEALANT: ASTM C 990 , BITUMEN OR BUTYL RUBBER.
   8. STEPS: INDIVIDUAL FRP STEPS OR FRP LADDER; WIDE ENOUGH TO ALLOW WORKER TO PLACE BOTH FEET ON ONE STEP AND DESIGNED TO PREVENT LATERAL SLIPPAGE OFF STEP. CAST OR ANCHOR STEPS INTO SIDEWALLS AT 12- TO 16-INCH INTERVALS. OMIT STEPS IF TOTAL DEPTH FROM FLOOR OF MANHOLE TO FINISHED GRADE IS LESS THAN 48 INCHES.
   9. STEPS: INDIVIDUAL FRP STEPS OR FRP LADDER; WIDE ENOUGH TO ALLOW WORKER TO PLACE BOTH FEET ON ONE STEP AND DESIGNED TO PREVENT LATERAL SLIPPAGE OFF STEP. CAST OR ANCHOR STEPS INTO SIDEWALLS AT 12- TO 16-INCH INTERVALS. OMIT STEPS IF TOTAL DEPTH FROM FLOOR OF MANHOLE TO FINISHED GRADE IS LESS THAN 48 INCHES.
   10. ADJUSTING RINGS: INTERLOCKING HDPE RINGS, WITH LEVEL OR SLOPED EDGE IN THICKNESS AND DIAMETER MATCHING MANHOLE FRAME AND COVER, AND WITH HEIGHT AS REQUIRED TO ADJUST MANHOLE FRAME AND COVER TO INDICATED ELEVATION AND SLOPE. INCLUDE SEALANT RECOMMENDED BY RING MANUFACTURER.
   11. GRADE RINGS: REINFORCED-CONCRETE RINGS, 6- TO 9-INCH TOTAL THICKNESS, WITH DIAMETER MATCHING MANHOLE FRAME AND COVER, AND WITH HEIGHT AS REQUIRED TO ADJUST MANHOLE FRAME AND COVER TO INDICATED ELEVATION AND SLOPE.
B. MANHOLE FRAMES AND COVERS:
   1. DESCRIPTION: FERROUS; 24-INCH ID BY 7- TO 9-INCH RISER, WITH 4-INCH- MINIMUM-WIDTH FLANGE AND 26-INCH- DIAMETER COVER. INCLUDE INDENTED TOP DESIGN WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "SANITARY SEWER."
   2. MATERIAL: ASTM A 536, GRADE 60-40-18 DUCTILE IRON UNLESS OTHERWISE INDICATED.
6.) IDENTIFICATION
A. ARRANGE FOR INSTALLATION OF GREEN WARNING TAPES DIRECTLY OVER PIPING AND AT OUTSIDE EDGES OF UNDERGROUND MANHOLES.
   1. USE WARNING TAPE OR DETECTABLE WARNING TAPE OVER FERROUS PIPING.
   2. USE DETECTABLE WARNING TAPE OVER NONFERROUS PIPING AND OVER EDGES OF UNDERGROUND MANHOLES.
7.) FIELD QUALITY CONTROL
A. INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. INSPECT AFTER APPROXIMATELY 24 INCHES OF BACKFILL IS IN PLACE, AND AGAIN AT COMPLETION OF PROJECT.
   1. DEFECTS REQUIRING CORRECTION INCLUDE THE FOLLOWING:
      a. ALIGNMENT: LESS THAN FULL DIAMETER OF INSIDE OF PIPE IS VISIBLE BETWEEN STRUCTURES.
      b. DEFLECTION: FLEXIBLE PIPING WITH DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 92.5 PERCENT OF PIPING DIAMETER.
      c. DAMAGE: CRUSHED, BROKEN, CRACKED, OR OTHERWISE DAMAGED PIPING.
      d. INFILTRATION: WATER LEAKAGE INTO PIPING.
      e. EXFILTRATION: WATER LEAKAGE FROM OR AROUND PIPING.
   2. REPLACE DEFECTIVE PIPING USING NEW MATERIALS, AND REPEAT INSPECTIONS UNTIL DEFECTS ARE WITHIN ALLOWANCES SPECIFIED.
   3. REINSPECT AND REPEAT PROCEDURE UNTIL RESULTS ARE SATISFACTORY.
B. TEST NEW PIPING SYSTEMS, AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED, FOR LE

EARTH MOVING

1) PROJECT CONDITIONS

A. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE BEGINNING EARTH MOVING OPERATIONS.
B. DO NOT COMMENCE EARTH MOVING OPERATIONS UNTIL TEMPORARY EROSION- AND SEDIMENTATION-CONTROL MEASURES, ARE IN PLACE.
C. DO NOT COMMENCE EARTH MOVING OPERATIONS UNTIL PLANT-PROTECTION MEASURES ARE IN PLACE.
D. DO NOT COMMENCE EARTH MOVING OPERATIONS WITHOUT REVIEWING AND MAKING PROVISIONS FOR ALL GEOTECHNICAL RECOMMENDATIONS MADE IN THE PROJECT GEOTECHNICAL REPORT. COMPLY WITH RECOMMENDATIONS IN THE GEOTECHNICAL REPORT REGARDING GENERAL SITE PREPARATION, BUILDING PAD PREPARATION, PAVEMENT SECTIONS, FILL, AND EXCAVATION.
E. RETAIN A COPY OF THE PROJECT GEOTECHNICAL REPORT AT THE WORK SITE AT ALL TIMES. ANY DISCREPANCIES BETWEEN THESE SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT SHALL BE RESOLVED IN FAVOR OF THE PROJECT GEOTECHNICAL REPORT (GEOTECH REPORT H162093 BY ALPHA TESTING INC. DATED OCTOBER 06, 2016).
F. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH MOVING OPERATIONS.
G. PROTECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS DURING EARTH MOVING OPERATIONS.

2) DEWATERING

A. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
B. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION.
C. DESIGN AND PROVIDE DEWATERING SYSTEM USING ACCEPTED AND PROFESSIONAL METHODS CONSISTENT WITH CURRENT INDUSTRY PRACTICE. PROVIDE DEWATERING SYSTEM OF SUFFICIENT SIZE AND CAPACITY TO CONTROL GROUNDWATER IN A MANNER THAT PRESERVES STRENGTH OF FOUNDATION SOILS, DOES NOT CAUSE INSTABILITY OR RAVELING OF EXCAVATION SLOPES, AND DOES NOT RESULT IN DAMAGE TO EXISTING STRUCTURES. LOWER WATER LEVEL IN ADVANCE OF EXCAVATION BY UTILIZING WELLPOINTS, OR SIMILAR POSITIVE CONTROL METHODS. MAINTAIN THE GROUNDWATER LEVEL TO A MINIMUM OF TWO (2) FEET BELOW EXCAVATIONS. PROVIDE PIEZOMETERS AS DIRECTED BY THE ENGINEER TO DOCUMENT THAT THE GROUNDWATER LEVEL IS BEING MAINTAINED.
D. BY ACCEPTABLE MEANS, CONTRACTOR SHALL CONTROL ALL WATER REGARDLESS OF SOURCE AND IS RESPONSIBLE FOR PROPER DISPOSAL OF THE WATER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY SUPPLEMENTAL MEASURES TO CONTROL SEEPAGE, GROUNDWATER, OR ARTESIAN HEAD.
E. OPEN PUMPING WITH SUMPS AND DITCHES SHALL BE ALLOWED, PROVIDED IT DOES NOT RESULT IN BOILS, LOSS OF FINES, SOFTENING OF THE GROUND, OR INSTABILITY OF SLOPES. SUMPS SHALL BE LOCATED OUTSIDE OF LOAD BEARING AREAS SO THE BEARING SURFACES WILL NOT BE DISTURBED. WATER CONTAINING SILT IN SUSPENSION SHALL NOT BE PUMPED INTO SEWER LINES OR ADJACENT WATER BODIES. DURING NORMAL PUMPING AND UPON DEVELOPMENT OF WELL(S), LEVELS OF FINE SAND OR SILT IN THE DISCHARGE OF WATER SHALL NOT EXCEED FIVE (5) PPM.
F. CONTINUOUSLY MAINTAIN EXCAVATIONS IN A DRY CONDITION WITH POSITIVE DEWATERING METHODS DURING PREPARATION OF SUBGRADE, INSTALLATION OF PIPE, AND CONSTRUCTION OF STRUCTURES UNTIL THE CRITICAL PERIOD OF CONSTRUCTION AND/OR BACKFILL IS COMPLETED TO PREVENT DAMAGE OF SUBGRADE SUPPORT, PIPING, STRUCTURE, SIDE SLOPES, OR ADJACENT FACILITIES FOR FLOTATION OR OTHER HYDROSTATIC PRESSURE IMBALANCE.
G. WHEN CONSTRUCTION IS COMPLETE, PROPERLY REMOVE ALL DEWATERING EQUIPMENT FROM THE SITE, INCLUDING WELLS AND RELATED TEMPORARY ELECTRICAL SERVICE.

3) SUBGRADE

A. NOTIFY PROJECT GEOTECHNICAL ENGINEER WHEN EXCAVATIONS HAVE REACHED REQUIRED SUBGRADE.
B. IF PROJECT GEOTECHNICAL ENGINEER DETERMINES THAT UNSATISFACTORY SOIL IS PRESENT, CONTINUE EXCAVATION AND REPLACE WITH COMPACTED BACKFILL OR FILL MATERIAL AS DIRECTED.
C. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH A PNEUMATIC-TIRED AND LOADED 10-WHEEL, TANDEM-AXLE DUMP TRUCK WEIGHING NOT LESS THAN 15 TONS TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY PROJECT GEOTECHNICAL ENGINEER, AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
D. IN HEAVY DUTY PAVEMENT AREAS, THE CREWEL AGGREGATE BASE SHALL BE EXTENDED UNDER THE CURB AND GUTTER SECTION TO PROVIDE ADDITIONAL STABILITY FOR TRUCK TRAVEL.

4) UTILITY TRENCH BEDDING AND BACKFILL

A. PLACE AND COMPACT BEDDING COURSE ON TRENCH BOTTOMS AND WHERE INDICATED. SHAPE BEDDING COURSE TO PROVIDE CONTINUOUS SUPPORT FOR BELLS, JOINTS, AND BARRELS OF PIPES AND FOR CURVES, PIPOTS, FITTINGS, AND BOTTOMS OF CONDUITS.
B. USE CLASS B BEDDING UNDER ALL PVC PIPING.
C. CAREFULLY COMPACT INITIAL BACKFILL UNDER PIPE HAUNCHES AND COMPACT EVENLY UP ON BOTH SIDES AND ALONG THE FULL LENGTH OF PIPING OR CONDUIT TO AVOID DAMAGE OR DISPLACEMENT OF PIPING OR CONDUIT.
D. BACKFILL ALL UTILITIES UNDER ROADWAYS AND TRAFFIC AREAS WITH CRUSHED STONE.

5) COMPACTION OF SOIL BACKFILLS AND FILLS

A. PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
B. PLACE BACKFILL AND FILL SOIL MATERIALS EVENLY ON ALL SIDES OF STRUCTURES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE. COMPACT SOIL MATERIALS AS INDICATED ON DRAWINGS OR AS INDICATED IN THE PROJECT GEOTECHNICAL REPORT.
C. PROVIDE CONSTRUCTION PHASE MONITORING AND TESTING AS RECOMMENDED IN THE PROJECT GEOTECHNICAL REPORT. PROVIDE TEST REPORTS TO THE ENGINEER FOR REVIEW AND APPROVAL.

6) GRADING

A. GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED.
   1. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES.
   2. CUT OUT SOFT SPOTS, FILL LOW SPOTS, AND TRIM HIGH SPOTS TO COMPLY WITH REQUIRED SURFACE TOLERANCES.
B. LANDSCAPE ISLANDS: FILL ALL CURBED ISLANDS TO TOP OF CURB WITH TOPSOIL AND APPLY SEED AND MULCH UNLESS DRAWINGS INDICATE OTHERWISE.
C. SLOPES: DO NOT CREATE CUT OR FILL SLOPES STEEPER THAN 2H:1V WITHOUT OBTAINING SPECIAL WRITTEN PERMISSION FROM THE ENGINEER OF RECORD AND PROJECT GEOTECHNICAL ENGINEER.

7) PROTECTION

A. PROTECTING GRADED AREAS: PROTECT NEWLY GRADED AREAS FROM TRAFFIC, FREEZING, AND EROSION. KEEP FREE OF TRASH AND DEBRIS. SEE EROSION AND SEDIMENT CONTROL PLAN AND NOTES FOR FURTHER INFORMATION.

ASPHALT PAVING

1) FIELD CONDITIONS

A. ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF SUBGRADE IS WET OR EXCESSIVELY DAMP, IF RAIN IS IMMINENT OR EXPECTED BEFORE TIME REQUIRED FOR ADEQUATE CURE, OR IF THE FOLLOWING CONDITIONS ARE NOT MET:
   1. PRIME COAT: MINIMUM SURFACE TEMPERATURE OF 60 DEG F .
   2. TACK COAT: MINIMUM SURFACE TEMPERATURE OF 60 DEG F .
   3. SLURRY COAT: COMPLY WITH WEATHER LIMITATIONS IN ASTM D 3910.
   4. ASPHALT BASE COURSE: MINIMUM SURFACE TEMPERATURE OF 40 DEG F AND RISING AT TIME OF PLACEMENT.
   5. ASPHALT SURFACE COURSE: MINIMUM SURFACE TEMPERATURE OF 60 DEG F AT TIME OF PLACEMENT.

2) ASPHALT MATERIALS

A. REFER TO PROJECT GEOTECHNICAL REPORT AND PROJECT DRAWINGS FOR REQUIRED ASPHALT MATERIAL DESIGN.
B. AGGREGATES SHALL MEET THE REQUIREMENTS OF THE LOCAL DEPARTMENT OF TRANSPORTATION.
C. RECLAIMED ASPHALT PAVEMENT (RAP) SHALL NOT BE USED IN THE MIX DESIGN.

3) PATCHING

A. ASPHALT PAVEMENT: SAW CUT PERIMETER OF PATCH AND EXCAVATE EXISTING PAVEMENT SECTION TO SOUND BASE. EXCAVATE RECTANGULAR OR TRAPEZOIDAL PATCHES, EXTENDING 12 INCHES INTO PERIMETER OF ADJACENT SOUND PAVEMENT, UNLESS OTHERWISE INDICATED. CUT EXCAVATION FACES VERTICALLY. REMOVE EXCAVATED MATERIAL. RECOMPACT EXISTING UNBOUND-AGGREGATE BASE COURSE TO FORM NEW SUBGRADE.
B. TACK COAT: BEFORE PLACING PATCH MATERIAL, APPLY TACK COAT UNIFORMLY TO VERTICAL ASPHALT SURFACES ABUTTING THE PATCH. APPLY AT A RATE OF 0.05 TO 0.15 GAL./SQ. YD. .
   1. ALLOW TACK COAT TO CURE UNDISTURBED BEFORE APPLYING HOT-MIX ASPHALT PAVING.
   2. AVOID SMEARING OR STAINING ADJOINING SURFACES, APPURTENANCES, AND SURROUNDINGS. REMOVE SPILLAGES AND CLEAN AFFECTED SURFACES.
C. PLACING PATCH MATERIAL: FILL EXCAVATED PAVEMENT AREAS WITH HOT-MIX ASPHALT BASE MIX FOR FULL THICKNESS OF PATCH AND, WHILE STILL HOT, COMPACT FLUSH WITH ADJACENT SURFACE.

4) SURFACE PREPARATION

A. GENERAL: IMMEDIATELY BEFORE PLACING ASPHALT MATERIALS, REMOVE LOOSE AND DELETERIOUS MATERIAL FROM SUBSTRATE SURFACES. ENSURE THAT PREPARED SUBGRADE IS READY TO RECEIVE PAVING. SAWCUT EXISTING PAVEMENT TO THE JOINED TO PROVIDE VERTICAL FACES BETWEEN NEW AND EXISTING SURFACES.
B. EMULSIFIED ASPHALT PRIME COAT: APPLY UNIFORMLY OVER SURFACE OF COMPACTED UNBOUND-AGGREGATE BASE COURSE AT A RATE OF 0.10 TO 0.30 GAL./SQ. YD. PER INCH DEPTH APPLY ENOUGH MATERIAL TO PENETRATE AND SEAL, BUT NOT FLOOD, SURFACE. ALLOW PRIME COAT TO CURE.
   1. IF PRIME COAT IS NOT ENTIRELY ABSORBED WITHIN 24 HOURS AFTER APPLICATION, SPREAD SAND TO ABSORB EXCESS ASPHALT. USE ENOUGH SAND TO PREVENT PICKUP UNDER TRAFFIC. REMOVE LOOSE SAND BY SWEEPING BEFORE PAVEMENT IS PLACED AND AFTER VOLATILES HAVE EVAPORATED.
   2. PROTECT PRIMED SUBSTRATE FROM DAMAGE UNTIL READY TO RECEIVE PAVING.
C. TACK COAT: APPLY UNIFORMLY TO SURFACES OF EXISTING PAVEMENT AT A RATE OF 0.02 TO 0.08 GAL./SQ. YD. .
   1. ALLOW TACK COAT TO CURE UNDISTURBED BEFORE APPLYING HOT-MIX ASPHALT PAVING.
   2. AVOID SMEARING OR STAINING ADJOINING SURFACES, APPURTENANCES, AND SURROUNDINGS. REMOVE SPILLAGES AND CLEAN AFFECTED SURFACES.

5) PLACING HOT-MIX ASPHALT

A. MACHINE PLACE HOT-MIX ASPHALT ON PREPARED SURFACE, SPREAD UNIFORMLY, AND STRIKE OFF. PLACE ASPHALT MIX BY HAND IN AREAS INACCESSIBLE TO EQUIPMENT IN A MANNER THAT PREVENTS SEGREGATION OF MIX. PLACE EACH COURSE TO REQUIRED GRADE, CROSS SECTION, AND THICKNESS WHEN COMPACTED.
   1. PLACE HOT-MIX ASPHALT BASE COURSE IN NUMBER OF LIFTS AND THICKNESSES INDICATED.
   2. PLACE HOT-MIX ASPHALT SURFACE COURSE IN SINGLE LIFT.
   3. SPREAD MIX AT A MINIMUM TEMPERATURE OF 250 DEG F .
   4. BEGIN APPLYING MIX ALONG CENTERLINE OF CROWN FOR CROWNED SECTIONS AND ON HIGH SIDE OF ONE-WAY SLOPES UNLESS OTHERWISE INDICATED.
   5. REGULATE PAVER MACHINE SPEED TO OBTAIN SMOOTH, CONTINUOUS SURFACE FREE OF PULLS AND TEARS IN ASPHALT-PAVING MAT.
B. PLACE PAVING IN CONSECUTIVE STRIPS NOT LESS THAN 10 FEET WIDE UNLESS INFILL EDGE STRIPS OF A LESSER WIDTH ARE REQUIRED.

6) JOINTS

A. CONSTRUCT JOINTS TO ENSURE A CONTINUOUS BOND BETWEEN ADJOINING PAVING SECTIONS. CONSTRUCT JOINTS FREE OF DEPRESSIONS, WITH SAME TEXTURE AND SMOOTHNESS AS OTHER SECTIONS OF HOT-MIX ASPHALT COURSE.
B. CONSTRUCT SMOOTH TRANSITIONS BETWEEN NEW AND EXISTING PAVING SECTIONS.

7) COMPACTION

A. GENERAL: BEGIN COMPACTION AS SOON AS PLACED HOT-MIX PAVING WILL BEAR ROLLER WEIGHT WITHOUT EXCESSIVE DISPLACEMENT. COMPACT HOT-MIX PAVING WITH HOT, HAND TAMPERS OR WITH VIBRATORY-PLATE COMPACTORS IN AREAS INACCESSIBLE TO ROLLERS. COMPLETE COMPACTION BEFORE MIX TEMPERATURE COOLS TO 185 DEG F.
   1. INITIAL LIFT: AVERAGE OF 92% OF MAXIMUM THEORETICAL DENSITY.
   2. TOP SURFACE LIFT: AVERAGE OF 93% OF MAXIMUM THEORETICAL DENSITY.
   3. TOLERANCE: +2.0%, -1.0% OF ANY INDIVIDUAL TEST.
B. FINISH ROLLING: FINISH ROLL PAVED SURFACES TO REMOVE ROLLER MARKS WHILE HOT-MIX ASPHALT IS STILL WARM.
C. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC FOR AT LEAST 24 HOURS AFTER PLACEMENT FOR THE BINDER COURSE, AND AT LEAST 72 HOURS AFTER PLACEMENT FOR THE FINAL WEARING SURFACE.
D. IF THE AMBIENT AIR TEMPERATURE IS IN EXCESS OF 90 DEGREES FAHRENHEIT DURING THE 72 HOUR PROTECTION PERIOD, THE PAVEMENT SURFACE SHALL BE FLOODED WITH WATER TO RAPIDLY COOL THE PAVEMENT AT LEAST ONCE PER DAY.

8) FIELD QUALITY CONTROL

A. TESTING AGENCY: ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
B. CONDUCT TESTS AND REPORTS SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT.
C. TESTING AGENCY MUST INSPECT AND APPROVE THE SUBGRADE, EACH FILL LAYER, AND THE SUBBASE AND BASE COURSE.
D. PROMPTLY SEND TEST REPORTS TO THE ENGINEER FOR REVIEW AND APPROVAL.
E. REMOVE AND REPLACE OR INSTALL ADDITIONAL HOT-MIX ASPHALT WHERE TEST RESULTS OR MEASUREMENTS INDICATE THAT IT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS.

CONCRETE PAVING

1) PROJECT CONDITIONS

A. TRAFFIC CONTROL: MAINTAIN ACCESS FOR VEHICULAR AND PEDESTRIAN TRAFFIC AS REQUIRED FOR OTHER CONSTRUCTION ACTIVITIES.

2) STEEL REINFORCEMENT

A. PLAIN-STEEL WELDED WIRE REINFORCEMENT: ASTM A 185/A 185M, FABRICATED FROM AS-DRAWN STEEL WIRE INTO FLAT SHEETS.
B. REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 ; DEFORMED.
C. JOINT DOWEL BARS: ASTM A 615/A 615M, GRADE 60 PLAIN-STEEL BARS. CUT BARS TRUE TO LENGTH WITH ENDS SQUARE AND FREE OF BURRS.
D. BAR SUPPORTS: ZINC-COATED (GALVANIZED) STEEL, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS, WELDED WIRE REINFORCEMENT, AND DOWELS IN PLACE. MANUFACTURER BAR SUPPORTS ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE" FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE OF GREATER COMPRESSIVE STRENGTH THAN CONCRETE SPECIFIED, AND AS FOLLOWS:

3) CONCRETE MATERIALS

A. CEMENTITIOUS MATERIAL: USE CEMENTITIOUS MATERIALS, OF SAME TYPE, BRAND, AND SOURCE THROUGHOUT PROJECT.
B. NORMAL-WEIGHT AGGREGATES: ASTM C 33, , UNIFORMLY GRADED. PROVIDE AGGREGATES FROM A SINGLE SOURCE
   1. MAXIMUM COARSE-AGGREGATE SIZE: 1 INCH NOMINAL.
   2. FINE AGGREGATE: FREE OF MATERIALS WITH DELETERIOUS REACTIVITY TO ALKALI IN CEMENT.

4) RELATED MATERIALS

A. JOINT FILLERS: ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER IN PREFORMED STRIPS.

5) WHEEL STOPS

A. WHEEL STOPS: PRECAST, AIR-ENTRAINED CONCRETE, 2500-PSI MINIMUM COMPRESSIVE STRENGTH.. PROVIDE CHAMFERED CORNERS AND DRAINAGE SLOTS ON UNDERSIDE AND HOLES FOR ANCHORING TO SUBSTRATE.

6) SIDEWALKS

A. SIDEWALKS: SLOPE SIDEWALKS AWAY FROM BUILDING WITH A 1.5% CROSS-SLOPE UNLESS DRAWINGS INDICATE OTHERWISE.

7) PREPARATION

A. REMOVE LOOSE MATERIAL FROM COMPACTED SUBBASE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

8) STEEL REINFORCEMENT

A. GENERAL: COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT.
B. CLEAN REINFORCEMENT OF LOOSE RUST AND MILL SCALE, EARTH, ICE, OR OTHER BONDOND-REDUCING MATERIALS.
C. ARRANGE, SPACE, AND SECURELY TIE BARS AND BAR SUPPORTS TO HOLD REINFORCEMENT IN POSITION DURING CONCRETE PLACEMENT. MAINTAIN MINIMUM COVER TO REINFORCEMENT.
D. INSTALL WELDED WIRE REINFORCEMENT IN LENGTHS AS LONG AS PRACTICABLE. LAP ADJOINING PIECES AT LEAST ONE FULL MESH, AND LACE SPLICES WITH WIRE. OFFSET LAPS OF ADJOINING WIDTHS TO PREVENT CONTINUOUS LAPS IN EITHER DIRECTION.
E. ZINC-COATED REINFORCEMENT: USE GALVANIZED-STEEL WIRE TIES TO FASTEN ZINC-COATED REINFORCEMENT. REPAIR CUT AND DAMAGED ZINC COATINGS WITH ZINC REPAIR MATERIAL.

9) JOINTS

A. GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGES TRUE TO LINE, WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE UNLESS OTHERWISE INDICATED.
   1. WHEN JOINING EXISTING PAVING, PLACE TRANSVERSE JOINTS TO ALIGN WITH PREVIOUSLY PLACED JOINTS UNLESS OTHERWISE INDICATED.
   2. ENSURE FORMS PROVIDE CORRECT HORIZONTAL AND VERTICAL ALIGNMENT BETWEEN NEW AND EXISTING PAVEMENTS, SIDEWALKS, CURB AND GUTTER, ETC.
B. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVING AND AT LOCATIONS WHERE PAVING OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVING TERMINATES AT ISOLATION JOINTS.
   1. CONTINUE STEEL REINFORCEMENT ACROSS CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED. DO NOT CONTINUE REINFORCEMENT THROUGH SIDES OF PAVING STRIPS UNLESS OTHERWISE INDICATED.
   2. PROVIDE TIE BARS AT SIDES OF PAVING STRIPS WHERE INDICATED.
   3. KEYED JOINTS: PROVIDE PREFORMED KEYWAY-SECTION FORMS OR BULKHEAD FORMS WITH KEYS UNLESS OTHERWISE INDICATED. EMBED KEYS AT LEAST 1-1/2 INCHES INTO CONCRETE.
   4. DOWELED JOINTS: INSTALL DOWEL BARS AND SUPPORT ASSEMBLIES AT JOINTS WHERE INDICATED. LUBRICATE OR COAT WITH ASPHALT ONE-HALF OF DOWEL LENGTH TO PREVENT CONCRETE BONDING TO ONE SIDE OF JOINT.
C. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, OTHER FIXED OBJECTS, AND WHERE INDICATED.
   1. LOCATE EXPANSION JOINTS AT INTERVALS OF 30 FEET UNLESS OTHERWISE INDICATED.
   2. EXTEND JOINT FILLERS FULL WIDTH AND DEPTH OF JOINT.
   3. TERMINATE JOINT FILLER NOT LESS THAN 1/2 INCH OR MORE THAN 1 INCH BELOW FINISHED SURFACE IF JOINT SEALANT IS INDICATED.
   4. PLACE TOP OF JOINT FILLER FLUSH WITH FINISHED CONCRETE SURFACE IF JOINT SEALANT IS NOT INDICATED.
   5. FURNISH JOINT FILLERS IN ONE-PIECE LENGTHS WHERE MORE THAN ONE LENGTH IS REQUIRED, LACE OR CLIP JOINT-FILLER SECTIONS TOGETHER.
   6. DURING CONCRETE PLACEMENT, PROTECT TOP EDGE OF JOINT FILLER WITH METAL, PLASTIC, OR OTHER TEMPORARY PREFORMED CAP. REMOVE PROTECTIVE CAP AFTER CONCRETE HAS BEEN PLACED ON BOTH SIDES OF JOINT.
D. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS, AS FOLLOWS:
   1. GROOVED JOINTS: FORM CONTRACTION JOINTS AFTER INITIAL FLOATING BY GROOVING AND FINISHING EACH EDGE OF JOINT WITH GROOVING TOOL TO A 1/4-INCH RADIUS. REPEAT GROOVING OF CONTRACTION JOINTS AFTER APPLYING SURFACE FINISHES. ELIMINATE GROOVING-TOOL MARKS ON CONCRETE SURFACES.
   2. SAWED JOINTS: FORM CONTRACTION JOINTS WITH POWER SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND-RIMMED BLADES. CUT 1/8-INCH- WIDE JOINTS INTO CONCRETE WHEN CUTTING ACTION WILL NOT TEAR, ABRADE, OR OTHERWISE DAMAGE SURFACE AND BEFORE DEVELOPING RANDOM CONTRACTION CRACKS.
   3. DOWELED CONTRACTION JOINTS: INSTALL DOWEL BARS AND SUPPORT ASSEMBLIES AT JOINTS WHERE INDICATED. LUBRICATE OR COAT WITH ASPHALT ONE-HALF OF DOWEL LENGTH TO PREVENT CONCRETE BONDING TO ONE SIDE OF JOINT.
E. EDGING: AFTER INITIAL FLOATING, TOOL EDGES OF PAVING, GUTTERS, CURBS, AND JOINTS IN CONCRETE WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE EDGING-TOOL MARKS ON CONCRETE SURFACES.

10) FIELD QUALITY CONTROL

A. TESTING AGENCY: ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
B. PROMPTLY SEND TEST REPORTS TO THE ENGINEER FOR REVIEW AND APPROVAL.
C. TESTING SERVICES: TESTING OF COMPOSITE SAMPLES OF FRESH CONCRETE OBTAINED ACCORDING TO ASTM C 172 SHALL BE PERFORMED BY THE GENERAL CONTRACTOR'S TESTING AGENCY ACCORDING TO THE FOLLOWING REQUIREMENTS:
   1. TESTING FREQUENCY: OBTAIN AT LEAST ONE COMPOSITE SAMPLE FOR EACH 100 CU. YD. OR FRACTION THEREOF OF EACH CONCRETE MIXTURE PLACED EACH DAY. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN FIVE COMPRESSIVE-STRENGTH TESTS FOR EACH CONCRETE MIXTURE, TESTING SHALL BE CONDUCTED FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE ARE USED.
   2. SLUMP: ASTM C 143/C 143M; ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
   3. AIR CONTENT: ASTM C 231, PRESSURE METHOD; ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE.
   4. CONCRETE TEMPERATURE: ASTM C 1064/C 1064M; ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEG F AND BELOW AND WHEN IT IS 80 DEG F AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE.
   5. COMPRESSION TEST SPECIMENS: ASTM C 31/C 31M; CAST AND LABORATORY CURE ONE SET OF THREE STANDARD CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE.
   6. COMPRESSIVE-STRENGTH TESTS: ASTM C 39/C 39M; TEST ONE SPECIMEN AT SEVEN DAYS AND TWO SPECIMENS AT 28 DAYS. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM TWO SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT 28 DAYS.
D. STRENGTH OF EACH CONCRETE MIXTURE WILL BE SATISFACTORY IF AVERAGE OF ANY THREE CONSECUTIVE COMPRESSIVE-STRENGTH TESTS EQUALS OR EXCEEDS SPECIFIED COMPRESSIVE STRENGTH AND NO COMPRESSIVE-STRENGTH TEST VALUE FALLS BELOW SPECIFIED COMPRESSIVE STRENGTH BY MORE THAN 500 PSI .
E. TEST RESULTS SHALL BE REPORTED IN WRITING TO ENGINEER, CONCRETE MANUFACTURER, AND CONTRACTOR WITHIN 48 HOURS OF TESTING. REPORTS OF COMPRESSIVE-STRENGTH TESTS SHALL CONTAIN PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING AND INSPECTING AGENCY, LOCATION OF CONCRETE BATCH IN WORK, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIXTURE PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7- AND 28-DAY TESTS.
F. ADDITIONAL TESTS: TESTING AND INSPECTING AGENCY SHALL MAKE ADDITIONAL TESTS OF CONCRETE WHEN TEST RESULTS INDICATE THAT SLUMP, AIR ENTRAINMENT, COMPRESSIVE STRENGTHS, OR OTHER REQUIREMENTS HAVE NOT BEEN MET AS DIRECTED BY ENGINEER.
G. CONCRETE PAVING WILL BE CONSIDERED DEFICIENT IF IT DOES NOT PASS TESTS AND INSPECTIONS.
H. ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.
I. PREPARE TEST AND INSPECTION REPORTS.

11) REPAIRS AND PROTECTION

A. REMOVE AND REPLACE CONCRETE PAVING THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION. REMOVE WORK IN COMPLETE SECTIONS FROM JOINT TO JOINT UNLESS OTHERWISE APPROVED BY ENGINEER.
B. DRILL TEST CORES, WHERE DIRECTED BY ENGINEER, WHEN NECESSARY TO DETERMINE MAGNITUDE OF CRACKS OR DEFECTIVE AREAS. FILL DRILLED CORE HOLES IN SATISFACTORY PAVING AREAS WITH PORTLAND CEMENT CONCRETE BONDED TO PAVING WITH EPOXY ADHESIVE.
C. PROTECT CONCRETE PAVING FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVING FOR AT LEAST 14 DAYS AFTER PLACEMENT. WHEN CONSTRUCTION TRAFFIC IS PERMITTED, MAINTAIN PAVING AS CLEAN AS POSSIBLE BY REMOVING SURFACE STAINS AND SPILLAGE OF MATERIALS AS THEY OCCUR.
D. MAINTAIN CONCRETE PAVING FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP PAVING NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

PAVEMENT MARKINGS

1) QUALITY ASSURANCE

A. REGULATORY REQUIREMENTS: COMPLY WITH MATERIALS, WORKMANSHIP, AND OTHER APPLICABLE REQUIREMENTS OF STATE DOT OR LOCAL MUNICIPALITY FOR PAVEMENT-MARKING WORK.

2) FIELD CONDITIONS

A. ENVIRONMENTAL LIMITATIONS: PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES AND AT A MINIMUM AMBIENT OR SURFACE TEMPERATURE OF 40 DEG F FOR ALKYD MATERIALS, 55 DEG F FOR WATER-BASED MATERIALS, AND NOT EXCEEDING 95 DEG F.

3) PAVEMENT-MARKING PAINT

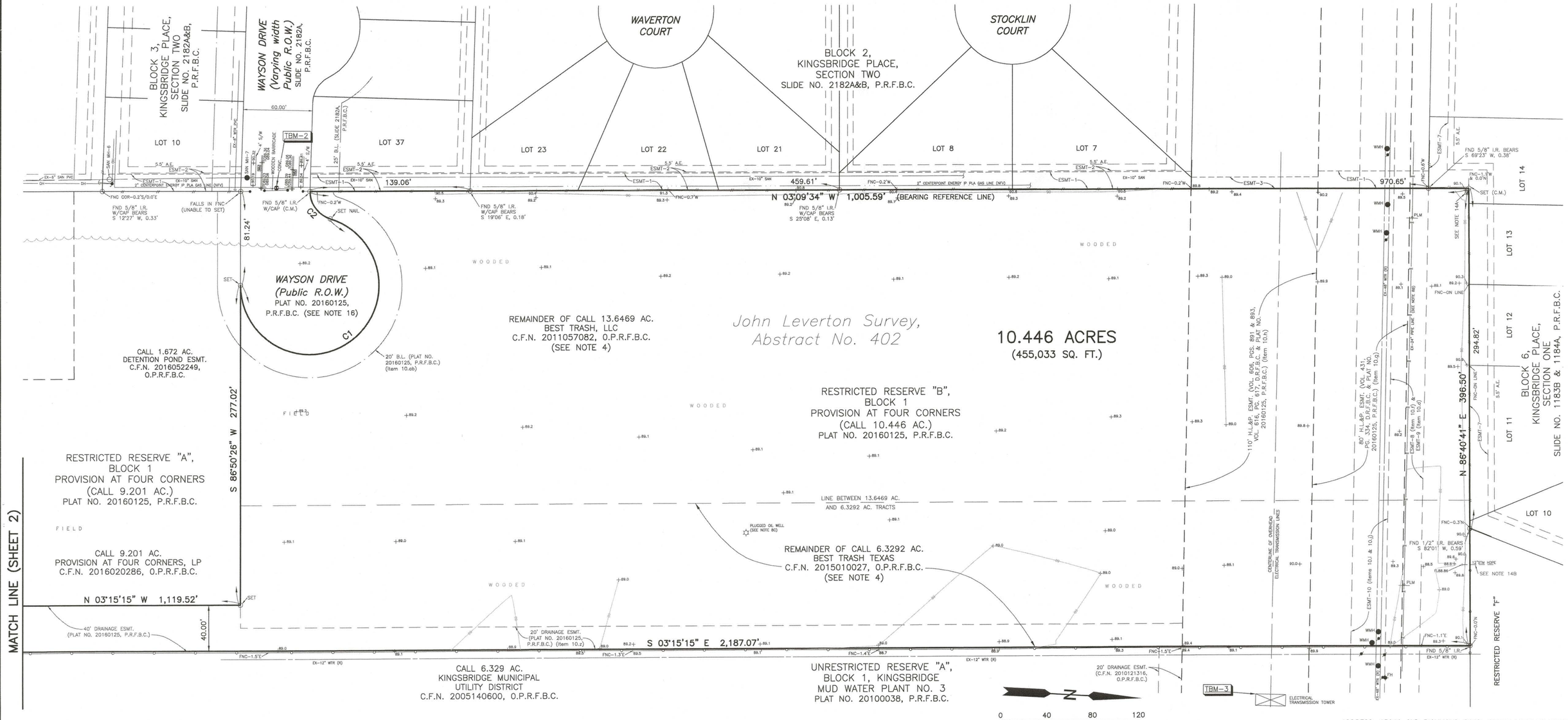
A. PAVEMENT-MARKING PAINT: ALKYD-RESIN TYPE, LEAD AND CHROMATE FREE, READY MIXED, COMPLYING WITH AASHTO M 248; COLORS COMPLYING WITH FS TT-P-1952, COLOR: AS INDICATED.
B. ALL PAVEMENT MARKING WITHIN D.O.T. RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND IN ACCORDANCE WITH D.O.T. SPECIFICATIONS.

4) PAVEMENT MARKING

A. APPLY TEMPORARY PAVEMENT MARKING BEFORE TRAFFIC IS ALLOWED ON ANY NEWLY PAVED SURFACES AND AT A MINIMUM AMBIENT OR SURFACE TEMPERATURE OF 40 DEG F FOR ALKYD MATERIALS, 55 DEG F FOR WATER-BASED MATERIALS, AND NOT EXCEEDING 95 DEG F.

5) PROTECTING AND CLEANING

A. PROTECT PAVEMENT MARKINGS FROM DAMAGE AND WEAR DURING REMAINDER OF CONSTRUCTION PERIOD.
B. CLEAN SPILLAGE AND SOILING FROM ADJACENT CONSTRUCTION USING CLEANING AGENTS AND PROCEDURES REC



0 40 80 120

HORIZONTAL SCALE: 1"=40'
CONTOUR INTERVAL: 1 FOOT

ADDRESS: 15010 OLD RICHMOND ROAD, SUGAR LAND TX 77498

BENCHMARK INFORMATION

All elevations shown hereon are NAVD 88, 2001 Adjustment, elevations based on the U.S. Survey Foot, as determined from differential GPS observations collected on TSARP Reference Marks 040445, 040450, and 040455.

TBM-1 Elevation=90.18' (Sheet 2 of 2)
Railroad spike set in the south face of utility pole, located in the north right-of-way line of Old Richmond Road, approximately 105 feet west of the centerline of the driveway entering a water plant; also being 43 feet west of the southeast corner of the subject property.

TBM-2 Elevation=89.47' (Sheet 1 of 2)
Square chiseled in the centerline of the pavement header of Wayson Drive, which butts into the west line of the subject property; also being approximately 31 feet north of the northwest corner of the subject property.

TBM-3 Elevation=90.08' (Sheet 1 of 2)
Square chiseled on the southwest concrete footing of an electrical transmission tower located 186 feet south and 42 feet east of the northeast corner of the subject property.

MANHOLE INFORMATION

SAN MH-6: RECORD LOCATION OF MH; UNABLE TO FIND

SAN MH-7: RIM=90.57
FL-N=81.55
FL-S=81.70

CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD BEARING	CHORD
C1	60.00'	264.80'	252°52'06"	N 39°35'36" W	96.54'
C2	25.00'	31.81'	72°54'51"	S 50°24'10" W	29.71'

EASEMENT INFORMATION

ESMT-1 15' SAN. SEWER ESMT. (PARCEL "A"), VOL. 2286, PG. 873, O.P.R.F.B.C.

ESMT-2 16' U.E. W/ADJ. 5.5' A.E., STARTING 16' ABOVE GND, SLIDE 2182A, P.R.F.B.C.

ESMT-3 10' SAN. SEWER ESMT., VOL. 1972, PG. 1917, D.R.F.B.C.

ESMT-7 16' U.E. W/ADJ. 5.5' A.E., STARTING 16' ABOVE GND, SLIDE 1183B, P.R.F.B.C.

ESMT-8 30' SHELL RANCHO PIPELINE ESMT., VOL. 301, PG. 291, D.R.F.B.C. & PLAT NO. 20161025, P.R.F.B.C. (Item 10.f)

ESMT-9 30' SHELL PIPELINE ESMT., VOL. 293, PGS. 500 & 503; AMENDED IN VOL. 411, PG. 607, D.R.F.B.C.; ASSIGNED TO TEPPCO CRUDE PIPELINE LP IN C.F.N. 2003101891, O.P.R.F.B.C. & PLAT NO. 20161025, P.R.F.B.C. (Item 10.d)

ESMT-10 30' W.L.E., C.F.N. 2009106060, 2009106061 & 2010080006, O.P.R.F.B.C., & PLAT NO. 20160125, P.R.F.B.C. (Items 10.i & 10.j)

LEGEND

- MANHOLE
- BENCHMARK
- GUY ANCHOR
- UTILITY POLE
- WATER VALVE
- OH — OVERHEAD UTILITY LINE
- PUBLIC WATER LINE
- CENTERPOINT ENERGY GAS LINE
- PUBLIC SANITARY SEWER
- HOUSTON PIPE LINE COMPANY GAS LINE
- EDGE OF ASPHALT
- TOP BANK OF DITCH
- EDGE OF WOODS
- WOOD FENCE
- CHAIN-LINK FENCE
- BARB-WIRE FENCE

ABBREVIATIONS

ABAND,	Abandoned	STL	Steel
AC.	Acres	STM	Storm sewer
ADJ.	Adjoining	S/W	Sidewalk (concrete)
A.E.	Aerial easement	TBM	Temporary (project) benchmark
ASPH.	Asphalt pavement	TC	Top of curb (elevation)
B.L.	Building setback line	TFP	Transformer on utility pole
C.F.N.	Clerk's File Number	U.E.	Utility easement
C.M.	Controlling monument	VOL.	Volume
CONC.	Concrete pavement	W/	With
COR	Corner	W.L.E.	Waterline easement
D.R.F.B.C.	Deed Records of Fort Bend County	WM	Water meter
ESMT.	Easement	WMH	Water manhole
EX	Existing	WTR	Waterline
FH	Fire hydrant		
FL	Flow line (elevation)		
FNC	Fence		
FND	Found		
G	Gutter (elevation)		
GKP	Gate keypad		
GND	Ground		
H.L.&P.	Houston Lighting & Power Company		
IP	Intermediate pressure		
I.R.	Iron rod		
LP	Lamp on utility pole		
MB	Mailbox		
MH	Manhole		
NFV	Not field-verified		
NO.	Number		
O.P.R.F.B.C.	Official Public Records of Fort Bend County		
PG.	Page		
PLA	Plastic		
PLM	Pipeline marker		
P.R.F.B.C.	Plat Records of Fort Bend County		
PVC	Plastic pipe		
RCP	Reinforced concrete pipe		
R.O.W.	Right-of-way		
SAN	Sanitary sewer		
SET	Set 5/8-inch iron rod with plastic cap, stamped "TERRA SURVEYING", unless otherwise indicated		
SQ. FT.	Square feet		
S/T	Safety end treatment (concrete)		

STATE OF TEXAS REGISTERED GEORGE COLLISON 4461 PROFESSIONAL SURVEYOR

10/3/17

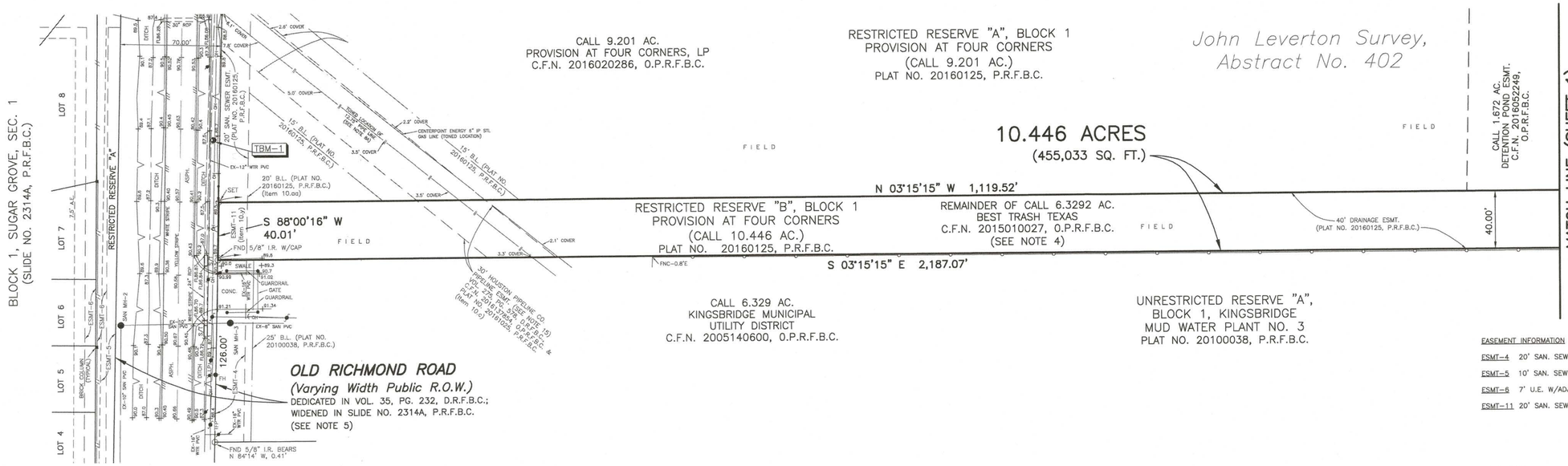
REV.NO.	DESCRIPTION	BY	DATE	APP.
1	REVISE ADDRESS	SM	4/12/17	GC

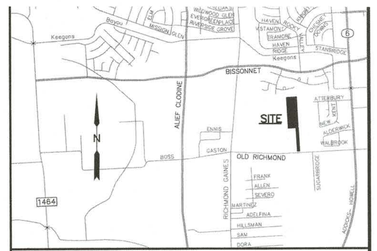
AN ALTA/NSPS LAND TITLE SURVEY OF
10.446 ACRES (455,033 SQ. FT.)
BEING ALL OF RESTRICTED RESERVE "B",
BLOCK 1, PROVISION AT FOUR CORNERS
JOHN LEVERTON SURVEY, ABSTRACT NO. 402
FORT BEND COUNTY, TEXAS

V-1

TERRA SURVEYING CO., INC.
3000 WILCREST DR. – SUITE 210
HOUSTON, TEXAS 77042
(713) 993-0327 – FAX (713) 993-9231

DRAWN BY: SDM	SCALE: 1"=40'	KEY MAP: 527-V
CREW CHIEF: MIKESKA	FIELD DATE: 09/01/16	PROJECT: 1851-1515-S
APPROVED BY: GC	FIELD BK: 16-32	SHEET 1 OF 2





VICINITY MAP: 1"=0.5 MILE

EASEMENT INFORMATION

ESMT-4 20' SAN. SEWER ESMT., C.F.N. 2010121317, O.P.R.F.B.C.

ESMT-5 10' SAN. SEWER ESMT., SLIDE 2314A, P.R.F.B.C.

ESMT-6 7' U.E. W/ADJ. 7.5' A.E., STARTING 16' ABOVE GND, SLIDE 2314A, P.R.F.B.C.

ESMT-11 20' SAN. SEWER ESMT., PLAT NO. 20160125, P.R.F.B.C. (Item 10.y)

LEGAL DESCRIPTION OF THE LAND PER SCHEDULE A OF THE TITLE COMMITMENT LISTED UNDER GENERAL NOTE 1

Restricted Reserve "B", in Block One (1), of Provision At Four Corners, a subdivision in Fort Bend County, Texas, according to the map or plat thereof recorded in/under Plat No. 20160125 of the Map/Plat Records of Fort Bend County, Texas.

GENERAL NOTES

1. This survey relies on a Commitment for Title Insurance issued by Stewart Title Guaranty Company, under File No. 15000332398, having an effective date of January 26, 2017; last issued February 2, 2017, for all matters of record, including easements, rights-of-way, and other encumbrances of public record affecting the subject property. No additional research has been performed by Terra Surveying Company, Inc., to determine the existence of any other encumbrances.

2. Bearings hereon are grid bearings based on the Texas State Plane Coordinate System, South Central Zone, NAD 83 (2001 Adjustment), as determined from GPS observations on TSARP Reference Marks 040445, 040450, and 040455. Distances are surface distances and can be converted to grid by multiplying by a combined scale factor of 0.999870017.

3. The subject property is located entirely within Zone "X" ("areas determined to be outside the 0.2% annual chance floodplain") per National Flood Insurance Program FIRM Map Number 48157C0145L; latest available published revision dated April 2, 2014.

4. The subject property is located within the extraterritorial jurisdiction of the City of Houston, Texas and subject to the City's platting and developmental ordinances. Per the City's "Major Thoroughfare Plan," Old Richmond Road is not designated, as a major thoroughfare. The City of Houston and County of Fort Bend does not have zoning per se.

5. The Old Richmond Road R.O.W. is located in an area designated by the City of Houston, as "Limited Purpose Annexation," which is defined on the City Planning & Development Department's website, as follows:
   "This type of annexation, authorized in the 1999 Legislature, may be conducted as part of a Strategic Partnership Agreement (SPA) with a utility district. It carries less stringent public notice requirements. The annexation typically includes commercial property only. Property (ad valorem) taxes are not levied on properties included in this type of annexation, but the City may levy a sales tax on retail sales conducted in the area. Properties annexed as part of a SPA do not carry the three-year requirement. The SPA identifies which regulations and services, if any, are imposed in the area annexed. It also identifies the amount of sales tax to be levied and how much, if any, will be shared with the district. Finally, the SPA identifies the length of the agreement and the City's options for when and if the City might make the property subject to general-purpose annexation.

6. Surface or subsurface faulting, hazardous waste, or other environmental issues have not been addressed within the scope of this survey. Per the U.S. Fish & Wildlife Service's National Wetlands, on-line "Wetlands Mapper", there are no designated wetlands located within the subject property.

7. Underground utilities shown hereon are based on available record drawings combined with field-located utility features. There may be other subsurface utilities of which this surveyor is unaware. The construction contractor should verify the exact locations of all on-site utilities, before commencing work.

8. Per the Texas Railroad Commission's website:
   A) This pipeline is an active 12.75-inch natural gas transmission line, being part of the "4543 Jeanetta 12IN" system, and is operated by Houston Pipe Line Company LP (832-668-1431);
   B) This pipeline is an active 24-inch crude oil pipe line operated by Enterprise Crude Pipeline LLC;
   C) The location of this plugged oil well (API #15731916) is based upon coordinates reported on this website and was reportedly plugged in August, 1994; it was not found in the field.

9. Fences may meander between locations, where dimensions have been labeled.

10. There are presently no buildings located within the subject property.

11. All easements are public, unless otherwise indicated.

12. There is no observed evidence of recent earth moving work, building construction, or building additions observed on the subject property.

13. There are no known proposed changes in street right of way lines and no any observed evidence of recent street or sidewalk construction or repairs observed on the subject property.

14. List of potential encroachments:
   A) This cable TV pedestal is located in the subject property without an apparent easement.
   B) The presence of this storm pipe suggests that storm water is being conveyed across the property line, between the subject tract and the property to the north.

15. This pipeline easement of was originally granted to Houston Pipeline Co. in Vol. 275, Pg. 578, D.R.F.B.C., and did not specify a width. Subsequently, this easement was modified under C.F.N. 2016137854, O.P.R.F.B.C, in which 30-foot wide easement was delineated (this 30-foot easement is also depicted on Plat No. 20160125, P.R.F.B.C.)

16. Presently, this cul-de-sac area is unimproved, i.e. there is no pavement or utilities in place.

EXCEPTIONS LISTED IN SCHEDULE B OF THE TITLE COMMITMENT REFERENCED UNDER GENERAL NOTE 1

1.a Restrictive covenants recorded in/under in Plat No. 20160125 of the Plat Records of Fort Bend County, Texas and in Volume 657, Page 614 of the Deed Records of Fort Bend County, Texas, but omitting any covenants, condition, or restriction, if any, based on race, color, religion, sex, handicap, familial status or national origin unless and to the extent that the covenant, condition or restriction (a) is exempt under Title 42 of the United States Code or (b) relates to handicap, but does not discriminate against handicapped persons. [Surveyor's remarks: These documents affect the subject property; plottable elements are shown hereon.]

2-9 Standard exceptions. [Surveyor's remarks: These are not survey items.]

10.a Rights of parties in possession. (Owner Title Policy only) [Surveyor's remarks: This is not a survey item.]

10.b Intentionally Deleted

10.c Pipeline right-of-way easement in favor of Houston Pipe Line Company, located along the Southerly property line, as set forth in instrument recorded in/under Volume 275, Page 578 of the Deed Records of Fort Bend County, Texas and modified and amended by instrument recorded under Clerk's File No. 2016031461 and 2016137854 of the Official Public Records of Fort Bend County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. Building setback line, Fifteen (15) feet in width, located adjacent to both sides of said pipeline easement, as recorded in/under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon; C.F.N. 2016031461 does not affect the subject property.]

10.d Pipeline right-of-way easement in favor of Shell Pipe Line Corporation as set forth in instrument recorded in/ under Volume 293, Page 500, Volume 293, Page 503 and of the Deed Records of Fort Bend County, Texas. Amended and defined as Thirty (30) feet, located along the North property line, as reflected by instrument recorded in Volume 411, Page 607 of the Deed Records of Fort Bend County, Texas and assigned to TEPPCO Crude Pipeline, L.P., by instrument recorded under Clerk's File No. 2003101891 of the Official Public Records of Fort Bend County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.e Intentionally Deleted

10.f Pipeline right-of-way easement in favor of Shell Rancho, located along the North property line, as set forth in instrument recorded in/under Volume 301, Page 291 of the Deed Records of County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas.
[Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.g An easement Eighty (80) feet wide, granted to Houston Lighting & Power Company, located along the North property line, the location of which is reflected by instrument recorded in Volume 431, Page 334 of the Deed Records of Fort Bend County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.h An easement granted to Houston Lighting & Power Company, the location of which is reflected by instrument recorded in Volume 606, Page 891, Volume 606, Page 893 and Volume 616, Page 617 of the Deed Records of Fort Bend County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.i A water line easement Thirty (30) feet wide, the location of which is reflected by instrument recorded under Clerk's File No. 2009106060 and 2009106061 of the Official Public Records of Fort Bend County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas.
[Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.j A water line easement Thirty (30) feet wide, the location of which is reflected by instrument recorded under Clerk's File No. 2010080006 of the Official Public Records of Fort Bend County, Texas and as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas.
[Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.k Oil, gas and mineral lease dated August 28, 1956, recorded in/under Volume 354, Page 348 of the Deed Records of Fort Bend County, Texas in favor of T. S. Mabry. (Title to said lease not checked subsequent to its date of execution.)
[Surveyor's remarks: This lease affects the subject property, but is blanket in nature and not plottable.]

10.l All the oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same all of which are expressly excepted herefrom and not insured hereunder, as same are set forth in instrument recorded in/under Volume 657, Page 614 of the Deed Records of Fort Bend County, Texas. Surface rights not waived therein. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed. [Surveyor's remarks: These rights affect the subject property, but are blanket in nature and not plottable.]

10.m All the oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same all of which are expressly excepted herefrom and not insured hereunder, as same are set forth in instrument recorded in/under Volume 1918, Page 1389 (8707936) of the Official Records of Fort Bend County, Texas. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed. [Surveyor's remarks: These rights affect the subject property, but are blanket in nature and not plottable.]

10.n All the oil, gas and other minerals, the royalties, bonuses, rentals and all other rights in connection with same all of which are expressly excepted herefrom and not insured hereunder, as same are set forth in instrument recorded in/under Volume 1918, Page 1393 (8707937) of the Official Records of Fort Bend County, Texas. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed. [Surveyor's remarks: These rights affect the subject property, but are blanket in nature and not plottable.]

10.o Intentionally Deleted

10.p Intentionally Deleted

10.q Intentionally Deleted

10.r Intentionally Deleted

10.s Intentionally Deleted

10.t Building setback line, Twenty five (25) feet in width, along the South property line, as shown on the survey dated January 26, 2016, by Fred W. Lawton, RPLS#2321. [Surveyor's remarks: This item is not applicable to the subject property.]

10.u All leases, grants, exceptions or reservations of coal, lignite, oil, gas and other minerals, together with all rights, privileges, and immunities relating thereto, appearing in the Public Records whether listed in Schedule B or not. There may be leases, grants, exceptions or reservations of mineral interests that are not listed.
[Surveyor's remarks: This is not a survey item.]

10.v Rights of tenants, and assigns, as tenants only, under currently effective lease agreements. [Surveyor's remarks: This is not a survey item.]

10.w Intentionally Deleted

10.x Intentionally Deleted

10.y Sanitary sewer easement Twenty (20) feet wide, located along the South property line, as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.z Drainage easement Twenty (20) feet wide, located along the East property line, as shown on the recorded plat under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This easement affects the subject property, and is plotted and shown hereon.]

10.aa Building setback line, Twenty (20) feet in width, along the South property line, as recorded in/under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This setback affects the subject property, and is plotted and shown hereon.]

10.ab Building setback line, Twenty (20) feet in width, located adjacent to Wayson Drive cul de sac, as recorded in/under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Surveyor's remarks: This setback affects the subject property, and is plotted and shown hereon.]

10.ac An easement for drainage purposes extending a distance of Twenty (20) feet on each side of the centerline of all natural drainage courses, as reflected by the plat recorded in/under Plat No. 20160125 of the Plat Records of Fort Bend County, Texas. [Owner Title Policy Only] [Surveyor's remarks: This easement applies to the subject property, but there are no natural drainage courses located on the property.]

LEGEND

- MANHOLE
- BENCHMARK
- GUY ANCHOR
- UTILITY POLE
- WATER VALVE
- OH — OVERHEAD UTILITY LINE
- PUBLIC WATER LINE
- CENTERPOINT ENERGY GAS LINE
- PUBLIC SANITARY SEWER
- HOUSTON PIPE LINE COMPANY GAS LINE
- EDGE OF ASPHALT
- TOP BANK OF DITCH
- EDGE OF WOODS
- WOOD FENCE
- CHAIN-LINK FENCE
- BARB-WIRE FENCE

ABBREVIATIONS

ABAND.	Abandoned
AC.	Acres
ADJ.	Adjoining
A.E.	Aerial easement
ASPH.	Asphalt pavement
B.L.	Building setback line
C.F.N.	Clerk's File Number
C.M.	Controlling monument
CONC.	Concrete pavement
COR	Corner
D.R.F.B.C.	Deed Records of Fort Bend County
ESMT.	Easement
EX	Existing
FH	Fire hydrant
FL	Flow line (elevation)
FNC	Fence
FND	Found
G	Gutter (elevation)
GKP	Gate keypad
GND	Ground
H.L.&P.	Houston Lighting & Power Company
IP	Intermediate pressure
I.R.	Iron rod
LP	Lamp on utility pole
MB	Mailbox
MH	Manhole
NFV	Not field-verified
NO.	Number
O.P.R.F.B.C.	Official Public Records of Fort Bend County
PG.	Page
PLA	Plastic
PLM	Pipeline marker
P.R.F.B.C.	Plat Records of Fort Bend County
PVC	Plastic pipe
RCP	Reinforced concrete pipe
R.O.W.	Right-of-way
SAN	Sanitary sewer
SET	Set 5/8-inch iron rod with plastic cap, stamped "TERRA SURVEYING", unless otherwise indicated
SQ. FT.	Square feet
S/T	Safety end treatment (concrete)
STL	Steel
STM	Storm sewer
S/W	Sidewalk (concrete)
TBM	Temporary (project) benchmark
TC	Top of curb (elevation)
TFP	Transformer on utility pole
U.E.	Utility easement
VOL.	Volume
W/	With
W.L.E.	Waterline easement
WM	Water meter
WMH	Water manhole
WTR	Waterline

MANHOLE INFORMATION

SAN MH-2: RIM=91.29
FL-N=74.80
FL-E=72.15

SAN MH-3: RIM=91.76
FL-N=76.70
FL-S=75.55

BENCHMARK INFORMATION

All elevations shown hereon are NAVD 88, 2001 Adjustment, elevations based on the U.S. Survey Foot, as determined from differential GPS observations collected on TSARP Reference Marks 040445, 040450, and 040455.

TBM-1 Elevation=90.18' (Sheet 2 of 2)
Railroad spike set in the south face of utility pole, located in the north right-of-way line of Old Richmond Road, approximately 105 feet west of the centerline of the driveway entering a water plant; also being 43 feet west of the southeast corner of the subject property.

TBM-2 Elevation=89.47' (Sheet 1 of 2)
Square chiseled in the centerline of the pavement header of Wayson Drive, which butts into the west line of the subject property; also being approximately 31 feet north of the northwest corner of the subject property.

TBM-3 Elevation=90.08' (Sheet 1 of 2)
Square chiseled on the southwest concrete footing of an electrical transmission tower located 186 feet south and 42 feet east of the northeast corner of the subject property.

SURVEYOR'S CERTIFICATE

To Gala at Four Corners, LP, and Stewart Title Guaranty Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(a), 7(a), 8, 9, 11, 13, 14, 16, 17, 19, and 20 of Table A thereof. Field work was completed on September 1, 2016.

Date signed: 4-12-17

George Collison
Registered Professional Land Surveyor
Texas Registration Number 4461

STATE OF TEXAS
REGISTERED
GEORGE COLLISON
4461
PROFESSIONAL
LAND SURVEYOR

10/3/17

0 40 80 120

HORIZONTAL SCALE: 1"=40'
CONTOUR INTERVAL: 1 FOOT

ADDRESS: 15010 OLD RICHMOND ROAD, SUGAR LAND TX 77498

REV.NO.	DESCRIPTION	BY	DATE	APP.
1	REVISE ADDRESS	SM	4/12/17	

AN ALTA/NSPS LAND TITLE SURVEY OF
10.446 ACRES (455,033 SQ. FT.)
BEING ALL OF RESTRICTED RESERVE "B",
BLOCK 1, PROVISION AT FOUR CORNERS
JOHN LEVERTON SURVEY, ABSTRACT NO. 402
FORT BEND COUNTY, TEXAS

V-2

TERRA SURVEYING CO., INC.
3000 WILCREST DR. – SUITE 210
HOUSTON, TEXAS 77042
(713) 993-0327 – FAX (713) 993-9231

DRAWN BY: SDM	SCALE: 1"=40'	KEY MAP: 527-V
CREW CHIEF: MIKESKA	FIELD DATE: 09/01/16	PROJECT: 1851-1515-S
APPROVED BY:	FIELD BK: 16-32	SHEET 2 OF 2

STATE OF TEXAS

COUNTY OF FORT BEND

We, BEST TRASH, LLC, acting by and through Richard May, Member; BEST TRASH TEXAS, acting by and through Matthew May, Member; and PROVISION AT FOUR CORNERS, LP, acting by and through Provision at Four Corners GP, LLC, its' general partner, by Provision at Four Corners MM, LLC, its managing member, Jervon Harris, Manager, owners, hereinafter referred to as Owners of the 19.956 acre tract described in the above and foregoing map of PROVISION AT FOUR CORNERS, do hereby make and establish said subdivision and development plat 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), 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 and assigns to warrant and forever defend the title on the land so dedicated.

FURTHER, We have dedicated and by these presents do dedicate to the use of the public for public utility purposes 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, We 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, We 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, road or alley or any drainage ditch, either directly or indirectly.

FURTHER, We 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 and drainage ditches located in said subdivision, as easements for drainage purposes, Fort Bend County or any other governmental agency shall have the right to enter upon said easement at any and all times for the purposes of construction and maintenance of drainage facilities and structures.

FURTHER, We do hereby covenant and agree that all of the property within the boundaries of this plat 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, planting 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, Owners hereby certify that this replat does not attempt to alter, amend, or remove any covenants or restrictions; we further certify that no portion of the preceding plat was limited by deed restriction to residential use for more than two (2) residential units per lot.

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, the BEST TRASH, LLC, has caused these presents to be signed by Richard May, Member, this 4th day of April, 2016.

BEST TRASH, LLC

By: _____
Richard May, Member

STATE OF TEXAS

COUNTY OF FORT BEND

BEFORE ME, the undersigned authority, on this day personally appeared Richard May, Member of BEST TRASH, 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.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 4 day of April, 2016.

_____
Notary Public in and for the State of Texas
Print name
My Commission expires: Oct. 24, 2018

JENNIFER RAMIREZ
Notary Public, State of Texas
My Commission Expires
October 24, 2018

IN TESTIMONY WHEREOF, the BEST TRASH TEXAS, has caused these presents to be signed by Matthew May, Member, this 4th day of April, 2016.

BEST TRASH TEXAS

By: _____
Matthew May, Member

STATE OF TEXAS

COUNTY OF FORT BEND

BEFORE ME, the undersigned authority, on this day personally appeared Matthew May, Member of BEST TRASH TEXAS, 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.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 4 day of April, 2016.

_____
Notary Public in and for the State of Texas
Print name
My Commission expires: Oct. 24, 2018

JENNIFER RAMIREZ
Notary Public, State of Texas
My Commission Expires
October 24, 2018

IN TESTIMONY WHEREOF, the PROVISION AT FOUR CORNERS, LP, has caused these presents to be signed by Provision at Four Corners GP, LLC, its' general partner, by Provision at Four Corners MM, LLC, its managing member, Jervon Harris, Manager, this 4th day of April, 2016.

PROVISION AT FOUR CORNERS, LP
By: Provision at Four Corners GP, LLC, its' general partner
By: Provision at Four Corners MM, LLC, its managing member

By: _____
Jervon Harris, Manager

STATE OF TEXAS

COUNTY OF FORT BEND

BEFORE ME, the undersigned authority, on this day personally appeared Jervon Harris, Manager of Provision at Four Corners MM, LLC, managing member of Provision at Four Corners GP, LLC, general partner of PROVISION AT FOUR CORNERS, LP, 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.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 4 day of April, 2016.

_____
Notary Public in and for the State of Texas
Print name
My Commission expires: Oct. 24, 2018

JENNIFER RAMIREZ
Notary Public, State of Texas
My Commission Expires
October 24, 2018

I, George Collison, am registered 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.

_____
George Collison
Registered Professional Land Surveyor
Texas Registration No. 4461

STATE OF TEXAS
GEORGE COLLISON
4461
PROFESSIONAL LAND SURVEYOR

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

_____
Sean Faulkner
Registered Professional Engineer, No. 92581
Firm Number: TBPE F-12878

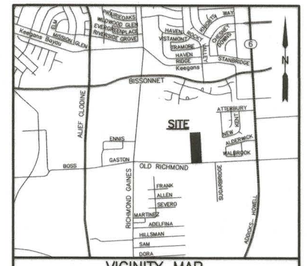
STATE OF TEXAS
SEAN FAULKNER
92581
LICENSED
PROFESSIONAL ENGINEER

This is to certify that the Planning Commission of the City of Houston, Texas, has approved this plat (or instrument when appropriate) and subdivision of PROVISION AT FOUR CORNERS in conformance with the laws of the State of Texas and the ordinances of the City of Houston, as shown hereon, and authorized the recording of this plat (or instrument when appropriate) this 19th day of April, 2016.

By: _____
Mark A. Kilkenny (or) M. Sonny Garza
Chair or Vice Chairman

By: _____
Patrick Walsh, P.E.
Secretary

HOUSTON PLANNING COMMISSION
HOUSTON
TEXAS



VICINITY MAP
KEY MAP NO. 527-V

I, Richard W. Stolleis P.E., Fort Bend County Engineer, do hereby certify that the plat of this subdivision complies with all of 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.

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

APPROVED by Commissioners' Court of Fort Bend County, Texas, this the 24th day of May, 2016.

Richard Morrison
Precinct 1, County Commissioner

Grady Prestage
Precinct 2, County Commissioner

Robert E. Hebert
County Judge

W.A. "Andy" Meyer
Precinct 3, County Commissioner

James Patterson
Precinct 4, County Commissioner

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 May 25, 2016, at 8:07 o'clock A.M., in Plat Number 20160125 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.

Laura Richard, County Clerk
Fort Bend County, Texas

Deputy SAN JUANITA RENTERIA

COUNTY CLERK OF FORT BEND COUNTY, TEXAS

25 PGS 2016053855
PLAT ATTACH

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

Laura Richard, County Clerk
Fort Bend County, Texas
May 25, 2016 08:07:19 AM
FEE: $394.00 SR1
PLAT 20160125

PROVISION AT FOUR CORNERS

A SUBDIVISION OF 19.956 ACRES OF LAND
BEING A PARTIAL REPLAT OUT OF THE EAST HALF OF LOT 17 OF
BROWN BROTHER'S SUBDIVISION (VOL. 35, PG. 232, F.B.C.D.R.)
LOCATED IN THE
JOHN LEVERTON SURVEY, A-402
FORT BEND COUNTY, TEXAS

1 BLOCK 2 RESERVES

REASON FOR REPLAT: TO CREATE TWO (2) RESTRICTED RESERVES

V-3

OWNERS:
BEST TRASH, LLC & BEST TRASH TEXAS
17820 MADDEN ROAD
RICHMOND, TEXAS 77407
(281) 734-2271

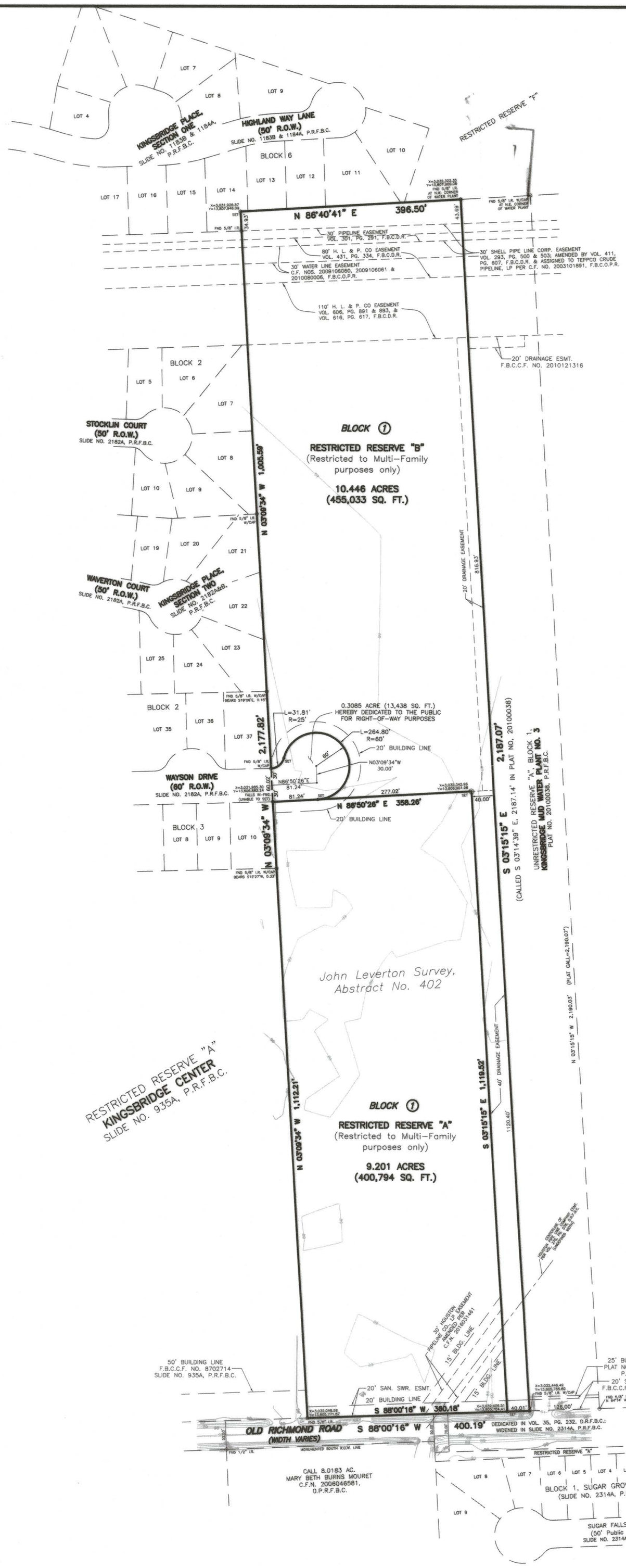
OWNER:
PROVISION AT FOUR CORNERS, LP
4803 SOUTH NATIONAL AVENUE, SUITE 200
SPRINGFIELD, MISSOURI 65810
(417) 447-1800

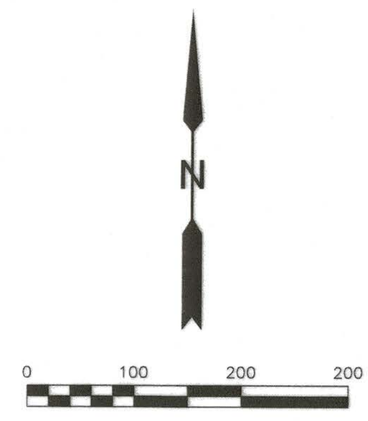
ENGINEER:
FORESITE GROUP, INC.
1999 BRYAN STREET, SUITE 890
DALLAS, TEXAS 75201
(214) 939-7123

SURVEYOR:
TERRA SURVEYING COMPANY, INC.
3000 WILCREST DRIVE, SUITE 210
HOUSTON, TEXAS 77042
(713) 993-0327

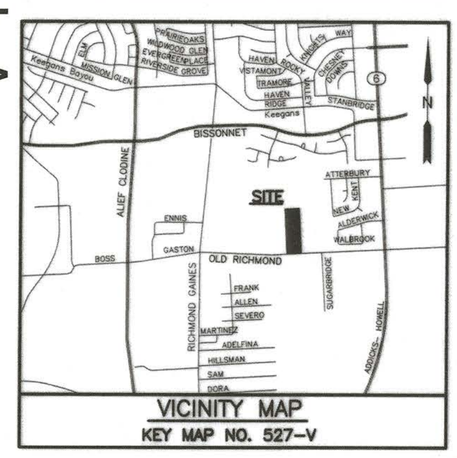
DATE: MARCH 24, 2016 SCALE: 1"= 100' PROJECT NO.:1851-1515-P

10/31/17





V-4



VICINITY MAP
KEY MAP NO. 527-V

10/3/17

NOTES:

1. The coordinates shown hereon are Texas South Central Zone No. 4204 State Plane Grid Coordinates (NAD83) and may be brought to surface by applying the following combined scale: 1.00013 (0.999870017).

2. All bearings based on the Texas State Plane Coordinate System, South Central Zone (NAD 83).

3. Unless otherwise indicated, the building line [B.L.], whether one or more, shown on this subdivision plat are established to evidence compliance 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. All non-perimeter easements on property lines are centered unless otherwise noted.

5. This tract lies in Zone "X" (unshaded), designated as "Areas determined to be outside the 0.2% annual chance floodplain", as per the National Flood Insurance Program FIRM Panel Number 48157C0145 L, published map revised date April 2, 2014.

6. All property to drain into the drainage easement only through an approved drainage structure.

7. This property lies within Fort Bend County, West Keegans Bayou Improvement District, Kingsbridge Municipal Utility District and Fort Bend Independent School District.

8. This property lies within Houston Extraterritorial Jurisdiction.

9. All known pipeline easements within the plat boundary are shown hereon.

10. Sidewalks shall be built or caused to be built not less than 5 feet in width on both sides of all dedicated right-of-way within said plat and on the contiguous right-of-way of all perimeter roads surrounding said plat, in accordance with ADA requirements.

11. The top of all floor slabs constructed hereafter shall be a minimum of 90.5 feet above mean sea level. In addition, the top of slab elevation at any point of the perimeter of the slab shall not be less than eighteen (18) inches above natural ground.

12. 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.

13. The Lighting Zone is LZ3.

14. This subdivision is subject to Restrictive Covenants, as recorded in Volume 657, Page 614 (Use of Land, pages 620 and 621) of the Deed Records of Fort Bend County, Texas.

15. All drainage easements to be kept clear of fences, buildings, vegetation and other obstructions for the purpose of the operation and maintenance of the drainage facility.

16. The contours shown hereon are per conditions prior to the addition of fill.

17. The detention pond will be owned and maintained by the Owners, or subsequent Owners.

18. 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 Commissioner Court on January 24, 2006, and as amended on August 27, 2013.

19. 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.

ABBREVIATIONS

AC.	Acres
ADJ.	Adjoining
A.E.	Aerial easement
B.L.	Building setback line
C.F.N.	Clerk's File Number
D.R.F.B.C.	Deed Records of Fort Bend County
F.B.C.C.F. NO.	Fort Bend County Clerk's File Number
ESMT.	Easement
FND	Found
GND	Ground
HL&P	Houston Lighting & Power
I.R.	Iron rod
NO.	Number
O.P.R.F.B.C.	Official Public Records of Fort Bend County
PG.	Page
P.F.B.C.	Plat Records of Fort Bend County
R.O.W.	Right-of-way
SAN. SWR.	Sanitary Sewer
SET	Set 5/8-inch iron rod with plastic cap, stamped "TERRA SURVEYING"
SQ. FT.	Square feet
U.E.	Utility easement
VOL.	Volume
W/	With
W.L.E.	Waterline easement
WTR	Waterline

25 PGS 2016053855
PLAT ATTACH

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

Laura Richard, County Clerk
Fort Bend County, Texas
May 25, 2016 08:07:19 AM
FEE: $394.00 SR1 20160125
PLAT

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RICHMOND, TEXAS 77407
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OWNER:
PROVISION AT FOUR CORNERS, LP
4803 SOUTH NATIONAL AVENUE, SUITE 200
SPRINGFIELD, MISSOURI 65810
(417) 447-1800

ENGINEER:
FORESITE GROUP, INC.
1999 BRYAN STREET, SUITE 890
DALLAS, TEXAS 75201
(214) 939-7123

SURVEYOR:
TERRA SURVEYING COMPANY, INC.
3000 WILCREST DRIVE, SUITE 210
HOUSTON, TEXAS 77042
(713) 993-0327

DATE: MARCH 24, 2016 SCALE: 1"= 100' PROJECT NO.:1851-1515-P

GENERAL NOTES:

1) CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE DEVELOPMENT PERMIT FROM FORT BEND COUNTY PRIOR TO DEMOLITION OF THE SITE.

2) ALL INITIAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY WORK INCLUDING DEMOLITION.

3) ALL CONSTRUCTION RELATED PERMITS DURING THE CONSTRUCTION PHASE OF THIS PROJECT ARE THE RESPONSIBILITY OF THE CONTRACTOR.

4) THE CONTRACTOR SHALL REMOVE SHRUBS AND TREES AS NOTED. GRUB OUT ROOTS AND STUMPS AND LEGALLY DISPOSE OF DEBRIS.

5) ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.

DEMOLITION NOTES:

1) ALL NEW WORK SHOWN IN THESE SHEETS SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL BUILDING AND UTILITY INSTALLATION CODES.

2) ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH TXDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES EXCEPT IN CASES WHERE WITHIN FORT BEND COUNTY JURISDICTION, THE COUNTY STANDARD SPECIFICATIONS ARE MORE STRINGENT.

3) THERE MAY BE ADDITIONAL UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN, AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND TO NOTIFY THE OWNER IN CASE OF DISCREPANCIES THAT AFFECT THE CONSTRUCTION PROJECT.

4) THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION OF AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATION AND RELOCATION OF AND TIE-IN TO PUBLIC UTILITIES.

5) THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE THAT MAY OCCUR TO ANY ADJACENT STRUCTURES OR PROPERTY, OR ANY EXISTING STRUCTURES WITHIN LIMITS OF CONSTRUCTION THAT ARE DESIGNATED ON THE PLANS TO REMAIN, AND SHALL REPAIR OR REPLACE SUCH DAMAGED PROPERTY TO THE PROPERTY OWNER'S SATISFACTION AT NO COST TO THE OWNER.

6) THE CONTRACTOR SHALL NOT DEVIATE FROM THESE PLANS AND SPECIFICATIONS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ENGINEER.

7) THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING FORT BEND COUNTY AND ALL EXISTING UTILITY PROVIDERS BEFORE REMOVING ANY/ALL UTILITIES FROM THEIR EXISTING LOCATION ON THE SITE. THE CONTRACTOR SHALL PERFORM ALL UTILITY DEMOLITION OR RELOCATION ACTIVITIES IN ACCORDANCE WITH THE EXISTING UTILITIES SPECIFICATIONS, MATERIALS, AND REQUIREMENTS.

8) THE CONTRACTOR SHALL SEQUENCE THE WORK AND PROVIDE TEMPORARY MEASURES AS NECESSARY TO MAINTAIN ACCESS TO THE SITE THROUGH ALL ENTRANCES AT ALL TIMES DURING CONSTRUCTION. TEMPORARY PROVISIONS MAY INCLUDE, BUT ARE NOT LIMITED TO: BARRICADES, FLASHING LIGHTS, FLAGMAN, TEMPORARY PAVEMENT, AND DIRECTIONAL SIGNAGE AS NECESSARY TO ACCOMPLISH THE WORK.

9) THE CONTRACTOR SHALL CONSIDER COORDINATION ASPECTS OF CRANES AND CONSTRUCTION EQUIPMENT OPERATIONS DURING DEMOLITION ACTIVITY.

10) THE CONTRACTOR EQUIPMENT SHALL NOT BE PARKED IN COUNTY, CITY OR STATE RIGHT-OF-WAY, AND MUST BE STORED WITHIN SITE.

11) THE CONTRACTOR SHALL COORDINATE WITH FORT BEND COUNTY AS REQUIRED DURING ALL DEMOLITION AND NEW CONSTRUCTION ACTIVITIES.

12) APPROVAL OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY FORT BEND COUNTY OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR APPROVAL OF ANY WETLAND AREA DISTURBANCE.

13) ALL BUFFERS AND SAVE AREAS SHALL BE CLEARLY IDENTIFIED BY FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.

14) THE CONTRACTOR SHALL DISPOSE OF ANY HAZARDOUS MATERIALS IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.

15) ALL ITEMS DESIGNATED FOR REMOVAL SHALL BE LEGALLY DISPOSED OF, OFF SITE.

16) THE CONTRACTOR SHALL CONTACT UTILITIES PROTECTION CENTER PRIOR TO ANY EXCAVATION.

17) THE CONTRACTOR SHALL POT HOLE EXISTING WATER LINE, UNDERGROUND ELECTRICAL LINES, GAS LINE, UNDERGROUND TELEPHONE, FIBER OPTIC, AND ANY OTHER UTILITY LINES WITHIN THE RIGHT OF WAY DURING DEMOLITION ACTIVITIES AND COORDINATE FIELD LOCATIONS AND DEPTHS OF THESE UTILITIES WITH ENGINEER FOR PROPOSED UTILITY CROSSINGS AND PROPOSED PAVEMENT OVER EXISTING LINES. THESE LINES MAY REQUIRE RELOCATION.

EROSION CONTROL NOTES

(SEE ALSO EROSION CONTROL PLAN)

1) EROSION CONTROL DEVICES ARE TO BE INSTALLED PRIOR TO ANY CLEARING OR EARTHWORK OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ALL DISTURBED AREAS.

2) THE CONTRACTOR SHALL PROVIDE DUST CONTROL AND SHALL PROTECT ADJACENT PAVEMENTS FROM SOIL ACCUMULATION DURING CONSTRUCTION.

3) ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY THE ENGINEER OR OTHER INSPECTORS AS DETERMINED BY FIELD CONDITIONS.

4) THE CONTRACTOR SHALL BE FAMILIAR WITH AND FOLLOW ALL RECOMMENDATIONS GIVEN BY GEOTECHNICAL REPORT BY ALPHA TESTING INC. DATED 10/06/2016 AND BY PHASE I REPORT BY AEI CONSULTANTS DATED 02/09/2016 DURING DEMOLITION AND SITE CONSTRUCTION.

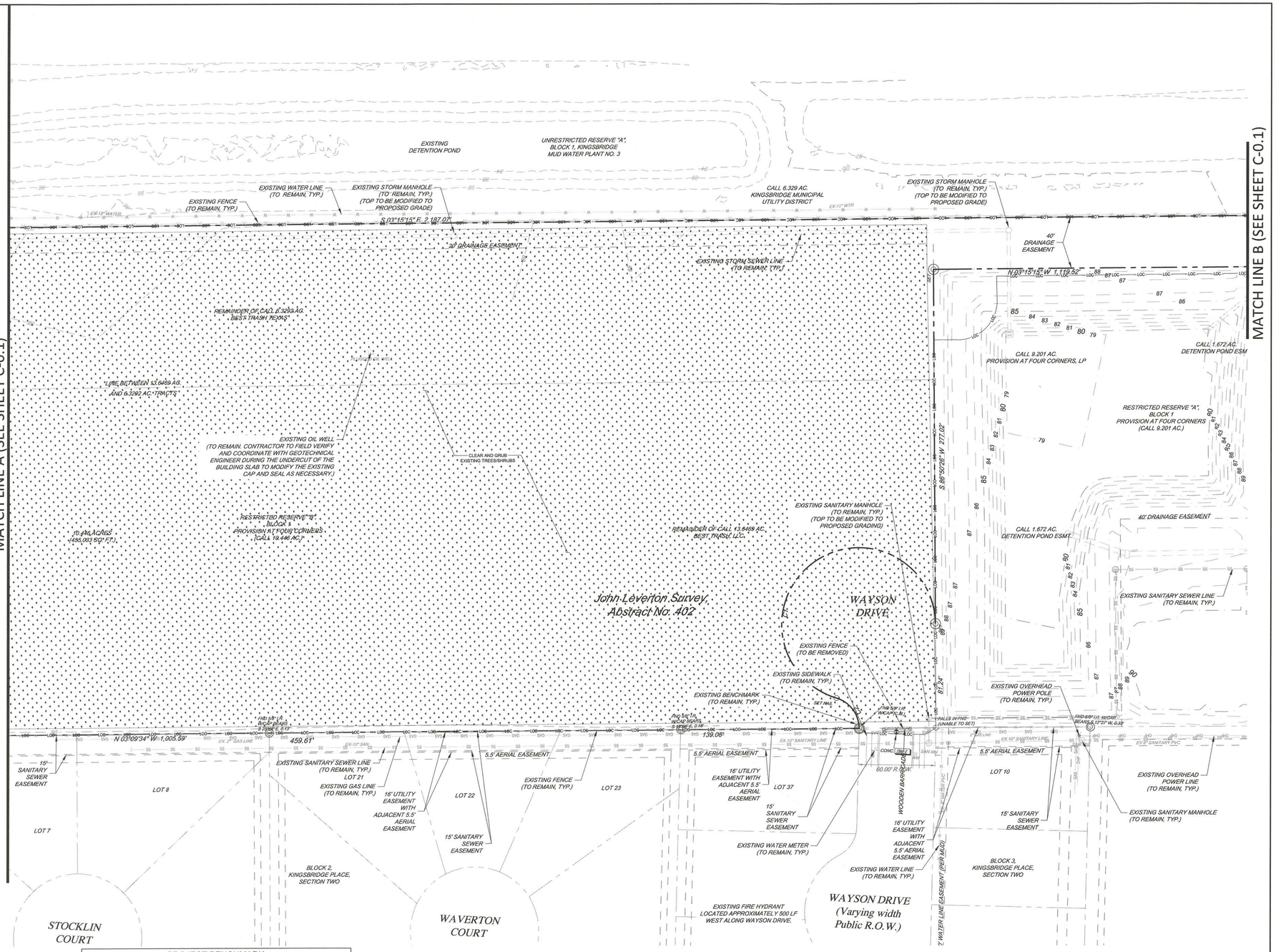
LEGEND

	UTILITIES, FENCE, AND/OR WALL TO BE REMOVED AND/OR RELOCATED. SEE NOTE FOR DETAIL.
	BUILDING/CONCRETE TO BE REMOVED
	ASPHALT, GRAVEL, AND/OR CURB & GUTTER TO BE REMOVED
	TREES AND BRUSH TO BE REMOVED
	EXISTING FENCE
	PROPERTY LINE
—LOC—LOC—LOC—	LIMITS OF CONSTRUCTION

EXISTING SITE DATA

TOTAL SITE AREA =	10.45 AC.
EXISTING PERVIOUS AREA =	10.45 AC.
EXISTING IMPERVIOUS AREA =	0.00 AC.

Know what's below Call before you dig



PROJECT BENCHMARK

ALL ELEVATIONS SHOWN HEREON ARE NAVD 88, 2001 ADJUSTMENT. ELEVATIONS BASED ON THE U.S. SURVEY FOOT, AS DETERMINED FROM DIFFERENTIAL GPS OBSERVATIONS COLLECTED ON TSARP REFERENCE MARKS 040445, 040450, AND 040455.

TBM-1 ELEVATION = 90.18 FEET (SHEET 2 OF 2)
RAILROAD SPIKE SET IN THE SOUTH FACE OF UTILITY POLE, LOCATED IN THE NORTH RIGHT-OF-WAY LINE OF OLD RICHMOND ROAD, APPROXIMATELY 105 FEET WEST OF THE CENTERLINE OF THE DRIVEWAY ENTERING A WATER PLAN; ALSO BEING 43 FEET WEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY.

TBM-2 ELEVATIONS = 89.47 FEET (SHEET 1 OF 2)
SQUARE CHISELED IN THE CENTERLINE OF THE PAVEMENT HEADER OF WAYSON DRIVE, WHICH BUTTS INTO THE WEST LINE OF THE SUBJECT PROPERTY; ALSO BEING APPROXIMATELY 31 FEET NORTH OF THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.

TBM-3 ELEVATION = 90.08 FEET (SHEET 1 OF 2)
SQUARE CHISELED ON THE SOUTHWEST CONCRETE FOOTING OF AN ELECTRICAL TRANSMISSION TOWER LOCATED 186 FEET SOUTH AND 42 FEET EAST OF THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.

FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. o | 214.939.7123
Suite 890 f | 888.765.8135
Dallas, TX 75201 w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

DEMOLITION PLAN

SHEET NUMBER:
C-0

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

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15) ALL ITEMS DESIGNATED FOR REMOVAL SHALL BE LEGALLY DISPOSED OF, OFF SITE.

16) THE CONTRACTOR SHALL CONTACT UTILITIES PROTECTION CENTER PRIOR TO ANY EXCAVATION.

17) THE CONTRACTOR SHALL POT HOLE EXISTING WATER LINE, UNDERGROUND ELECTRICAL LINES, GAS LINE, UNDERGROUND TELEPHONE, FIBER OPTIC, AND ANY OTHER UTILITY LINES WITHIN THE RIGHT OF WAY DURING DEMOLITION ACTIVITIES AND COORDINATE FIELD LOCATIONS AND DEPTHS OF THESE UTILITIES WITH ENGINEER FOR PROPOSED UTILITY CROSSINGS AND PROPOSED PAVEMENT OVER EXISTING LINES. THESE LINES MAY REQUIRE RELOCATION.

EROSION CONTROL NOTES

(SEE ALSO EROSION CONTROL PLAN)

1) EROSION CONTROL DEVICES ARE TO BE INSTALLED PRIOR TO ANY CLEARING OR EARTHWORK OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ALL DISTURBED AREAS.

2) THE CONTRACTOR SHALL PROVIDE DUST CONTROL AND SHALL PROTECT ADJACENT PAVEMENTS FROM SOIL ACCUMULATION DURING CONSTRUCTION.

3) ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED BY THE ENGINEER OR OTHER INSPECTORS AS DETERMINED BY FIELD CONDITIONS.

4) THE CONTRACTOR SHALL BE FAMILIAR WITH AND FOLLOW ALL RECOMMENDATIONS GIVEN BY GEOTECHNICAL REPORT BY ALPHA TESTING INC. DATED 10/06/2016 AND BY PHASE I REPORT BY AEI CONSULTANTS DATED 02/09/2016 DURING DEMOLITION AND SITE CONSTRUCTION.

LEGEND

	UTILITIES, FENCE, AND/OR WALL TO BE REMOVED AND/OR RELOCATED. SEE NOTE FOR DETAIL.
	BUILDING/CONCRETE TO BE REMOVED
	ASPHALT, GRAVEL, AND/OR CURB & GUTTER TO BE REMOVED
	TREES AND BRUSH TO BE REMOVED
	EXISTING FENCE
	PROPERTY LINE
—LOC— LOC —LOC—	LIMITS OF CONSTRUCTION

EXISTING SITE DATA

TOTAL SITE AREA =	10.45 AC.
EXISTING PERVIOUS AREA =	10.45 AC.
EXISTING IMPERVIOUS AREA =	0.00 AC.

PROJECT BENCHMARK

ALL ELEVATIONS SHOWN HEREON ARE NAVD 88, 2001 ADJUSTMENT, ELEVATIONS BASED ON THE U.S. SURVEY FOOT, AS DETERMINED FROM DIFFERENTIAL GPS OBSERVATIONS COLLECTED ON TSARP REFERENCE MARKS 040445, 040450, AND 040455.

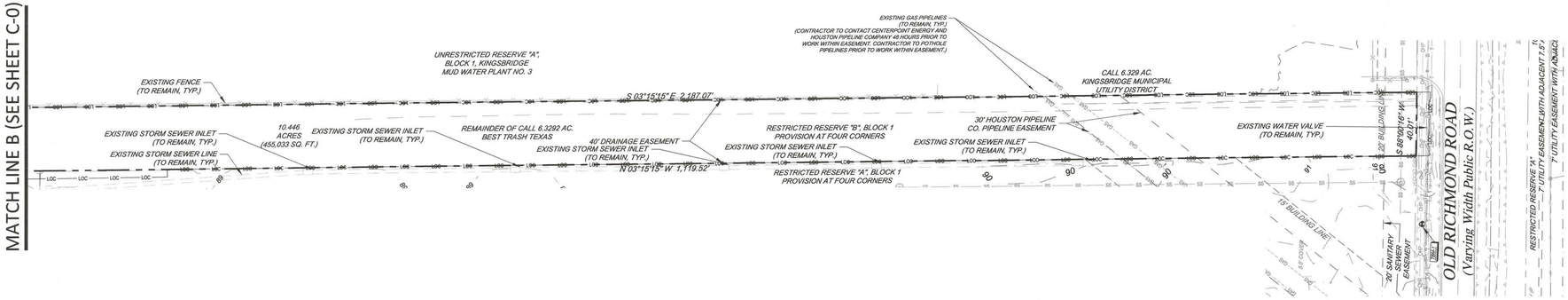
TBM-1 ELEVATION = 90.18 FEET (SHEET 2 OF 2)
RAILROAD SPIKE SET IN THE SOUTH FACE OF UTILITY POLE, LOCATED IN THE NORTH RIGHT-OF-WAY LINE OF OLD RICHMOND ROAD, APPROXIMATELY 105 FEET WEST OF THE CENTERLINE OF THE DRIVEWAY ENTERING A WATER PLAN; ALSO BEING 43 FEET WEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY.

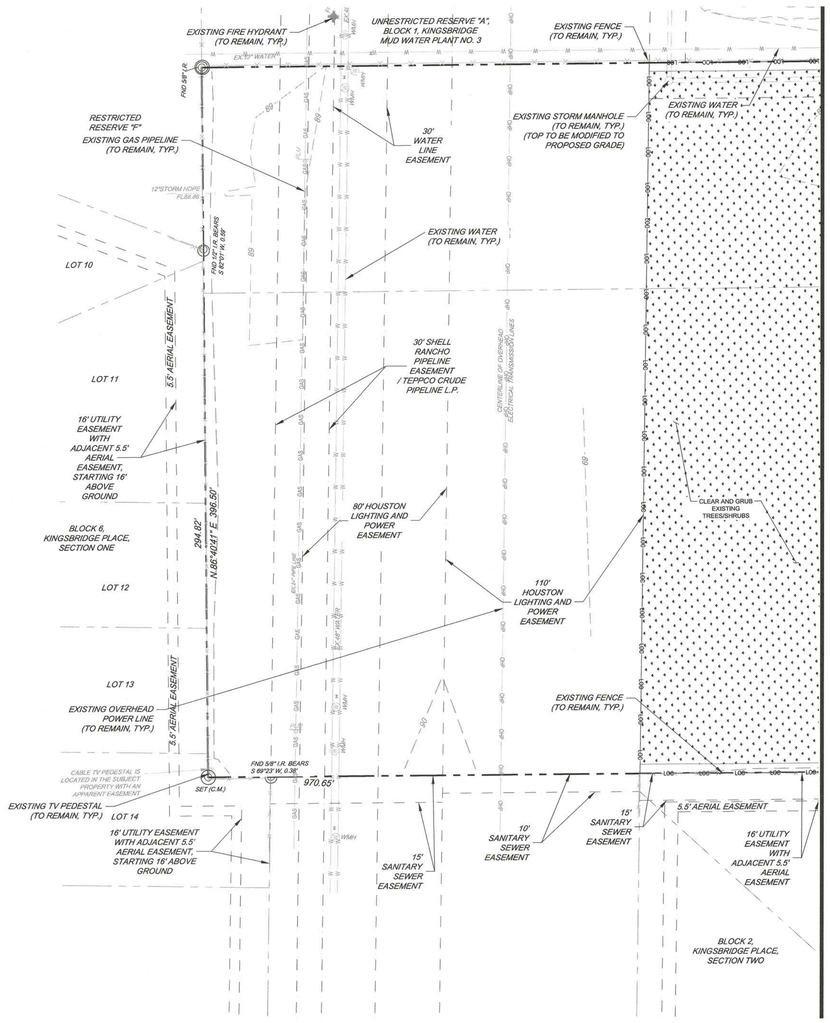
TBM-2 ELEVATIONS = 89.47 FEET (SHEET 1 OF 2)
SQUARE CHISELED IN THE CENTERLINE OF THE PAVEMENT HEADER OF WAYSON DRIVE, WHICH BUTTS INTO THE WEST LINE OF THE SUBJECT PROPERTY; ALSO BEING APPROXIMATELY 31 FEET NORTH OF THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.

TBM-3 ELEVATION = 90.08 FEET (SHEET 1 OF 2)
SQUARE CHISELED ON THE SOUTHWEST CONCRETE FOOTING OF AN ELECTRICAL TRANSMISSION TOWER LOCATED 186 FEET SOUTH AND 42 FEET EAST OF THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.

811 Know what's below Call before you dig

MATCH LINE B (SEE SHEET C-0)





MATCH LINE A (SEE SHEET C-0)

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. o | 214.939.7123
Suite 890 f | 888.765.8135
Dallas, TX 75201 w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C-0.1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES:

1) ALL PROPOSED DIMENSIONS USED TO SHOW THE GEOMETRIC LAYOUT OF THE PROPOSED PARKING LOT ARE SHOWN AT THE FACE OF CURB. ALL PROPOSED DIMENSIONS USED TO SHOW THE GEOMETRIC LAYOUT OF THE PROPOSED BUILDING LOCATION ARE GIVEN AT THE OUTSIDE FACE OF THE BUILDING CORNERS. ALL CURB RADII ARE GIVEN AT THE FACE OF CURB.

2) THE CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS IN THE FIELD AND THE SURVEY SHOWN ON THE PLANS BEFORE PROCEEDING WITH ANY NEW CONSTRUCTION.

3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT HORIZONTAL AND VERTICAL ALIGNMENT OF ALL TIES BETWEEN PROPOSED AND EXISTING PAVEMENTS, CURB AND GUTTER, SIDEWALKS, WALLS, AND UTILITIES.

4) ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.

SITE NOTES:

1) TRACT IS ZONED: NOT ZONED (FORT BEND COUNTY DOES NOT MAINTAIN A ZONING ORDINANCE)

2) SEE ARCHITECTURAL PLANS FOR BUILDING FLOOR PLAN DIMENSIONS, DOOR LOCATIONS, SITE LIGHTING PLAN, AND OTHER ARCHITECTURAL DETAILS.

3) NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED ON THE SITE.

4) HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM THE PUBLIC VIEW AND DOES NOT INTERFERE WITH TRAFFIC. (SEE PHOTOMETRICS PLAN IN ARCHITECTUAL PLANS).

5) ALL BUFFERS, TREE SAVE AREAS, AND UNDISTURBED AREAS SHALL BE CLEARLY IDENTIFIED BY FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.

6) NO OUTSIDE STORAGE IS PROPOSED. THIS INCLUDES SUPPLIES, VEHICLE, EQUIPMENT, PRODUCTS, ETC.

7) SIGNS (LOCATION, NUMBER, AND SIZE) ARE NOT APPROVED UNDER THIS DEVELOPMENT PERMIT. A SEPARATE PERMIT IS REQUIRED FOR ON-SITE SIGNAGE.

8) ALL PAVEMENT MARKING WITHIN FORT BEND COUNTY RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND ACCORDING TO TXDOT SPECIFICATIONS.

9) ALL CONSTRUCTION RELATED PERMITS DURING THE CONSTRUCTION PHASE OF THIS PROJECT ARE THE RESPONSIBILITY OF THE OWNER, HOWEVER A CONTRACTOR/DEVELOPER CAN DO PERMITTING WITH AGENT AUTHORIZATION.

10) CONSTRUCTION TRAILERS ARE TO BE PERMITTED THROUGH THE PERMITS DIVISION OF FORT BEND COUNTY ENGINEERING.

11) ALL EROSION, SEDIMENT CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY GRADING.

12) MAXIMUM CUT OR FILL SLOPE=2H:IV

13) FORT BEND COUNTY ACCEPTS NO RESPONSIBILITY FOR THE AMERICANS WITH DISABILITIES ACT (ADA), EXCEPT FOR NOTIFICATION REQUIREMENT. THE OWNER/DEVELOPER IS SOLELY RESPONSIBLE FOR COMPLIANCE FOR SAID ACT.

14) 24 HOUR CONTACT: MR. JOHN B. RHODES, JR., PE, (214) 939-7123

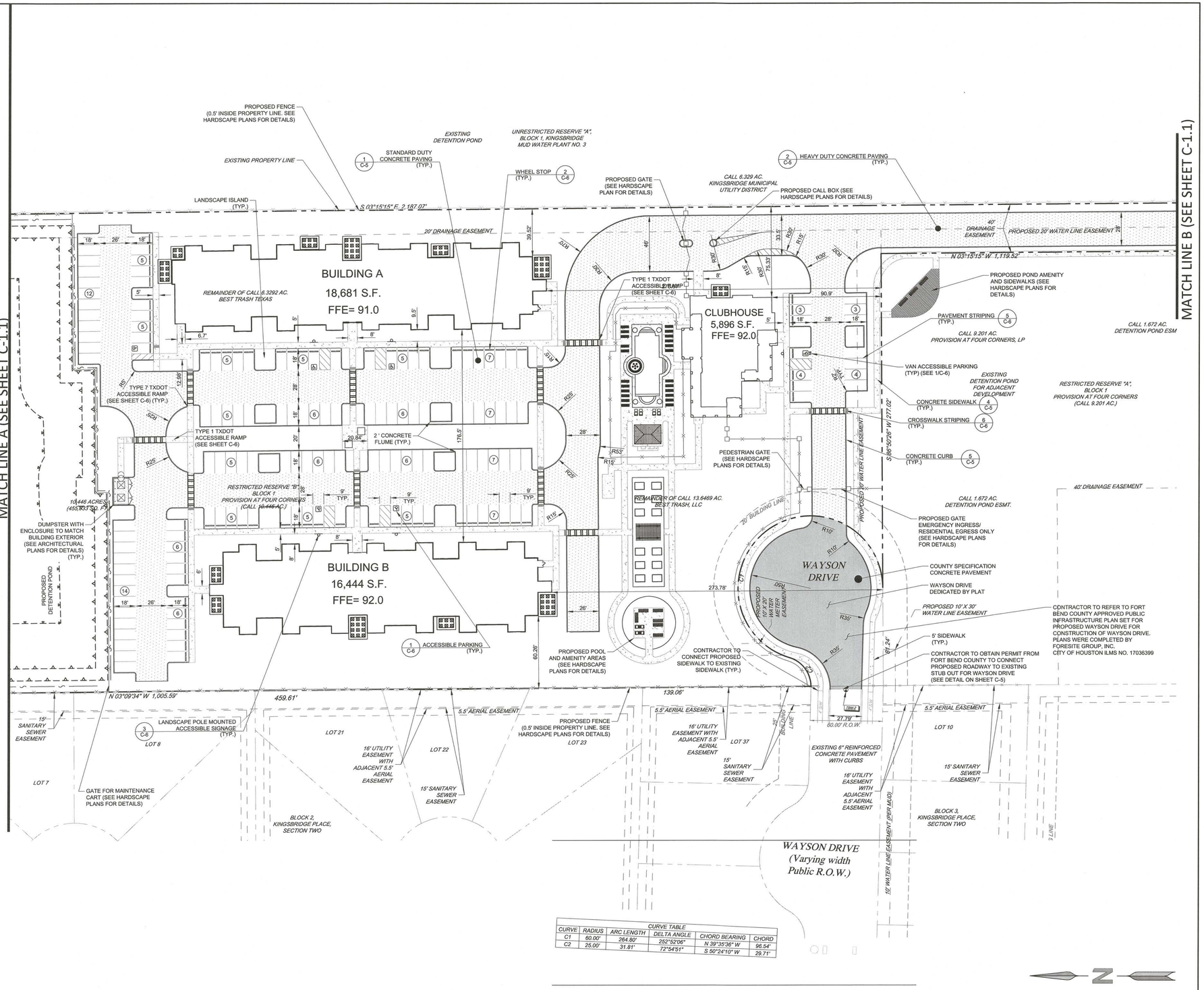
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LEGEND

- STANDARD DUTY CONCRETE PAVING — 5" THICK PORTLAND CEMENT WITH SUBGRADE COMPACTED TO 95% ASTM D698. 3,500 PSI WITH #3 REBAR 18" O.C.E.W.
- HEAVY DUTY CONCRETE PAVING — 6" THICK PORTLAND CEMENT WITH SUBGRADE COMPACTED TO 95% ASTM D698. 3,500 PSI WITH #3 REBAR 18" O.C.E.W.
- DUMPSTER AREA CONCRETE PAVING — 7" THICK PORTLAND CEMENT WITH SUBGRADE COMPACTED TO 95% ASTM D698. 3,500 PSI WITH #3 REBAR 18" O.C.E.W.
- COUNTY SPECIFICATION CONCRETE PAVING
- CONCRETE SIDEWALK PAVING
- PROPERTY LINE
- (#) PARKING COUNT
- TRAFFIC SIGN
- PAINTED TRAFFIC ARROWS
- TRAFFIC FLOW LANE DESIGNATION

SITE DATA

ZONING:	NOT ZONED (FORT BEND COUNTY DOES NOT MAINTAIN A ZONING ORDINANCE)
TOTAL SITE AREA:	10.45 AC.
PROJECT SITE AREA:	10.45 AC.
DISTURBED AREA:	8.43 AC.
PERVIOUS SURFACE AREA:	6.46 AC.
IMPERVIOUS SURFACE AREA:	3.99 AC.
PARKING RATIO REQUIRED:	NOT SPECIFIED
PARKING REQUIRED:	NOT SPECIFIED
PARKING PROVIDED:	154 SPACES
ACCESSIBLE PARKING REQUIRED:	6 SPACES
ACCESSIBLE PARKING PROVIDED:	6 SPACES



FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

1" = 40'
40 20 0 40 80
SCALE IN FEET

Know what's below Call before you dig

ENGINEER:

FORESITE group

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Suite 890 — f | 888.765.8135
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(417) 447-5538

CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

STATE OF TEXAS — JOHN B. RHODES, JR. — 112311 — LICENSED PROFESSIONAL ENGINEER

09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:

SITE & PAVING PLAN

SHEET NUMBER:

C-1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES:

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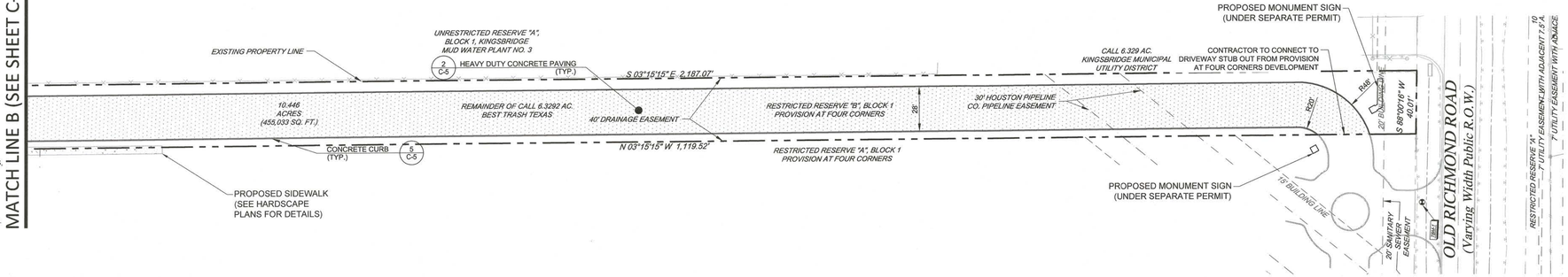
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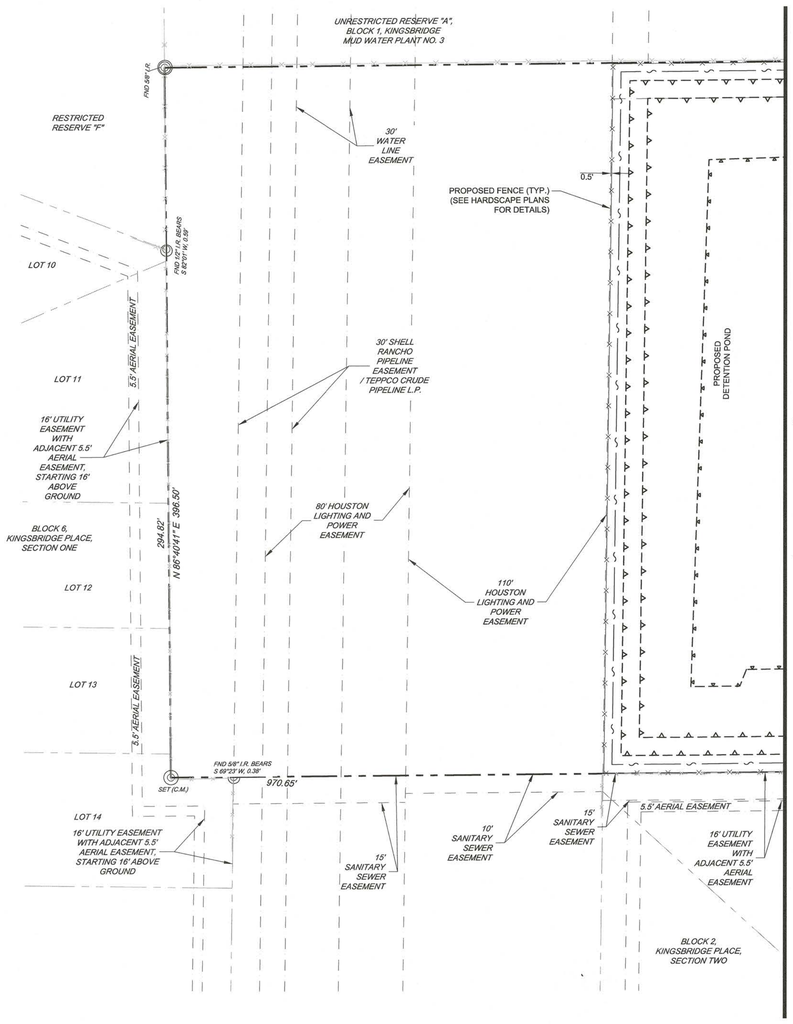
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LEGEND	
	STANDARD DUTY CONCRETE PAVING 5" THICK PORTLAND CEMENT WITH SUBGRADE COMPACTED TO 95% ASTM D698. 3,500 PSI WITH #3 REBAR 18" O.C.E.W.
	HEAVY DUTY CONCRETE PAVING 6" THICK PORTLAND CEMENT WITH SUBGRADE COMPACTED TO 95% ASTM D698. 3,500 PSI WITH #3 REBAR 18" O.C.E.W.
	DUMPSTER AREA CONCRETE PAVING 7" THICK PORTLAND CEMENT WITH SUBGRADE COMPACTED TO 95% ASTM D698. 3,500 PSI WITH #3 REBAR 18" O.C.E.W.
	COUNTY SPECIFICATION CONCRETE PAVING
	CONCRETE SIDEWALK PAVING
	PROPERTY LINE
(#)	PARKING COUNT
	TRAFFIC SIGN
	PAINTED TRAFFIC ARROWS
	TRAFFIC FLOW LANE DESIGNATION

SITE DATA	
ZONING:	NOT ZONED (FORT BEND COUNTY DOES NOT MAINTAIN A ZONING ORDINANCE)
TOTAL SITE AREA:	10.45 AC.
PROJECT SITE AREA:	10.45 AC.
DISTURBED AREA:	8.43 AC.
PERVIOUS SURFACE AREA:	6.46 AC.
IMPERVIOUS SURFACE AREA:	3.99 AC.
PARKING RATIO REQUIRED:	NOT SPECIFIED
PARKING REQUIRED:	NOT SPECIFIED
PARKING PROVIDED:	154 SPACES
ACCESSIBLE PARKING REQUIRED:	6 SPACES
ACCESSIBLE PARKING PROVIDED:	6 SPACES

MATCH LINE B (SEE SHEET C-1)





MATCH LINE A (SEE SHEET C-1)

N

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

1" = 40'
40 20 0 40 80
SCALE IN FEET

811 Know what's below Call before you dig

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. o | 214.939.7123
Suite 890 f | 888.765.8135
Dallas, TX 75201 w | www.fg-inc.net
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OWNER:
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DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:
SITE & PAVING PLAN

SHEET NUMBER:
C-1.1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

LEGEND

PROPERTY LINE

(#) PARKING COUNT

MATCH LINE A (SEE SHEET INSERT)

20' DRAINAGE EASEMENT

UNRESTRICTED RESERVE "A", BLOCK 1, KINGSBRIDGE MUD WATER PLANT NO. 3

S 0°01'15" E 2,187.07'

PROPOSED FDC LOCATION

CALL 6.329 AC. KINGSBRIDGE MUNICIPAL UTILITY DISTRICT

PROPOSED 20' WATER LINE EASEMENT

40' DRAINAGE EASEMENT

N 03°19'15" W 1,119.53'

RESTRICTED RESERVE "F"

30' WATER LINE EASEMENT

LOT 10

LOT 11

5.5' AERIAL EASEMENT

16' UTILITY EASEMENT WITH ADJACENT 5.5' AERIAL EASEMENT, STARTING 16' ABOVE GROUND

30' SHELL RANCHO PIPELINE EASEMENT / TEPPCO CRUDE PIPELINE L.P.

BLOCK 6, KINGSBRIDGE PLACE, SECTION ONE

N 88°40'41" E 396.50'

294.62'

LOT 12

LOT 13

LOT 14

80' HOUSTON LIGHTING AND POWER EASEMENT

110' HOUSTON LIGHTING AND POWER EASEMENT

970.65'

15' SANITARY SEWER EASEMENT

10' SANITARY SEWER EASEMENT

5.5' AERIAL EASEMENT

15' SANITARY SEWER EASEMENT

BLOCK 2, KINGSBRIDGE PLACE, SECTION TWO

LOT 8

15' SANITARY SEWER EASEMENT

N 03°09'34" W 1,005.59'

459.61'

LOT 21

16' UTILITY EASEMENT WITH ADJACENT 5.5' AERIAL EASEMENT

LOT 22

5.5' AERIAL EASEMENT

15' SANITARY SEWER EASEMENT

LOT 23

18,681 S.F.
FFE= 91.0

REMAINDER OF CALL 6.3292 AC. BEST TRASH TEXAS

PROPOSED FIRE HYDRANT

PROPOSED 8" PVC WATER LINE

RED STRIPING WITH WHITE LETTERS, TYP. (SEE DETAIL ON THIS SHEET)

10.446 ACRES (455,033 SQ. FT.)

RESTRICTED RESERVE "B", BLOCK 1 PROVISION AT FOUR CORNERS (CALL 10.446 AC.)

PROPOSED DETENTION POND

PROPOSED FIRE HYDRANT

16,444 S.F.
FFE= 92.0

CLUBHOUSE
5,896 S.F.
FFE= 92.0

REMAINDER OF CALL 13.6499 AC. BEST TRASH, LLC

PROPOSED 8" PVC WATER LINE

PROPOSED FIRE HYDRANT

PROPOSED 20' WATER LINE EASEMENT

S 88°50'26" W 177.02'

PROPOSED 8" PVC WATER LINE

PROPOSED 10'-X 30' WATER LINE EASEMENT

WAYSON DRIVE

PROPOSED FIRE HYDRANT

PROPOSED FDC LOCATION

61.24'

60.00' R.O.W.

EXISTING 8" WATER LINE

CALL 9.201 AC. PROVISION AT FOUR CORNERS, LP

CALL 1.672 AC. DETENTION POND ES

PROPOSED FIRE HYDRANT

RESTRICTED RESERVE "A", BLOCK 1 PROVISION AT FOUR CORNERS (CALL 9.201 AC.)

PROPOSED WATER METER

40' DRAINAGE EASEMENT

CALL 1.672 AC. DETENTION POND ESMT.

6.5' AERIAL EASEMENT

16' UTILITY EASEMENT WITH ADJACENT 5.5' AERIAL EASEMENT

LOT 10

15' SANITARY SEWER EASEMENT

16' UTILITY EASEMENT WITH ADJACENT 5.5' AERIAL EASEMENT

LOT 37

15' SANITARY SEWER EASEMENT

MATCH LINE A (SEE SHEET PLAN VIEW)

UNRESTRICTED RESERVE "A", BLOCK 1, KINGSBRIDGE MUD WATER PLANT NO. 3

S 0°01'15" E 2,187.07'

CALL 6.329 AC. KINGSBRIDGE MUNICIPAL UTILITY DISTRICT

PROPOSED 20' WATER LINE EASEMENT

10.446 ACRES (455,033 SQ. FT.)

REMAINDER OF CALL 6.3292 AC. BEST TRASH TEXAS

40' DRAINAGE EASEMENT

N 03°19'15" W 1,119.53'

RESTRICTED RESERVE "B", BLOCK 1 PROVISION AT FOUR CORNERS

30' HOUSTON PIPELINE CO: PIPELINE EASEMENT

RESTRICTED RESERVE "A", BLOCK 1 PROVISION AT FOUR CORNERS

RED STRIPING WITH WHITE LETTERS, TYP. (SEE DETAIL ON THIS SHEET)

726.00'

S 88°50'26" W 40.00'

OLD RICHMOND ROAD
(Varying Width Public R.O.W.)

7' UTILITY EASEMENT WITH 5' AERIAL EASEMENT ADJACENT

20' SANITARY SEWER EASEMENT

FIRE LANE STRIPING DETAIL

FIRE LANE – NO PARKING TOW AWAY ZONE

FIRE LANE

20.0' MINIMUM

45.0' SPACINGS TYPICAL

6" WIDE STRIPE

DIMENSIONS TYP. BOTH SIDES

Know what's below Call before you dig

FBC DEVELOPMENT COORDINATOR

10/3/17
DATE

1" = 50'

50 25 0 50 100

SCALE IN FEET

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St.
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Dallas, TX 75201
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SEAL:

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JOHN B. RHODES, JR.
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LICENSED PROFESSIONAL ENGINEER

09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:

FIRE LANE SITE PLAN

SHEET NUMBER:

C-1.2

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES:

1) ALL SPOT ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

2) ALL PROPOSED SIDEWALKS SHALL BE BUILT WITH A 1.5% CROSS-SLOPE AWAY FROM THE BUILDING.

3) ALL HEAD WALL SECTIONS SHALL BE CONSTRUCTED TO BE FLUSH WITH THE EXISTING DITCH BANK AND PROPOSED EMBANKMENT SLOPES.

4) ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.

SITE NOTES:

1) THE CONTRACTOR SHALL CLEAN OUT ACCUMULATED SILT IN STORM WATER CONVEYANCE CHANNELS AND PIPES AT END OF CONSTRUCTION WHEN DISTURBED AREAS HAVE BEEN STABILIZED.

2) THE CONTRACTOR SHALL COORDINATE WITH FORT BEND COUNTY INSPECTIONS DURING CONSTRUCTION.

3) NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED.

4) THE CONTRACTOR SHALL CONSTRUCT EROSION CONTROL BARRIERS PER FORT BEND COUNTY INSPECTOR AND MAINTAIN UNTIL PERMANENT VEGETATION IS ESTABLISHED.

5) THE CONTRACTOR SHALL RE-ESTABLISH ALL RIGHT OF WAY AREA WHICH IS DAMAGED OR DISTURBED TO ORIGINAL CONDITIONS OR BETTER DURING AUTHORIZED WORK. ALL WORK IN FORT BEND COUNTY RIGHT OF WAY SHALL COMPLY WITH DOT SPECIFICATIONS.

6) ALL CURBED LANDSCAPE ISLANDS SHALL BE FILLED TO TOP OF CURB WITH TOPSOIL AND SEEDED.

7) MAXIMUM CUT OR FILL SLOPES IS 2H:1V

8) TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING ACTIVITIES.

9) ALL STORM PIPE SHOWN ON THIS PLAN SHALL BE WRAPPED WITH LOCATION WIRE AND TAPE.

10) ALL HDPE SHALL BE AASHTO TYPE "S" AND SHALL BE INSTALLED IN ACCORDANCE TO ASTM D2321 OR AASHTO SECTION 30 STANDARD PRACTICES AND AS RECOMMENDED BY THE MANUFACTURER. ALL RCP STORM PIPE SHALL BE CLASS III. ALL PVC PIPE SHALL BE SDR 35 PVC OR CONTECH A-2000 PVC PIPE WITH WATERTIGHT JOINTS.

11) IN ALL AREAS OF FILL OR OTHERWISE DISTURBANCE OF EXISTING CONDITIONS, UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL FULLY AND COMPLETELY REMOVE AND LEGALLY DISPOSE OFF-SITE, ALL PLANT MATERIALS INCLUDING BUT NOT LIMITED TO ROOT SYSTEMS, CONCRETE, REINFORCED CONCRETE, ASPHALT DEBRIS, UNDERBRUSH, TOPSOIL, AND OTHER DELETERIOUS MATERIAL. THE SUBGRADE TO REMAIN SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY FOLLOWING FULL REMOVAL OF THESE MATERIALS.

12) THE CONTRACTOR SHALL REFER TO SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION REPORTS AS PROVIDED BY OWNER FOR RECOMMENDATIONS ASSOCIATED WITH: GENERAL SITE PREPARATION, BUILDING PAD PREPARATION, SUBGRADE PREP, AREAS TO RECEIVE FILL, AREAS TO BE OVER-EXCAVATED, PAVEMENT SECTIONS, FILL SLOPES AND EXCAVATION. CONTRACTOR SHALL HAVE THIS REPORT ON THE JOB SITE FOR REFERENCE AT ALL TIMES. CONTRACTOR SHALL PROVIDE EARTHWORK OPERATIONS AND CONSTRUCTION PHASE MONITORING TO ENSURE THAT ALL COMPACTION IS COMPLETED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. CONTRACTOR SHALL PROVIDE TESTING REPORTS TO THE OWNER REGARDING COMPACTION TESTING PER THE TESTING PROTOCOL IN THE GEOTECHNICAL REPORT.

13) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL DEVICES. **24 HR. CONTACT: MR. JOHN B. RHODES, JR., PE (214) 939-7123**

14) NO PORTION OF THIS PROPERTY LIES WITHIN A SPECIAL FLOOD HAZARD AREA PER PANEL 48157C0145L DATED 04/02/2014

15) DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

16) EXTREME CAUTION SHALL BE USED WHEN WORKING WITHIN THE VICINITY OF THE EXISTING OVERHEAD POWER LINES. CONTRACTORS SHALL NOTIFY/COORDINATE WITH ELECTRIC PROVIDER PRIOR TO CONSTRUCTION.

17) STORM WATER MANAGEMENT SHALL BE IN ACCORDANCE WITH COUNTY, STATE, AND OTHER APPROPRIATE ORDINANCES AND REGULATIONS IN EFFECT AT TIME OF CONSTRUCTION PLAN APPROVAL.

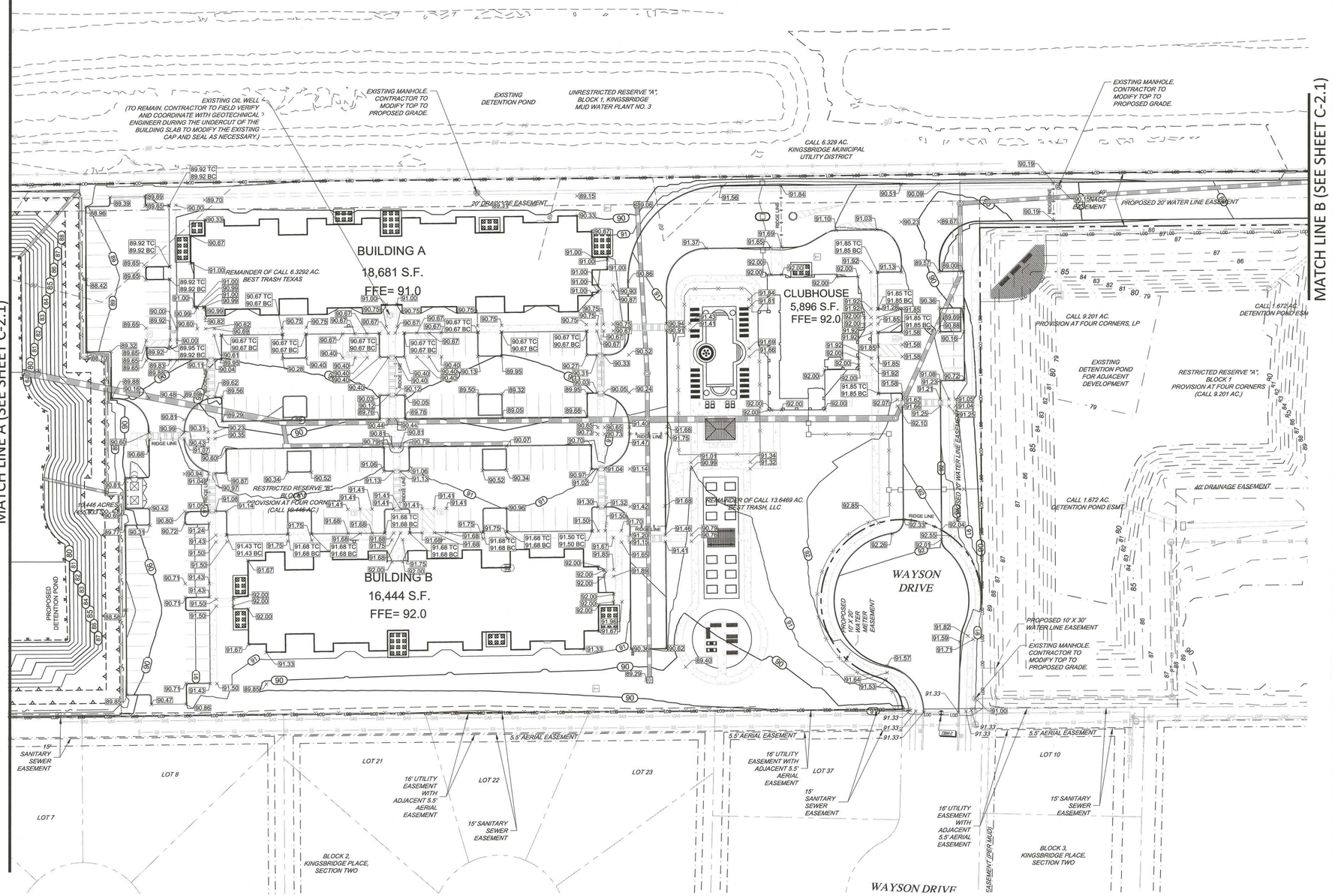
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LEGEND

XXXX	EXISTING CONTOURS
XXXX	EXISTING CONTOURS (PROVISION AT FOUR CORNERS)
XXXX	PROPOSED CONTOURS
	EXISTING STORM PIPE
	EXISTING STORM PIPE (PROVISION AT FOUR CORNERS)
	PROPOSED STORM PIPE
XXXX.XX	EXISTING SPOT ELEVATION
XXXX.XX	PROPOSED SPOT ELEVATION
XXXX.XX TC XXXX.XX BC	PROPOSED SPOT ELEVATION FOR TOP OF CURB / BOTTOM OF CURB AT FINISHED SURFACE GRADE

MATCH LINE A (SEE SHEET C-2.1)

MATCH LINE B (SEE SHEET C-2.1)



PROJECT BENCHMARK

ALL ELEVATIONS SHOWN HEREON ARE NAVD 88, 2001 ADJUSTMENT, ELEVATIONS BASED ON THE U.S. SURVEY FOOT, AS DETERMINED FROM DIFFERENTIAL GPS OBSERVATIONS COLLECTED ON TSARP REFERENCE MARKS 040445, 040450, AND 040455.

TBM-1 ELEVATION = 90.18 FEET (SHEET 2 OF 2)
RAILROAD SPIKE SET IN THE SOUTH FACE OF UTILITY POLE, LOCATED IN THE NORTH RIGHT-OF-WAY LINE OF OLD RICHMOND ROAD, APPROXIMATELY 105 FEET WEST OF THE CENTERLINE OF THE DRIVEWAY ENTERING A WATER PLAN; ALSO BEING 43 FEET WEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY.

TBM-2 ELEVATIONS = 89.47 FEET (SHEET 1 OF 2)
SQUARE CHISELED IN THE CENTERLINE OF THE PAVEMENT HEADER OF WAYSON DRIVE, WHICH BUTTS INTO THE WEST LINE OF THE SUBJECT PROPERTY; ALSO BEING APPROXIMATELY 31 FEET NORTH OF THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.

TBM-3 ELEVATION = 90.08 FEET (SHEET 1 OF 2)
SQUARE CHISELED ON THE SOUTHWEST CONCRETE FOOTING OF AN ELECTRICAL TRANSMISSION TOWER LOCATED 186 FEET SOUTH AND 42 FEET EAST OF THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.

811 Know what's below Call before you dig

FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. — o | 214.939.7123
Suite 890 — f | 888.765.8135
Dallas, TX 75201 — w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/18/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:

GRADING PLAN

SHEET NUMBER:
C-2

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES:

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LEGEND

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XXXX	EXISTING CONTOURS (PROVISION AT FOUR CORNERS)
XXXX	PROPOSED CONTOURS
	EXISTING STORM PIPE
	EXISTING STORM PIPE (PROVISION AT FOUR CORNERS)
	PROPOSED STORM PIPE
XXXX.XX	EXISTING SPOT ELEVATION
XXXX.XX	PROPOSED SPOT ELEVATION
XXXX.XX TC XXXX.XX BC	PROPOSED SPOT ELEVATION FOR TOP OF CURB / BOTTOM OF CURB AT FINISHED SURFACE GRADE

PROJECT BENCHMARK

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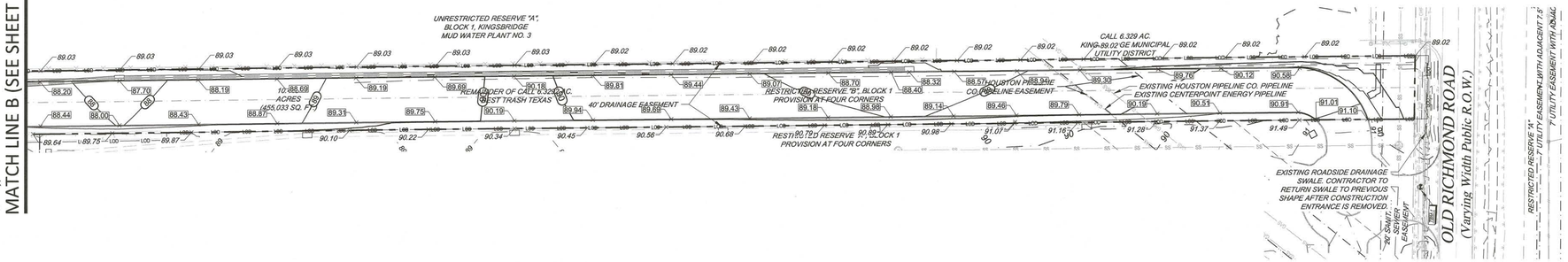
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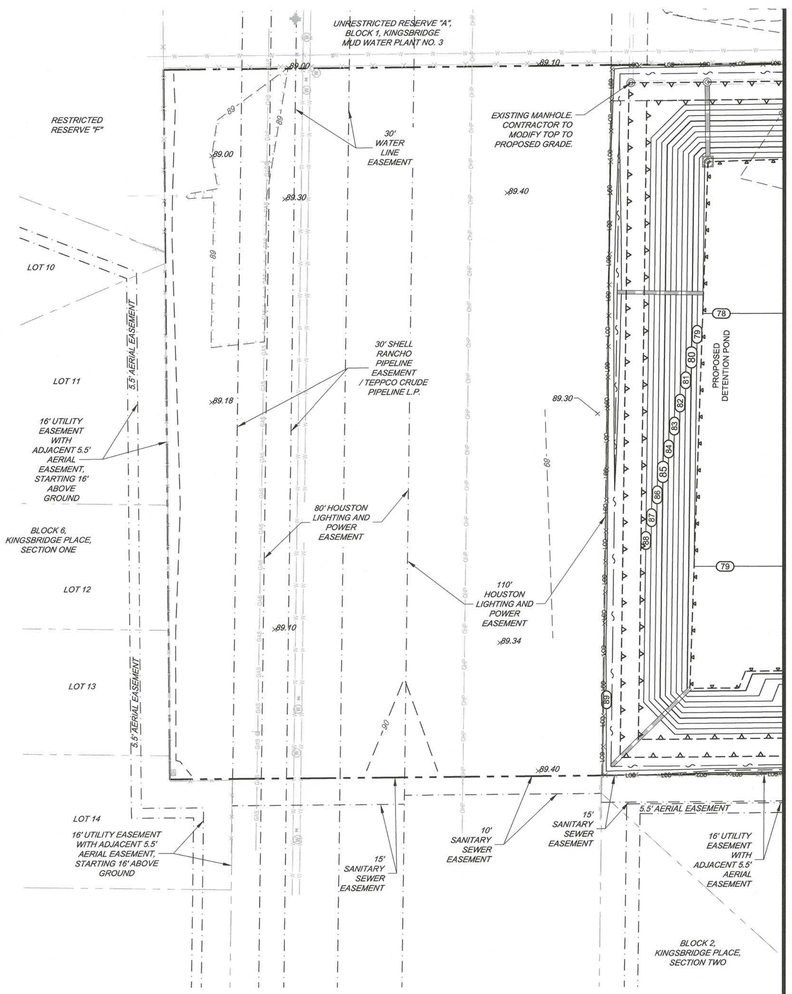
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811 Know what's below Call before you dig

MATCH LINE B (SEE SHEET C-2)





MATCH LINE A (SEE SHEET C-2)

N

1" = 40'
40 20 0 40 80
SCALE IN FEET

FBC DEVELOPMENT COORDINATOR 10/3/17 DATE

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
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SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

GRADING PLAN

SHEET NUMBER:
C-2.1

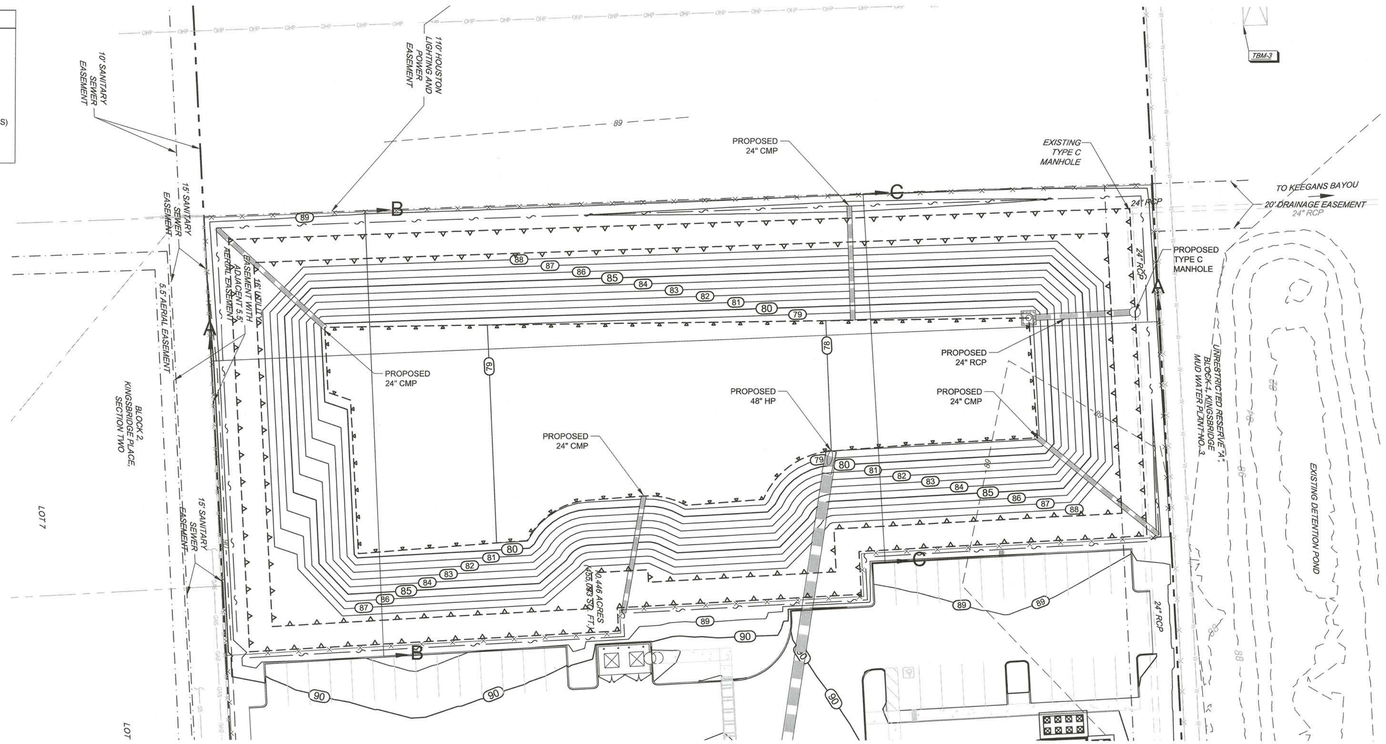
COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

LEGEND	
XXXX	EXISTING CONTOURS
XXXX	PROPOSED CONTOURS
	EXISTING STORM PIPE
	EXISTING STORM PIPE (PROVISION AT FOUR CORNERS)
	PROPOSED STORM PIPE

GENERAL NOTES:

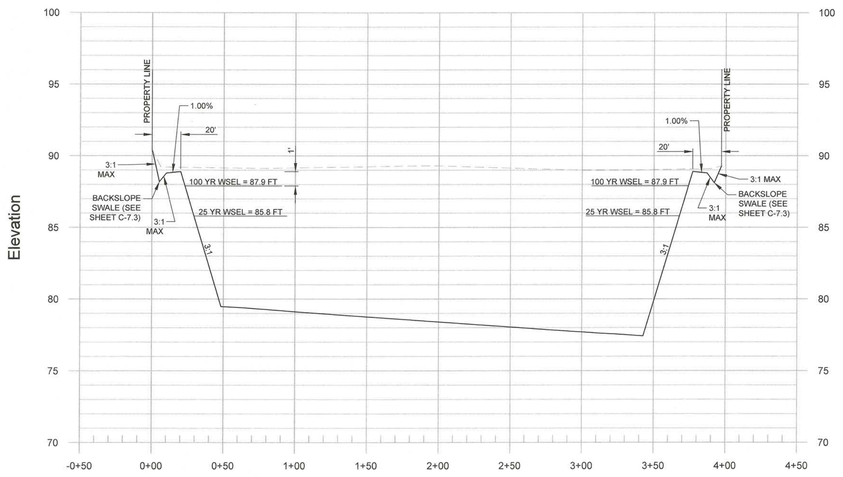
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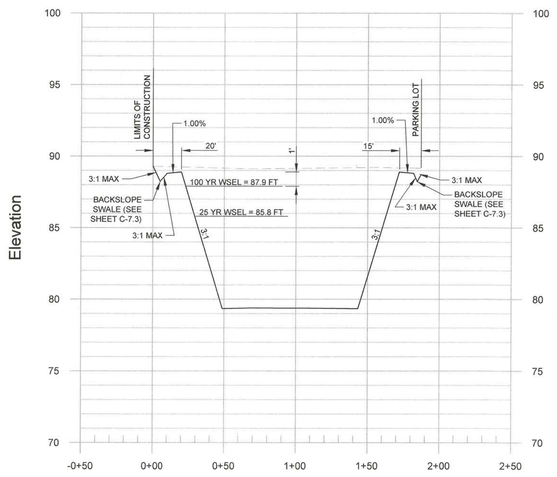


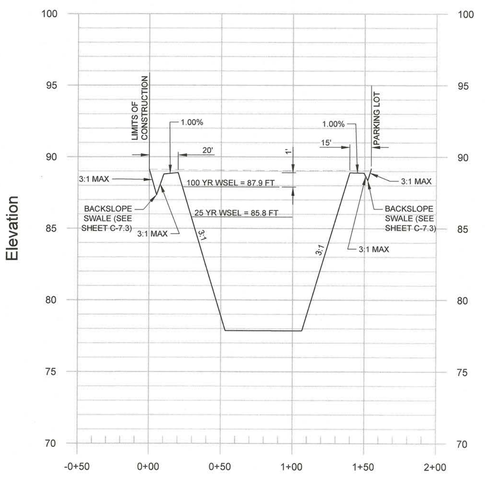
SECTION A-A
1" = 50'H, 1"=5'V

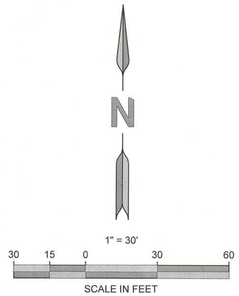
SECTION B-B
1" = 50'H, 1"=5'V

SECTION C-C
1" = 50'H, 1"=5'V









1" = 5'
5 2.5 0 5 10
VERTICAL: SCALE IN FEET

1" = 50'
50 25 0 50 100
HORIZONTAL: SCALE IN FEET

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

Know what's below Call before you dig

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
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SEAL:
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LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:
DETENTION POND CROSS SECTIONS

SHEET NUMBER:
C-2.2

COMMENTS:
NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER:
693.011

NOTES:

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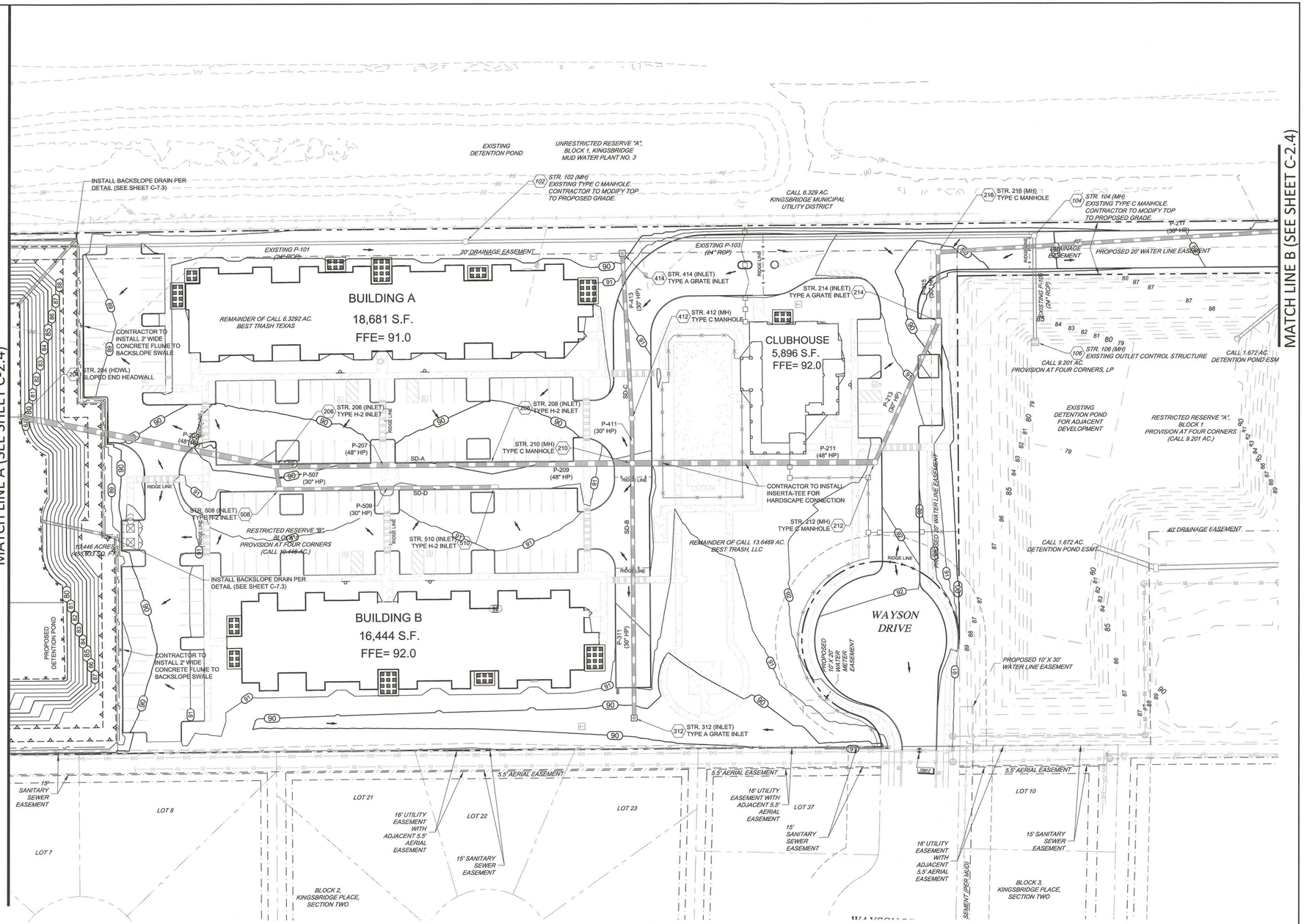
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LEGEND

- EXISTING CONTOURS
- EXISTING CONTOURS (PROVISION AT FOUR CORNERS)
- PROPOSED CONTOURS
- EXISTING STORM PIPE
- EXISTING STORM PIPE (PROVISION AT FOUR CORNERS)
- PROPOSED STORM PIPE
- STORM STRUCTURE NUMBER
- FLOW ARROW



PROJECT BENCHMARK

ALL ELEVATIONS SHOWN HEREON ARE NAVD 88, 2001 ADJUSTMENT, ELEVATIONS BASED ON THE U.S. SURVEY FOOT, AS DETERMINED FROM DIFFERENTIAL GPS OBSERVATIONS COLLECTED ON TSARP REFERENCE MARKS 040445, 040450, AND 040455.

TBM-1 ELEVATION = 90.18 FEET (SHEET 2 OF 2)
RAILROAD SPIKE SET IN THE SOUTH FACE OF UTILITY POLE, LOCATED IN THE NORTH RIGHT-OF-WAY LINE OF OLD RICHMOND ROAD, APPROXIMATELY 105 FEET WEST OF THE CENTERLINE OF THE DRIVEWAY ENTERING A WATER PLAN; ALSO BEING 43 FEET WEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY.

TBM-2 ELEVATIONS = 89.47 FEET (SHEET 1 OF 2)
SQUARE CHISELED IN THE CENTERLINE OF THE PAVEMENT HEADER OF WAYSON DRIVE, WHICH BUTTS INTO THE WEST LINE OF THE SUBJECT PROPERTY; ALSO BEING APPROXIMATELY 31 FEET NORTH OF THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.

TBM-3 ELEVATION = 90.08 FEET (SHEET 1 OF 2)
SQUARE CHISELED ON THE SOUTHWEST CONCRETE FOOTING OF AN ELECTRICAL TRANSMISSION TOWER LOCATED 186 FEET SOUTH AND 42 FEET EAST OF THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.

811 Know what's **below** **Call** before you dig

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. o | 214.939.7123
Suite 890 f | 888.765.8135
Dallas, TX 75201 w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:
DRAINAGE PLAN

SHEET NUMBER:
C-2.3

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

NOTES:

1) **ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.**

2) THE CONTRACTOR SHALL CLEAN OUT ACCUMULATED SILT IN STORM WATER CONVEYANCE CHANNELS AND PIPES AT END OF CONSTRUCTION WHEN DISTURBED AREAS HAVE BEEN STABILIZED.

3) COORDINATE WITH FORT BEND COUNTY INSPECTIONS DURING CONSTRUCTION.

4) NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED.

5) CONSTRUCT EROSION CONTROL BARRIERS PER THE APPROVED EROSION CONTROL PLAN, SWPPP, AND THE FORT BEND COUNTY INSPECTOR(S) AND MAINTAIN UNTIL PERMANENT VEGETATION IS ESTABLISHED.

6) THE CONTRACTOR SHALL RE-ESTABLISH ALL RIGHT OF WAY AREA WHICH IS DAMAGED OR DISTURBED TO ORIGINAL CONDITIONS OR BETTER DURING AUTHORIZED WORK. ALL WORK IN FORT BEND COUNTY RIGHT OF WAY SHALL COMPLY WITH CITY OF EULESS SPECIFICATIONS. ALL WORK IN THE TxDOT RIGHT OF WAY SHALL COMPLY WITH TxDOT SPECIFICATIONS.

7) ALL PLASTIC STORM PIPE SHOWN ON THIS PLAN SHALL BE WRAPPED WITH LOCATION WIRE AND TAPE.

8) ALL HDPE SHALL BE AASHTO TYPE "S" AND SHALL BE INSTALLED IN ACCORDANCE TO ASTM D2321 OR AASHTO SECTION 30 STANDARD PRACTICES AND AS RECOMMENDED BY THE MANUFACTURER. ALL RCP STORM PIPE SHALL BE CLASS III. ALL PVC PIPE SHALL BE SDR 35 PVC OR CONTECH A-2000 PVC PIPE WITH WATERTIGHT JOINTS.

9) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL DEVICES. **24 HR. CONTACT: MR. JOHN B. RHODES, JR., PE (214) 939-7123**

10) EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

11) EXTREME CAUTION SHALL BE USED WHEN WORKING WITHIN THE VICINITY OF THE EXISTING OVERHEAD POWER LINES. CONTRACTORS SHALL NOTIFY/COORDINATE WITH ELECTRIC PROVIDER PRIOR TO CONSTRUCTION.

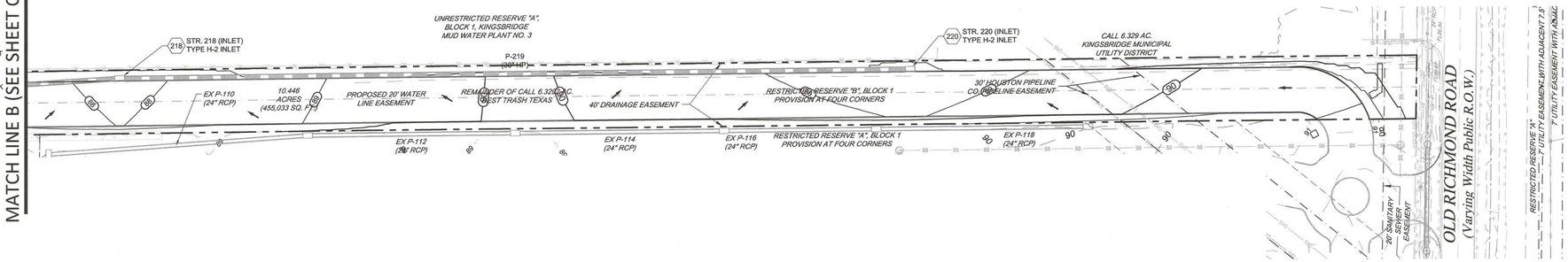
12) STORM WATER MANAGEMENT SHALL BE IN ACCORDANCE WITH COUNTY, STATE, AND OTHER APPROPRIATE ORDINANCES AND REGULATIONS IN EFFECT AT TIME OF CONSTRUCTION PLAN APPROVAL.

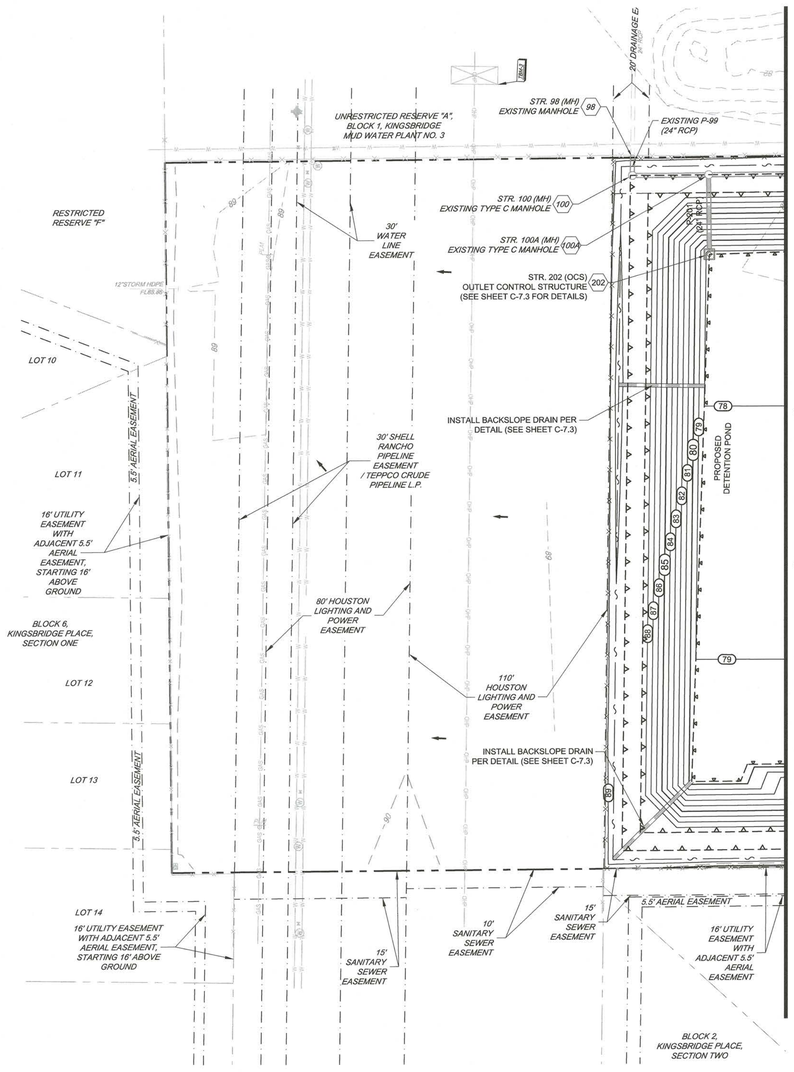
13) CONTRACTOR SHALL INSTALL DOWNSTREAM STORM PIPE CONNECTION IN THE RIGHT-OF-WAY PRIOR TO INSTALLATION OF ON-SITE STORM PIPING. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES SHOWN ON THE PLANS BY POT HOLING THE LINES. THE CONTRACTOR SHALL HAVE THE LINES SURVEYED, INCLUDING HORIZONTAL AND VERTICAL LOCATION, AND THE SURVEYED POINTS SENT TO THE PROJECT ENGINEER TO DETERMINE IF ANY UTILITY CONFLICTS WILL AFFECT THE CURRENT STORM DRAINAGE DESIGN.

LEGEND

XXXX	EXISTING CONTOURS
XXXX	EXISTING CONTOURS (PROVISION AT FOUR CORNERS)
XXXX	PROPOSED CONTOURS
	EXISTING STORM PIPE
	EXISTING STORM PIPE (PROVISION AT FOUR CORNERS)
	PROPOSED STORM PIPE
100	STORM STRUCTURE NUMBER
	FLOW ARROW

MATCH LINE B (SEE SHEET C-2.3)





MATCH LINE A (SEE SHEET C-2.3)

PROJECT BENCHMARK

ALL ELEVATIONS SHOWN HEREON ARE NAVD 88, 2001 ADJUSTMENT, ELEVATIONS BASED ON THE U.S. SURVEY FOOT, AS DETERMINED FROM DIFFERENTIAL GPS OBSERVATIONS COLLECTED ON TSARP REFERENCE MARKS 040445, 040450, AND 040455.

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811 Know what's below Call before you dig

FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

N

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. — o | 214.939.7123
Suite 890 — f | 888.765.8135
Dallas, TX 75201 — w | www.fg-inc.net
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SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:
DRAINAGE PLAN

SHEET NUMBER:
C-2.4

COMMENTS:
NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER:
693.011

GENERAL NOTES:

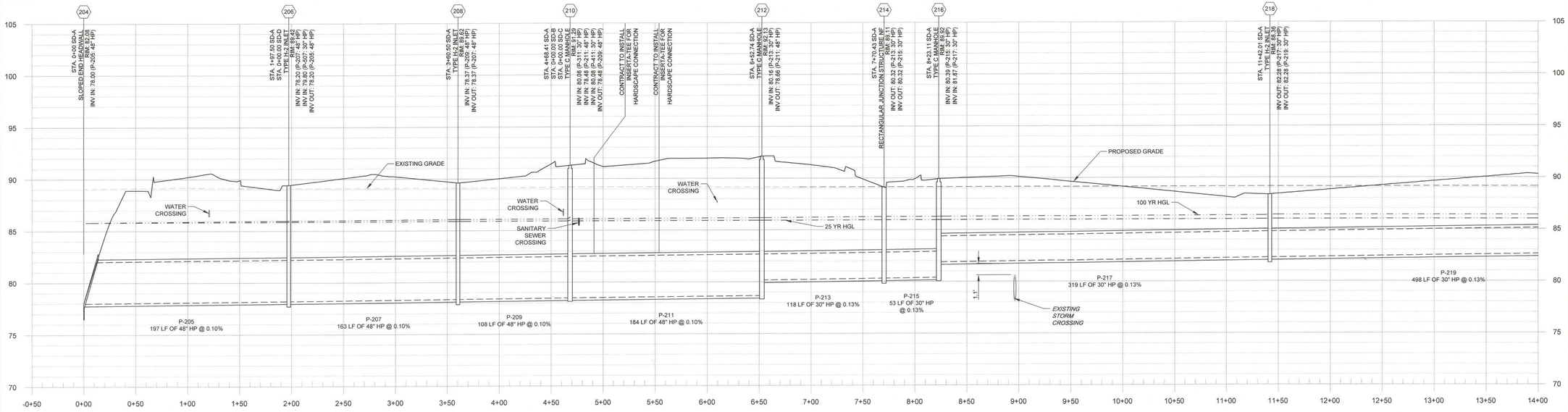
1) PIPE LENGTHS REFLECT THE PIPES LINEAR LENGTH AND ARE SHOWN FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

2) EXISTING UTILITY DEPTHS ARE APPROXIMATED BASED ON 4 FT COVER FROM THE EXISTING GROUND SURFACE. PROPOSED UTILITY DEPTHS ARE BASED ON 4 FT OF COVER FROM THE PROPOSED GROUND SURFACE UNLESS SHOWN OTHERWISE. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY DEPTHS AT CROSSING AND CONTACT ENGINEER IMMEDIATELY IF CONFLICTS ARE ENCOUNTERED.

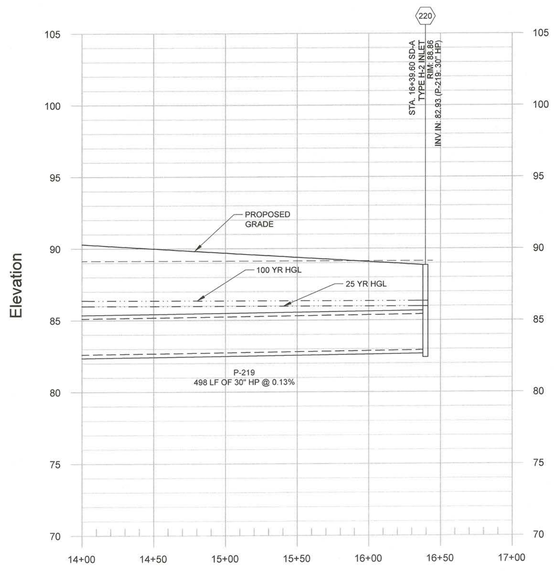
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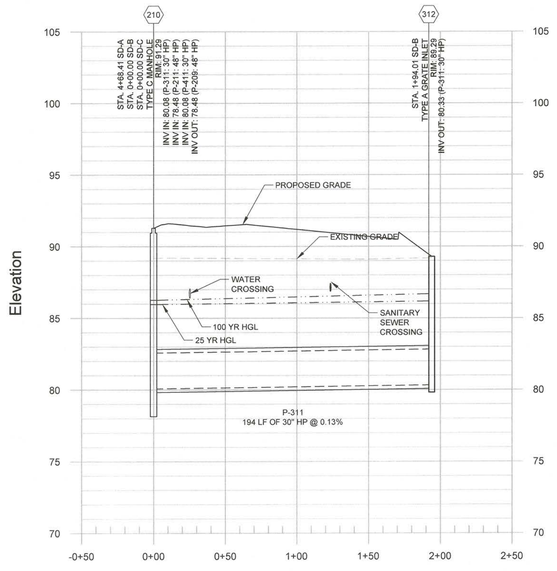
SD-A (1 OF 2)
1" = 50'H, 1"=5'V



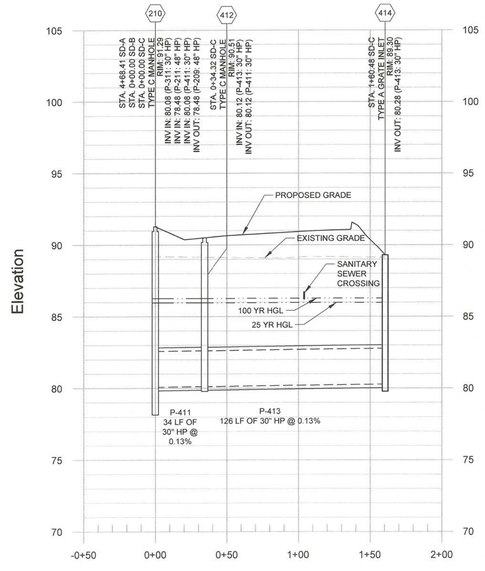
SD-A (2 OF 2)
1" = 50'H, 1"=5'V



SD-B
1" = 50'H, 1"=5'V



SD-C
1" = 50'H, 1"=5'V



1" = 5'
5 2.5 0 5 10
VERTICAL: SCALE IN FEET

1" = 50'
50 25 0 50 100
HORIZONTAL: SCALE IN FEET

FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
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SEAL:
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JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:

STORM DRAINAGE PROFILES

SHEET NUMBER:
C-2.5

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES:

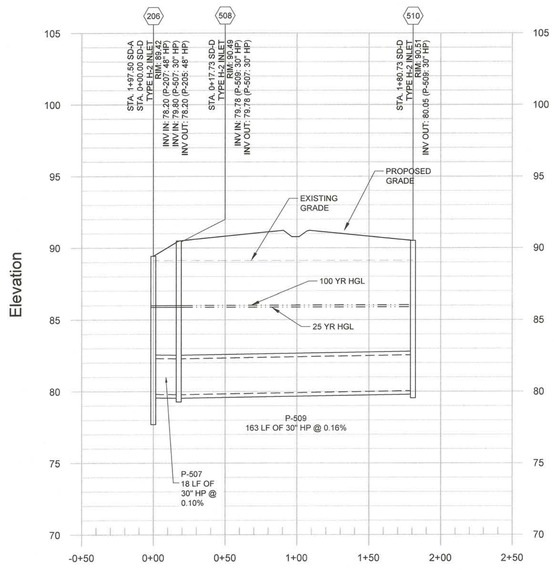
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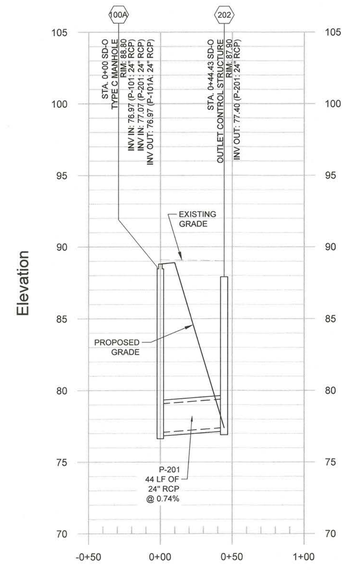
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SD-D
1" = 50'H, 1"=5'V



SD-O
1" = 50'H, 1"=5'V



1" = 5'
5 2.5 0 5 10
VERTICAL: SCALE IN FEET

1" = 50'
50 25 0 50 100
HORIZONTAL: SCALE IN FEET

10/3/17
FBC DEVELOPMENT COORDINATOR DATE

ENGINEER:
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10/10/17

REVISIONS	DATE
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MUD COMMENTS	09/19/2017

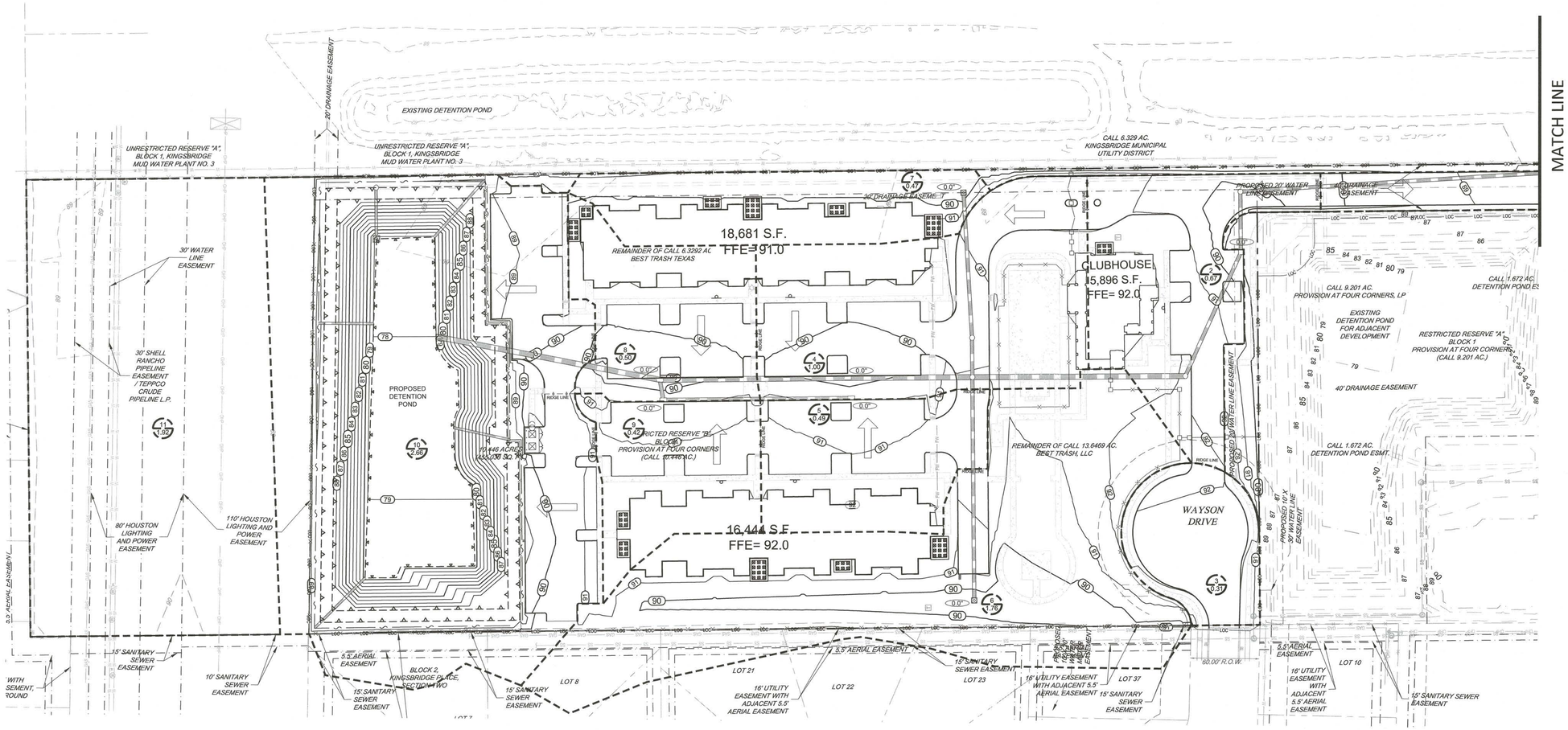
PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:
STORM DRAINAGE PROFILES

SHEET NUMBER:
C-2.6

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011



LEGEND

- XXXX — EXISTING CONTOURS
- XXXX — EXISTING CONTOURS (PROVISION AT FOUR CORNERS)
- XXXX — PROPOSED CONTOURS
- EXISTING STORM PIPE
- EXISTING STORM PIPE (PROVISION AT FOUR CORNERS)
- PROPOSED STORM PIPE
- EXTREME EVENT OVERFLOW ROUTING
- 8.6" — EXTREME EVENT PONDING DEPTH (ABOVE GUTTER)
- DRAINAGE DIVIDE
- # / ACRES — DRAINAGE AREA LABEL

GENERAL NOTES:

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PROPOSED FLOW SUMMARY

Area	Area (ac.)	Conc. (min.)	C 25 Year	C 100 Year	I25 (in/hr)	I100 (in/hr)	Q25 (cfs)	Q100 (cfs)	Comments
1	0.4	10	0.72	0.81	8.00	9.13	2.29	2.97	
2	0.67	10	0.72	0.81	8.00	9.13	3.83	4.97	
3	0.31	10	0.72	0.81	8.00	9.13	1.77	2.30	Drains to Wayson Drive ROW
4	1.00	10	0.72	0.81	8.00	9.13	5.72	7.42	
5	0.49	10	0.72	0.81	8.00	9.13	2.80	3.63	
6	1.76	10	0.72	0.81	8.00	9.13	10.07	13.06	
7	0.47	10	0.72	0.81	8.00	9.13	2.69	3.49	
8	0.50	10	0.72	0.81	8.00	9.13	2.86	3.71	
9	0.42	10	0.72	0.81	8.00	9.13	2.40	3.12	
10	2.66	10	0.72	0.81	8.00	9.13	15.22	19.73	
11	1.92	10	0.72	0.81	8.00	9.13	11.06	14.20	Drains per existing contours away from pond
12	0.38	10	0.72	0.81	8.00	9.13	2.19	2.81	
Total	8.75	10	0.72	0.81	8.00	9.13	50.05	64.91	Does not contain Area 3 or Area 11

FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

1" = 50'
50 25 0 50 100
SCALE IN FEET

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09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
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MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 50'
TITLE:	

DRAINAGE AREA MAP

SHEET NUMBER: C-2.7

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

25 YEAR HYDRAULIC CALCULATIONS

	US STR.	DS STR.	US STA.	DS STA.	AREA	AREA (AC)	TOTAL AREA (AC)	RUNOFF COEFF. C	INCREMENTAL CA	TOTAL CA	DESIGN STORM (YEAR)	INTENSITY I (IN/HR)	Tc (MIN)	Q TOTAL (CFS)	REACH (FT)	LINE SIZE (IN)	LINE MANN. CONST.	LINE SLOPE (FT/FT)	LINE Q CAPACITY (CFS)	FLOWLINE UP-STREAM (FT)	FLOWLINE DOWN-STREAM (FT)	V (FPS)	HGL SLOPE (FT/FT)	K	V1 (FPS)	V2 (FPS)	HEAD LOSS HL (FT)	UPSTREAM HGL (FT)	DOWNSTREAM HGL (FT)	INLET TC ELEV.	PONDING DEPTH (IN)	PONDING COMMENT
SD-A	220	218	16+39.60	11+42.01	1	0.40	0.40	0.72	0.29	0.29	25	9.21	10.00	2.63	497.59	30	0.015	0.0013	12.85	82.93	82.28	0.54	0.0001		0.00	0.54	0.00	86.00	85.98	90.09	0.0	
	218	216	11+42.01	8+23.11	12	0.38	0.78	0.72	0.27	0.56	25	6.09	25.46	3.40	318.90	30	0.015	0.0013	12.75	82.28	81.87	0.69	0.0001	0.50	0.54	0.69	0.01	85.98	85.95	90.00	0.0	
	216	214	8+23.11	7+70.43			0.78	0.72	0.00	0.56	25	5.27	33.14	2.94	52.68	30	0.015	0.0013	12.96	80.39	80.32	0.60	0.0001	0.50	0.69	0.60	0.00	85.95	85.94	89.75	0.0	
	214	212	7+70.43	6+52.74	2	0.67	1.45	0.72	0.48	1.04	25	5.14	34.61	5.33	117.69	30	0.015	0.0014	13.11	80.32	80.16	1.09	0.0002	0.50	0.60	1.09	0.02	85.94	85.92	89.53	0.0	
	212	210	6+52.74	4+68.41			1.45	0.72	0.00	2.63	25	4.99	36.41	13.13	184.33	48	0.015	0.0010	38.90	78.66	78.48	1.04	0.0001	0.50	1.09	1.04	0.01	85.92	85.90	92.13	0.0	
	210	208	4+68.41	3+60.50			1.45	0.72	0.00	2.63	25	4.77	39.35	12.54	107.91	48	0.015	0.0010	39.75	78.48	78.37	1.00	0.0001	0.50	1.04	1.00	0.01	85.90	85.89	91.29	0.0	
	208	206	3+60.50	1+97.50	4	1.00	2.45	0.72	0.72	4.00	25	4.64	41.16	18.54	163.00	48	0.015	0.0010	40.20	78.37	78.20	1.48	0.0002	0.50	1.00	1.48	0.03	85.89	85.85	89.94	0.0	
	206	204	1+97.50	0+00.00	8	0.50	2.95	0.72	0.36	4.35	25	4.52	43.00	19.67	197.50	48	0.015	0.0010	39.62	78.20	78.00	1.57	0.0002	0.50	1.48	1.57	0.02	85.85	85.80	89.72	0.0	
SD-B	312	210	1+94.01	0+00.00	6	1.76	1.76	0.72	1.26	1.26	25	9.21	10.00	11.59	194.01	30	0.015	0.0013	12.76	80.33	80.08	2.36	0.0011	0.25	0.00	2.36	0.09	86.10	85.90	89.30	0.0	
SD-C	414	412	1+60.48	0+34.32	7	0.47	0.47	0.72	0.34	0.34	25	9.21	10.00	3.09	126.16	30	0.015	0.0013	12.66	80.28	80.12	0.63	0.0001	0.25	0.00	0.63	0.01	85.91	85.90	89.30	0.0	
	412	210	0+34.32	0+00.00			0.47	0.72	0.00	0.34	25	9.21	10.00	3.09	34.32	30	0.015	0.0012	12.14	80.12	80.08	0.63	0.0001	0.50	0.00	0.63	0.01	85.90	85.90	90.51	0.0	
SD-D	510	508	1+80.73	0+17.73	5	0.49	0.49	0.72	0.35	0.35	25	9.21	10.00	3.23	163.00	30	0.015	0.0017	14.47	80.05	79.78	0.66	0.0001	0.25	0.00	0.66	0.01	85.87	85.85	90.81	0.0	
	508	206	0+17.73	0+00.00	9	0.42	0.91	0.72	0.30	0.65	25	9.21	10.00	5.99	17.73	30	0.015	0.0011	11.94	79.78	79.76	1.22	0.0003	0.50	0.00	1.22	0.02	85.85	85.85	90.93	0.0	
SD-0	202	100	0+50.03	0+00.00	DISCHAGE FROM DETENTION POND									0.94	50.03	24	0.013	0.0066	18.37	77.40	77.07	0.30	0.0000		0.00	0.30	0.00	Partial Flow	79.07				

100 YEAR HYDRAULIC CALCULATIONS

	US STR.	DS STR.	US STA.	DS STA.	AREA	AREA (AC)	TOTAL AREA (AC)	RUNOFF COEFF. C	INCREMENTAL CA	TOTAL CA	DESIGN STORM (YEAR)	INTENSITY I (IN/HR)	Tc (MIN)	Q TOTAL (CFS)	REACH (FT)	LINE SIZE (IN)	LINE MANN. CONST.	LINE SLOPE (FT/FT)	LINE Q CAPACITY (CFS)	FLOWLINE UP-STREAM (FT)	FLOWLINE DOWN-STREAM (FT)	V (FPS)	HGL SLOPE (FT/FT)	K	V1 (FPS)	V2 (FPS)	HEAD LOSS HL (FT)	UPSTREAM HGL (FT)	DOWNSTREAM HGL (FT)	INLET TC ELEV.	PONDING DEPTH (IN)	PONDING COMMENT
SD-A	220	218	16+39.60	11+42.01	1	0.40	0.40	0.81	0.33	0.33	100	11.63	10.00	3.78	497.59	30	0.015	0.0013	12.85	82.93	82.28	0.77	0.0001		0.00	0.77	0.01	86.40	86.35	90.09	0.0	
	218	216	11+42.01	8+23.11	12	0.38	0.78	0.81	0.31	0.63	100	8.79	20.77	5.57	318.90	30	0.015	0.0013	12.75	82.28	81.87	1.14	0.0002	0.50	0.77	1.14	0.02	86.35	86.27	90.00	0.0	
	216	214	8+23.11	7+70.43			0.78	0.81	0.00	0.63	100	7.99	25.45	5.06	52.68	30	0.015	0.0013	12.96	80.39	80.32	1.03	0.0002	0.50	1.14	1.03	0.01	86.27	86.26	89.75	0.0	
	214	212	7+70.43	6+52.74	2	0.67	1.45	0.81	0.54	1.18	100	7.86	26.30	9.26	117.69	30	0.015	0.0014	13.11	80.32	80.16	1.89	0.0007	0.50	1.03	1.89	0.05	86.26	86.18	89.53	0.0	
	212	210	6+52.74	4+68.41			1.45	0.81	0.00	2.99	100	7.70	27.34	23.04	184.33	48	0.015	0.0010	38.90	78.66	78.48	1.83	0.0003	0.50	1.89	1.83	0.02	86.18	86.11	92.13	0.0	
	210	208	4+68.41	3+60.50			1.45	0.81	0.00	2.99	100	7.47	29.02	22.35	107.91	48	0.015	0.0010	39.75	78.48	78.37	1.78	0.0003	0.50	1.83	1.78	0.02	86.11	86.08	91.29	0.0	
	208	206	3+60.50	1+97.50	4	1.00	2.45	0.81	0.81	4.54	100	7.34	30.03	33.35	163.00	48	0.015	0.0010	40.20	78.37	78.20	2.65	0.0007	0.50	1.78	2.65	0.08	86.08	85.96	89.94	0.0	
	206	204	1+97.50	0+00.00	8	0.50	2.95	0.81	0.41	4.95	100	7.21	31.05	35.70	197.50	48	0.015	0.0010	39.62	78.20	78.00	2.84	0.0008	0.50	2.65	2.84	0.07	85.96	85.80	89.72	0.0	
SD-B	312	210	1+94.01	0+00.00	6	1.76	1.76	0.81	1.43	1.43	100	11.63	10.00	16.64	194.01	30	0.015	0.0013	12.76	80.33	80.08	3.39	0.0022	0.25	0.00	3.39	0.18	86.54	86.11	89.30	0.0	
SD-C	414	412	1+60.48	0+34.32	7	0.47	0.47	0.81	0.38	0.38	100	11.63	10.00	4.44	126.16	30	0.015	0.0013	12.66	80.28	80.12	0.91	0.0002	0.25	0.00	0.91	0.01	86.14	86.12	89.30	0.0	
	412	210	0+34.32	0+00.00			0.47	0.81	0.00	0.38	100	11.63	10.00	4.44	34.32	30	0.015	0.0012	12.14	80.12	80.08	0.91	0.0002	0.50	0.00	0.91	0.01	86.12	86.11	90.51	0.0	
SD-D	510	508	1+80.73	0+17.73	5	0.49	0.49	0.81	0.40	0.40	100	11.63	10.00	4.63	163.00	30	0.015	0.0017	14.47	80.05	79.78	0.94	0.0002	0.25	0.00	0.94	0.01	86.00	85.97	90.81	0.0	
	508	206	0+17.73	0+00.00	9	0.42	0.91	0.81	0.34	0.74	100	11.63	10.00	8.60	17.73	30	0.015	0.0011	11.94	79.78	79.76	1.75	0.0006	0.50	0.00	1.75	0.05	85.97	85.96	90.93	0.0	
SD-0	202	100	0+50.03	0+00.00	DISCHAGE FROM DETENTION POND									0.94	50.03	24	0.013	0.0066	18.37	77.40	77.07	0.30	0.0000		0.00	0.30	0.00	Partial Flow	79.07				

NOTES:

1. FLOW RATES BASED ON RATIONAL METHOD (Q=CIA)
2. 'C' VALUES FOR 25 YEAR STORM BASED ON 'C' VALUE IN FORT BEND COUNTY DRAINAGE MANUAL TABLE 2-3 (MULTIFAMILY 1-3.5%) WITH A 25 YEAR CORRECTION FACTOR OF 1.1.
2. 'C' VALUES FOR 100 YEAR STORM BASED ON 'C' VALUE IN FORT BEND COUNTY DRAINAGE MANUAL TABLE 2-3 (MULTIFAMILY 1-3.5%) WITH A 100 YEAR CORRECTION FACTOR OF 1.25.
3. RAINFALL INTENSITY VALUES BASED ON HYDRO-35 AS SHOWN IN FORT BEND COUNTY DRAINAGE MANUAL FIGURE 2-7.

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St.
Suite 890
Dallas, TX 75201
o | 214.939.7123
f | 888.765.8135
w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:

GARDNER CAPITAL

2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538

CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER

09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	N/A

TITLE:

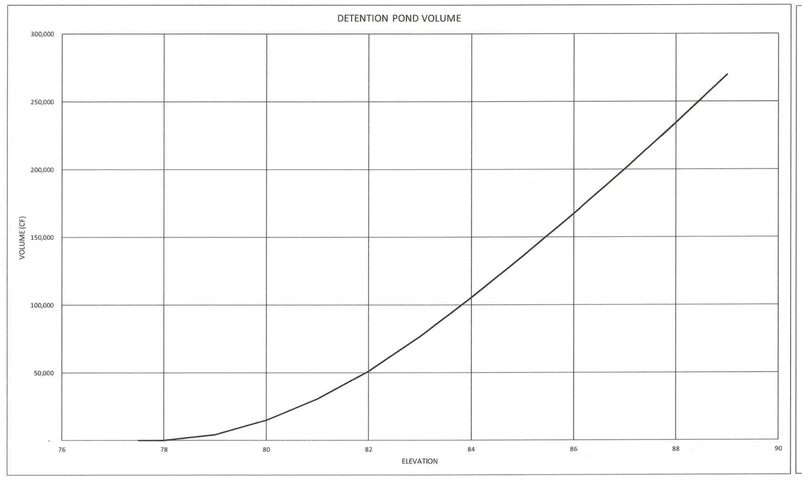
DRAINAGE CALCULATIONS

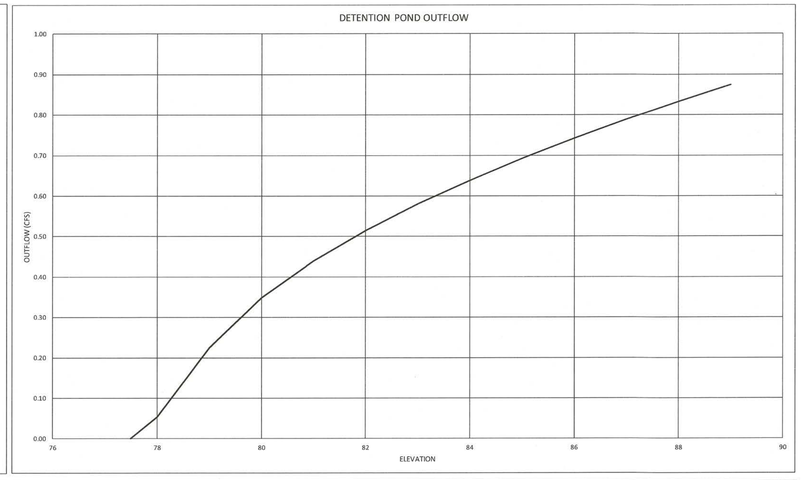
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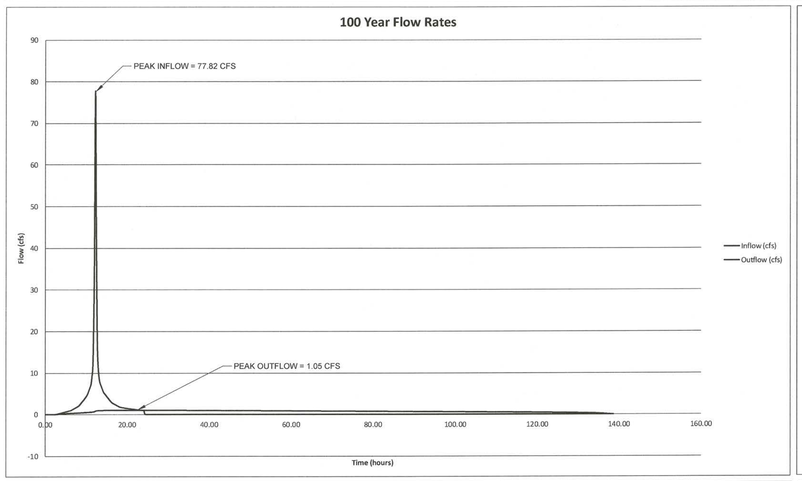
C-2.8

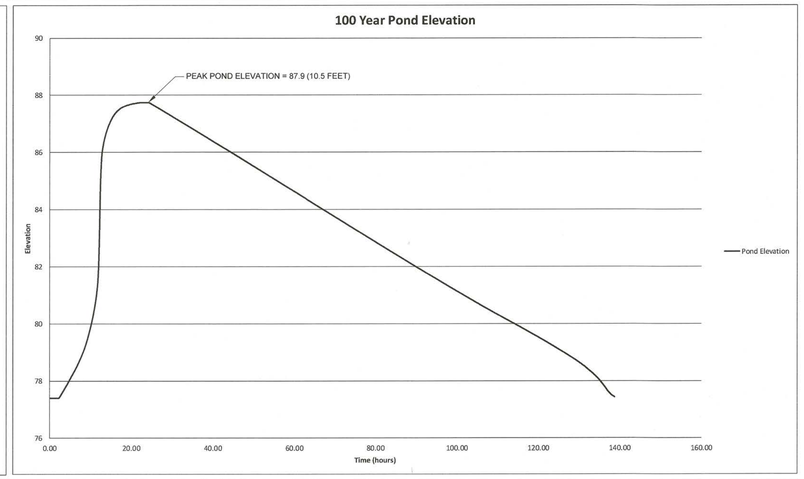
COMMENTS: NOT RELEASED FOR CONSTRUCTION

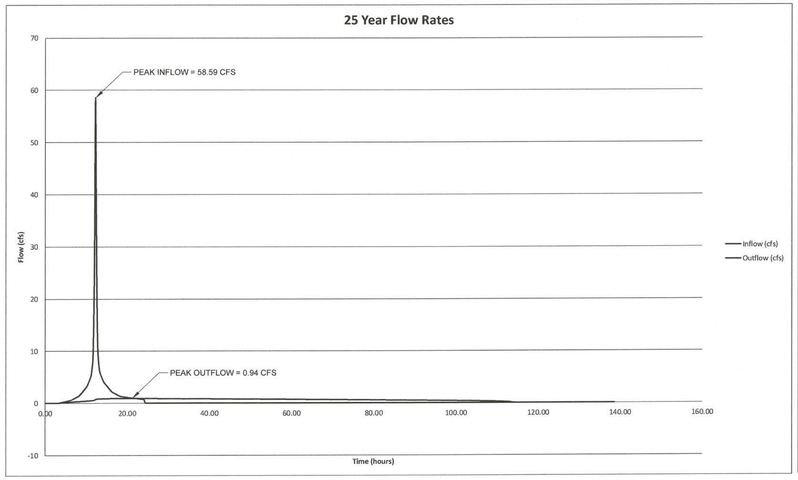
JOB/FILE NUMBER: 693.011

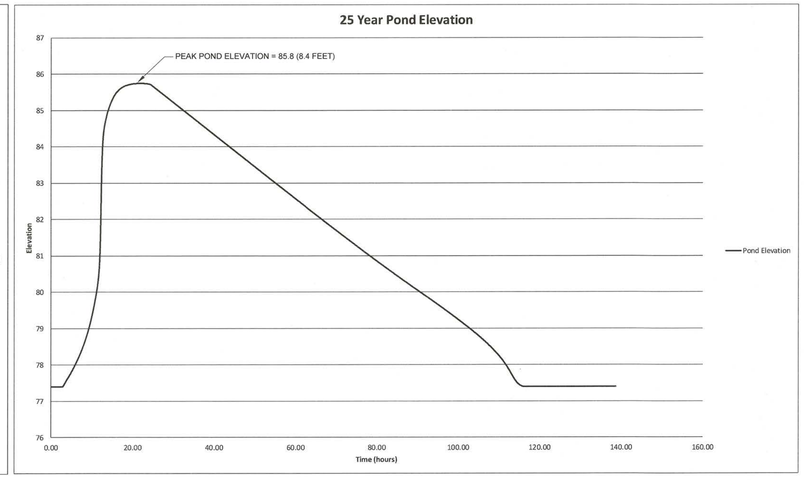












Pond Data

Elevation	Contour Area (sf)	Volume (cf)	Outflow (cfs)
77.40	-	-	0.00
78.00	4,670	778	0.26
79.00	16,256	11,241.33	0.39
80.00	24,061	31,399.83	0.51
81.00	26,460	56,660.33	0.61
82.00	28,915	84,347.83	0.69
83.00	31,426	114,518.33	0.77
84.00	33,993	147,227.83	0.84
85.00	36,616	182,532.33	0.90
86.00	39,295	220,487.83	0.96
87.00	42,030	261,150.33	1.01
87.90	44,542	300,462.00	1.06

MINIMUM DETENTION REQUIREMENT CALCULATIONS:

TOTAL SITE DRAINAGE AREA: 381,156 SF (8.76 ACRES)
IMPERVIOUS AREA (BUILDINGS, PAVEMENT, ETC.): 179,213 SF (4.11 ACRES)
POND SURFACE AREA: 48,749 SF (1.12 ACRES)
TOTAL IMPERVIOUS AREA: 227,962 SF (5.23 ACRES)
% IMPERVIOUS COVERAGE: 59.7%

MINIMUM DETENTION STORAGE: 0.8188 ACRE-FT/ACRE -> 7.173 ACRE-FT (312,442 CF)

TOTAL STORAGE AT 100 YR WSEL: 7.23 ACRE-FT (315,010 CF)
STORAGE AT TOP OF POND (ELEV 87.9): 6.90 ACRE-FT (300,462 CF)
STORAGE IN PIPES: 0.33 AC-FT (14,548 CF)

DETENTION CALCULATIONS BASED ON 24 HOUR TYPE III SCS STORM.

- CN VALUE OF 93 FOR TYPE D SOIL AND 60% IMPERVIOUS COVERAGE
- 100 YEAR RAINFALL OF 12.5 INCHES PER FORT BEND COUNTY DRAINAGE MANUAL
- 25 YEAR RAINFALL OF 9.6 INCHES PER FORT BEND COUNTY DRAINAGE MANUAL

MAXIMUM ALLOWABLE RELEASE RATE

AREA DRAINAGE TO DETENTION POND: 8.76 ACRES

0.125 CFS/ACRE * 8.76 ACRES = 1.09 CFS

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St.
Suite 890
Dallas, TX 75201
o | 214.939.7123
f | 888.765.8135
w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	N/A

TITLE:
DETENTION CALCULATIONS

SHEET NUMBER:
C-2.9

COMMENTS:
NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER:
693.011

UTILITY NOTES:

1) **ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.**

2) KINGSBRIDGE MUD WILL FURNISH THE DOMESTIC WATER METER AND TAP THE EXISTING WATER LINE. THE CONTRACTOR MUST INSTALL ALL ONSITE WATER AND SEWER INFRASTRUCTURE.

3) THE CONTRACTOR SHALL COORDINATE AS REQUIRED WITH FORT BEND COUNTY AND KINGSBRIDGE MUD DURING CONSTRUCTION FOR REQUIRED INSPECTIONS.

4) THIS SITE INDICATES POTABLE WATER SERVICE AND SANITARY SEWER LATERALS. THIS WORK TO BE INSTALLED BY A LICENSED PLUMBER IF STATE LAW REQUIRES. ALL WORK MUST BE INSPECTED BY SI ENVIRONMENTAL FOR KINGSBRIDGE MUD.

5) ALL CONDUIT, PIPE, AND CHASE PIPE SHALL BE WRAPPED WITH THE APPROPRIATE LOCATION WIRE AND TAPE.

6) NO PRESSURE REDUCING VALVES ARE TO BE INSTALLED ON FIRE LINES. ALL FIRE LINES ARE TO BE INSPECTED BY FORT BEND COUNTY FIRE SERVICE PRIOR TO COVERING.

7) THE CONTRACTOR SHALL NOTIFY WATER AND SEWER INSPECTOR PRIOR TO START OF CONSTRUCTION.

8) **THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS INCLUDING ALL RIM ELEVATIONS, INVERT ELEVATIONS, PIPE SIZES, AND PIPE MATERIAL FOR ALL PUBLIC MAINS TO THE ENGINEER AS SOON AS INSTALLATION IS COMPLETE.**

9) CONTRACTOR SHALL INSTALL THE DOWNSTREAM SANITARY SEWER CONNECTIONS PRIOR TO THE INSTALLATION OF THE ON-SITE INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES SHOWN ON THE PLANS BY POT HOLING THE LINES. THE CONTRACTOR SHALL HAVE THE LINES SURVEYED, INCLUDING HORIZONTAL AND VERTICAL LOCATION, AND THE SURVEYED POINTS SENT TO THE PROJECT ENGINEER TO DETERMINE IF ANY UTILITY CONFLICTS WILL AFFECT THE CURRENT SANITARY SEWER DESIGN.

10) PVC WATER LINES LESS THAN 3" SHALL BE ASTM D 2241, SDR 21 WITH INTEGRALLY MOLDED BELL ENDS, ASTM D 2672. PVC WATER LINES 3" AND LARGER SHALL BE AWWA C900, RATED DR 18 (CLASS 150) WITH INTEGRALLY MOLDED BELL ENDS, ASTM D3139. DIP WATER LINES SHALL BE AWWA C151, THICKNESS CLASS 50.

11) PVC SANITARY SEWER LINES SHALL BE ASTM D 3034, RATED SDR 35 WITH INTEGRALLY MOLDED BELL ENDS, ASTM D 3034. TABLE 2, WITH FACTORY SUPPLIED ELASTOMERIC GASKETS AND LUBRICANT. DIP SANITARY SEWER LINES SHALL BE ASTM A746, CLASS 50 WITH AWWA C111, RUBBER GASKET JOINT DEVICES.

12) DEMOLISHED UTILITIES NOT DEPICTED ON THIS SHEET. REFER TO THE DEMOLITION PLAN.

13) ALL SANITARY SEWER MANHOLES WITHIN PAVEMENT SHALL HAVE A HDPE INFILTRATION DOME INSTALLED.

LEGEND

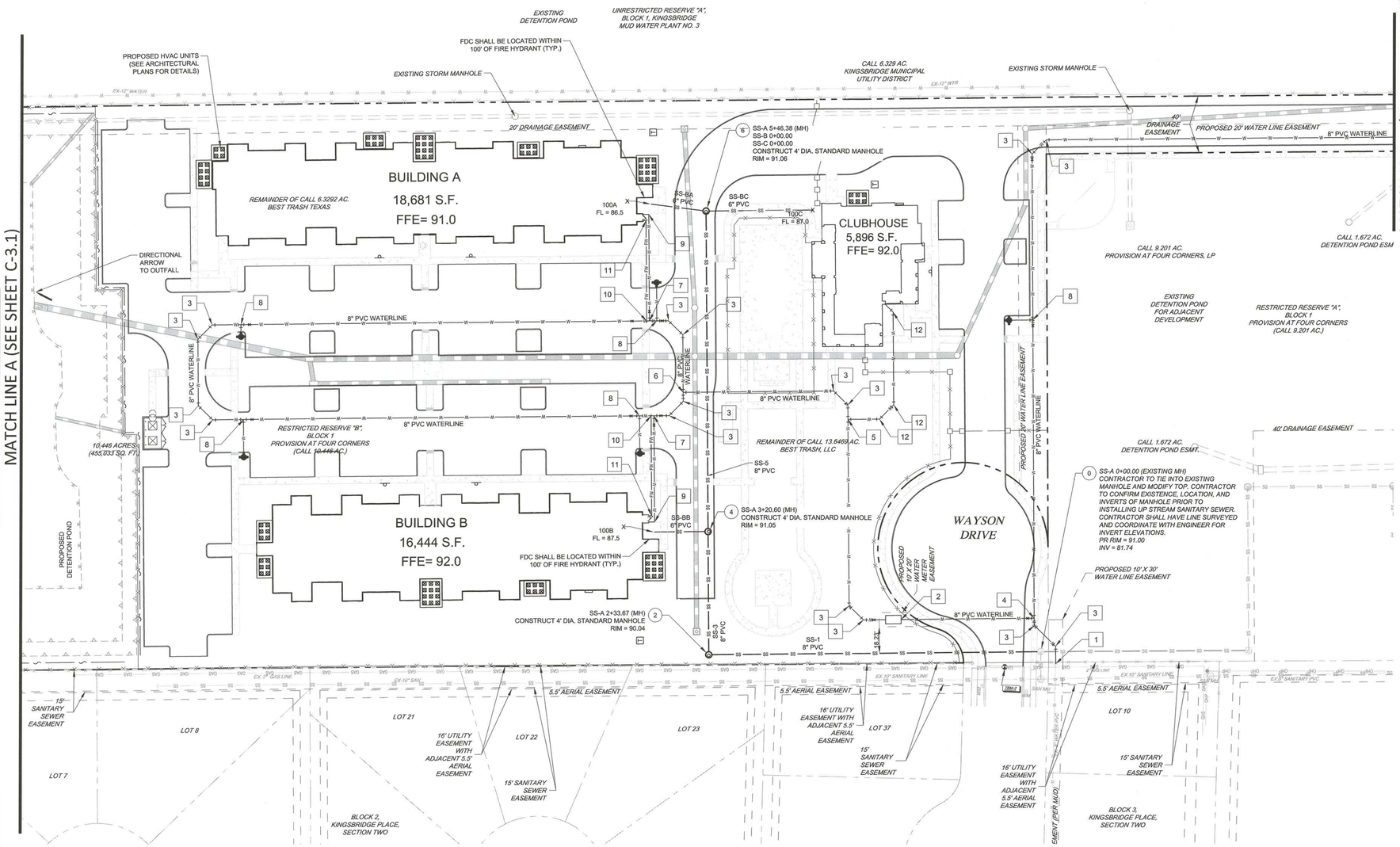
	EXISTING FENCE LINE
	PROPERTY LINE
CATV	EXISTING CABLE TELEVISION LINE
FOC	EXISTING FIBER OPTIC LINE
OHP	EXISTING OVERHEAD POWER LINE
UGE	EXISTING UNDERGROUND POWER LINE
UGT	EXISTING UNDERGROUND TELEPHONE LINE
GAS	EXISTING GAS LINE
SS	EXISTING SANITARY SEWER LINE
W	EXISTING WATER LINE
	EXISTING STORM LINE
CATV	PROPOSED CABLE TELEVISION LINE
FOC	PROPOSED FIBER OPTIC LINE
OHP	PROPOSED OVERHEAD POWER LINE
UGE	PROPOSED UNDERGROUND POWER LINE
UGT	PROPOSED UNDERGROUND TELEPHONE LINE
GAS	PROPOSED GAS LINE
SS	PROPOSED SANITARY SEWER LINE
W	PROPOSED WATER LINE
FW	PROPOSED FIRE WATER LINE
	PROPOSED STORM LINE

WATER CALLOUTS

1	1 - 8"X6" TAPPING SLEEVE 1 - 8" GATE VALVE
2	1 - 8"X4" REDUCER 1 - 4" WATER METER 1 - 4"X8" REDUCER 1 - 8" GATE VALVE
3	1 - 8" 45° BEND WITH THRUST BLOCK
4	1 - 8"X6" TEE 1 - 8" GATE VALVE
5	1 - 8"X1" TAPPING SADDLE 1" WATER SERVICE 1 - 8" GATE VALVE 1 - 1" GATE VALVE
6	1 - 8"X8" TEE
7	1 - 8"X2-1/2" TAPPING SADDLE 1 - 8" GATE VALVE 1 - 2-1/2"" GATE VALVE 2-1/2" WATER SERVICE
8	1 - 8"X6" TEE 1 - FIRE HYDRANT ASSEMBLY 1 - 8" GATE VALVE
9	1 - 2-1/2" 90° BEND WITH THRUST BLOCK
10	4" FIRE WATER SERVICE 1 - 8"X4" TEE WITH THRUST BLOCK
11	1 - 2-1/2" 90° BEND WITH THRUST BLOCK
12	1 - 1" 45° BEND WITH THRUST BLOCK

FIRE WATER FLOW TEST

TEST 1: MUELLER #1/ AMERICAN DARLIN	
DATE OF FLOW TEST:	DECEMBER 16, 2016
STATIC PRESSURE:	65 PSI
RECORDED FLOW:	1,140 GPM WITH 46 PSI RESIDUAL PRESSURE.
SIZE OF WATER MAIN AT PROJECT CONNECTION POINT:	8 INCHES
TEST 2: MUELLER #2/ MUELLER #3	
DATE OF FLOW TEST:	DECEMBER 16, 2016
STATIC PRESSURE:	60 PSI
RECORDED FLOW:	1,250 GPM WITH 56 PSI RESIDUAL PRESSURE.
SIZE OF WATER MAIN AT PROJECT CONNECTION POINT:	12 INCHES



N

FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

1" = 40'
40 20 0 40 80
SCALE IN FEET

Know what's **below** **Call** before you dig

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. — o | 214.939.7123
Suite 890 — f | 888.765.8135
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SEAL:

STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/18/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

UTILITIES PLAN

SHEET NUMBER:

C-3

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

UTILITY NOTES:

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7) THE CONTRACTOR SHALL NOTIFY WATER AND SEWER INSPECTOR PRIOR TO START OF CONSTRUCTION.

8) **THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS INCLUDING ALL RIM ELEVATIONS, INVERT ELEVATIONS, PIPE SIZES, AND PIPE MATERIAL FOR ALL PUBLIC MAINS TO THE ENGINEER AS SOON AS INSTALLATION IS COMPLETE.**

9) CONTRACTOR SHALL INSTALL THE DOWNSTREAM SANITARY SEWER CONNECTIONS PRIOR TO THE INSTALLATION OF THE ON-SITE INFRASTRUCTURE. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES SHOWN ON THE PLANS BY POT HOLING THE LINES. THE CONTRACTOR SHALL HAVE THE LINES SURVEYED, INCLUDING HORIZONTAL AND VERTICAL LOCATION, AND THE SURVEYED POINTS SENT TO THE PROJECT ENGINEER TO DETERMINE IF ANY UTILITY CONFLICTS WILL AFFECT THE CURRENT SANITARY SEWER DESIGN.

10) PVC WATER LINES LESS THAN 3" SHALL BE ASTM D 2241, SDR 21 WITH INTEGRALLY MOLDED BELL ENDS, ASTM D 2672. PVC WATER LINES 3" AND LARGER SHALL BE AWWA C900, RATED DR 18 (CLASS 150) WITH INTEGRALLY MOLDED BELL ENDS, ASTM D3139. DIP WATER LINES SHALL BE AWWA C151, THICKNESS CLASS 50.

11) PVC SANITARY SEWER LINES SHALL BE ASTM D 3034, RATED SDR 35 WITH INTEGRALLY MOLDED BELL ENDS, ASTM D 3034, TABLE 2, WITH FACTORY SUPPLIED ELASTOMERIC GASKETS AND LUBRICANT. DIP SANITARY SEWER LINES SHALL BE ASTM A746, CLASS 50 WITH AWWA C111, RUBBER GASKET JOINT DEVICES.

12) DEMOLISHED UTILITIES NOT DEPICTED ON THIS SHEET. REFER TO THE DEMOLITION PLAN.

13) ALL SANITARY SEWER MANHOLES WITHIN PAVEMENT SHALL HAVE A HDPE INFILTRATION DOME INSTALLED.

LEGEND

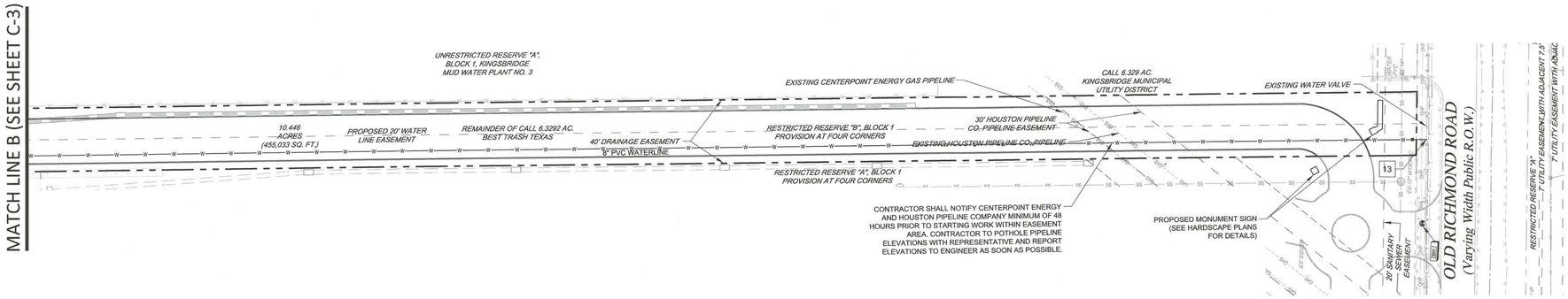
X X X	EXISTING FENCE LINE
	PROPERTY LINE
CATV CATV	EXISTING CABLE TELEVISION LINE
FOC FOC FOC	EXISTING FIBER OPTIC LINE
OHP OHP OHP	EXISTING OVERHEAD POWER LINE
UGE UGE	EXISTING UNDERGROUND POWER LINE
UGT UGT	EXISTING UNDERGROUND TELEPHONE LINE
GAS GAS GAS	EXISTING GAS LINE
SS SS SS	EXISTING SANITARY SEWER LINE
W W W	EXISTING WATER LINE
ST ST ST	EXISTING STORM LINE
CATV CATV	PROPOSED CABLE TELEVISION LINE
FOC FOC FOC	PROPOSED FIBER OPTIC LINE
OHP OHP OHP	PROPOSED OVERHEAD POWER LINE
UGE UGE	PROPOSED UNDERGROUND POWER LINE
UGT UGT	PROPOSED UNDERGROUND TELEPHONE LINE
GAS GAS GAS	PROPOSED GAS LINE
SS SS SS	PROPOSED SANITARY SEWER LINE
W W W	PROPOSED WATER LINE
FW FW FW	PROPOSED FIRE WATER LINE
	PROPOSED STORM LINE

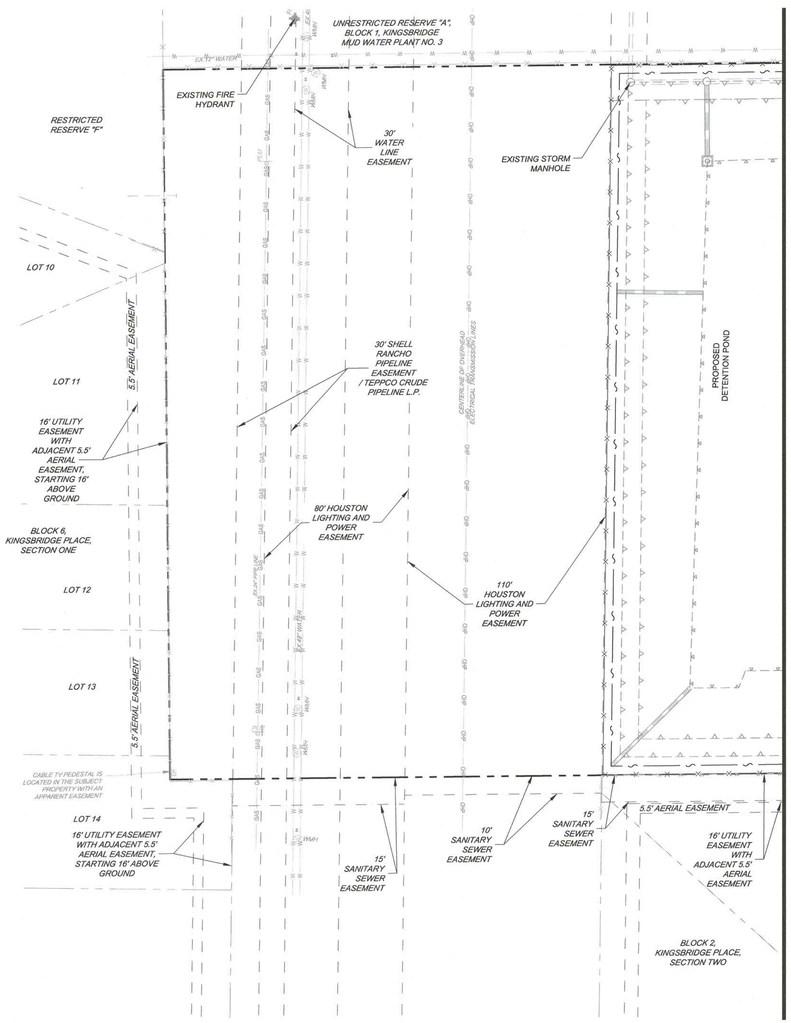
WATER CALLOUTS

13	1 - 16"X8" TAPPING SLEEVE 1 - 8" GATE VALVE

FIRE WATER FLOW TEST

TEST 1: MUELLER #1/ AMERICAN DARLIN	
DATE OF FLOW TEST:	DECEMBER 16, 2016
STATIC PRESSURE:	65 PSI
RECORDED FLOW:	1,140 GPM WITH 46 PSI RESIDUAL PRESSURE.
SIZE OF WATER MAIN AT PROJECT CONNECTION POINT:	8 INCHES
TEST 2: MUELLER #2/ MUELLER #3	
DATE OF FLOW TEST:	DECEMBER 16, 2016
STATIC PRESSURE:	60 PSI
RECORDED FLOW:	1,250 GPM WITH 56 PSI RESIDUAL PRESSURE.
SIZE OF WATER MAIN AT PROJECT CONNECTION POINT:	12 INCHES





811 Know what's below Call before you dig

FBC DEVELOPMENT COORDINATOR 10/3/17 DATE

N

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. o | 214.939.7123
Suite 890 f | 888.765.8135
Dallas, TX 75201 w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
08/18/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

UTILITIES PLAN

SHEET NUMBER:
C-3.1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

GENERAL NOTES:

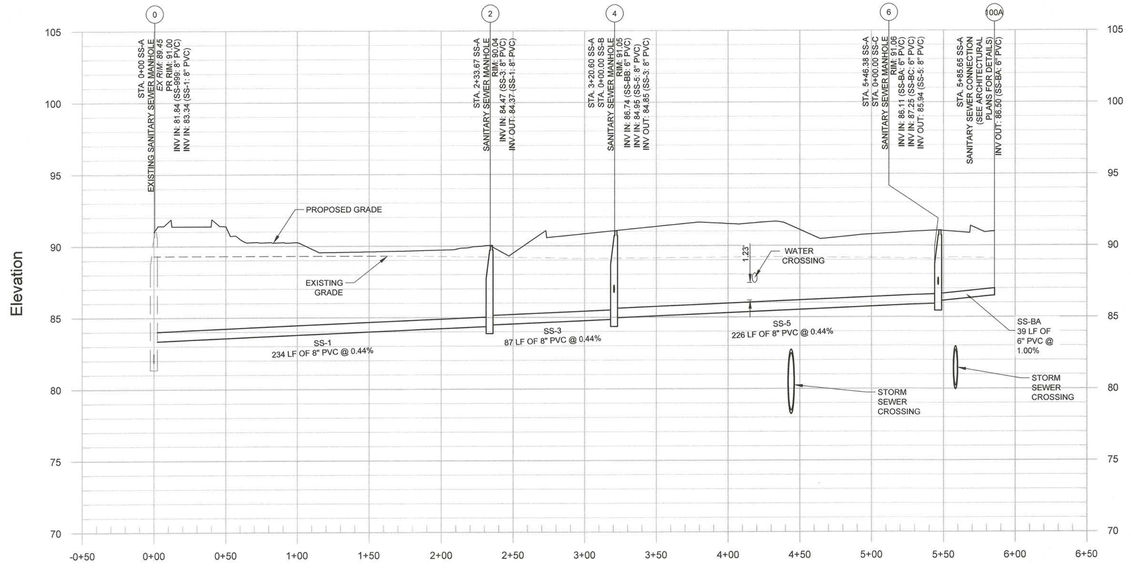
1) PIPE LENGTHS REFLECT THE PIPES LINEAR LENGTH AND ARE SHOWN FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

2) EXISTING UTILITY DEPTHS ARE APPROXIMATED BASED ON 4 FT COVER FROM THE EXISTING GROUND SURFACE. PROPOSED UTILITY DEPTHS ARE BASED ON 4 FT OF COVER FROM THE PROPOSED GROUND SURFACE UNLESS SHOWN OTHERWISE. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY DEPTHS AT CROSSING AND CONTACT ENGINEER IMMEDIATELY IF CONFLICTS ARE ENCOUNTERED.

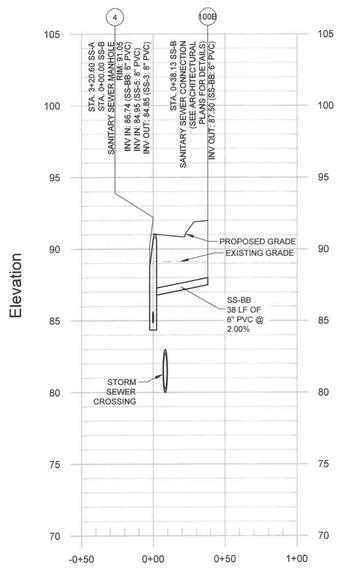
3) CONTRACTOR TO FIELD VERIFY EXISTING ELEVATIONS OF UTILITIES IN RIGHT OF WAY TO AVOID CONFLICTS. CONTACT ENGINEER IMMEDIATELY IF FIELD ELEVATIONS DIFFER FROM THE DESIGN DRAWINGS.

4) ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.

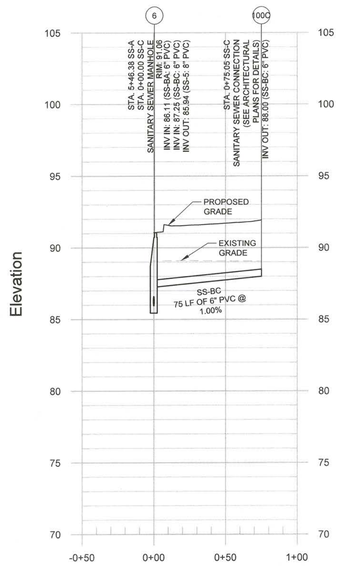
SS-A
1" = 50'H, 1"=5'V



SS-B
1" = 50'H, 1"=5'V



SS-C
1" = 50'H, 1"=5'V



1" = 5'
5 2.5 0 5 10
VERTICAL: SCALE IN FEET

1" = 50'
50 25 0 50 100
HORIZONTAL: SCALE IN FEET

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St.
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D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:
SANITARY SEWER PROFILES

SHEET NUMBER:
C-3.2

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

EROSION AND SEDIMENT CONTROL LEGEND

CODE	PRACTICE	DETAIL	MAP SYMBOL
Cd	CHECKDAM		
Co	CONSTRUCTION ENTRANCE		Co
Sd1	SEDIMENT BARRIER		SF SILT FENCE
Sd2-F	INLET SEDIMENT TRAP FILTER FABRIC WITH SUPPORTING FRAME		
Su	SURFACE ROUGHENING		Su
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2
Du	DUST CONTROL ON DISTURBED AREAS		Du
	LIMITS OF CONSTRUCTION	N/A	LOC

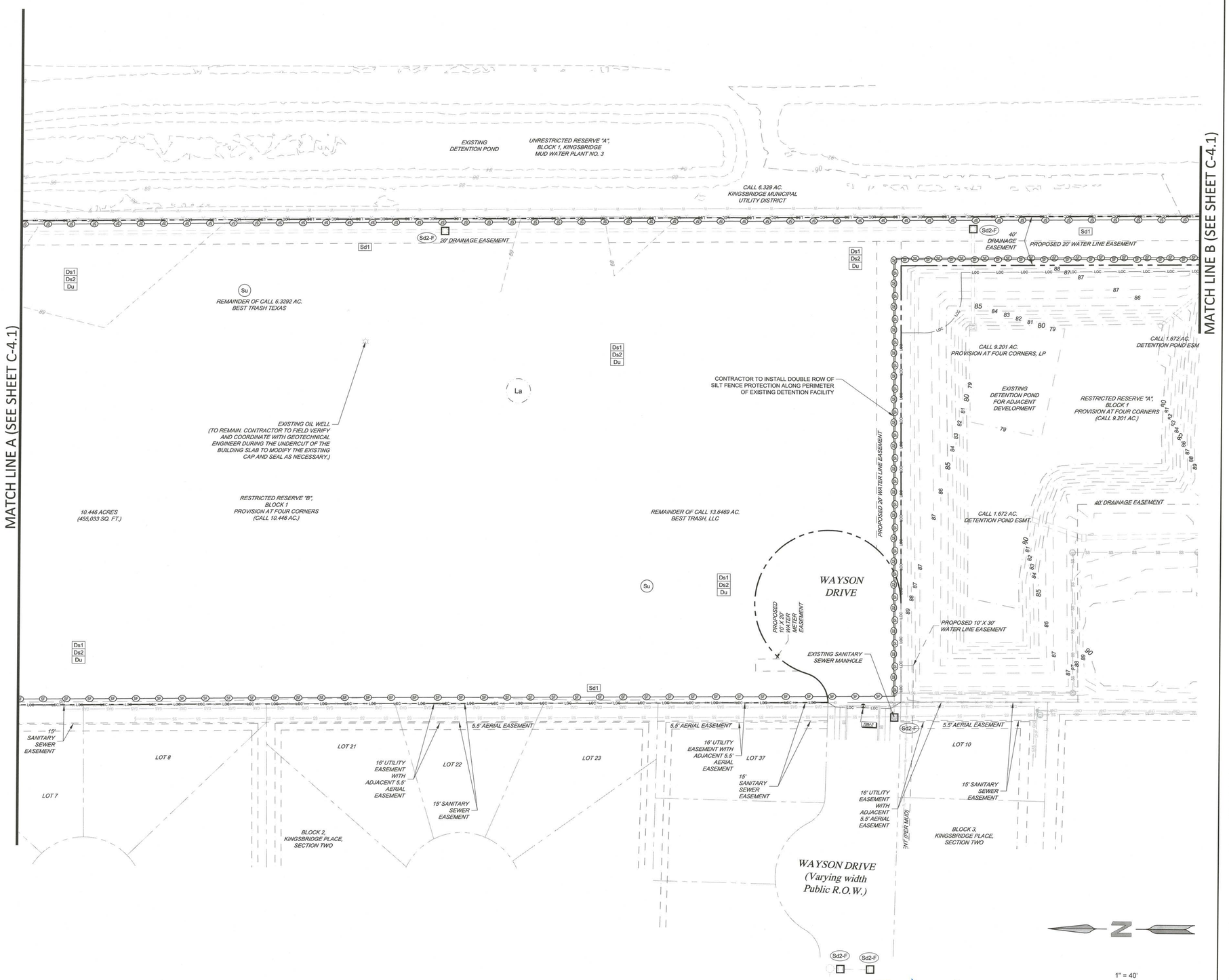
SOIL TYPE

La	LAKE CHARLES CLAY, 0 TO 1 PERCENT SLOPES

GENERAL NOTES:

1) CONTRACTOR SHALL PROVIDE A COPY OF THE TCEQ NOI & SWPPP TO MILLER & ASSOCIATES PRIOR TO START OF CONSTRUCTION.

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FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:

FORESITE group

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1999 Bryan St.
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OWNER:

GARDNER CAPITAL

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CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:



REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:

INITIAL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-4

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

EROSION AND SEDIMENT CONTROL LEGEND

CODE	PRACTICE	DETAIL	MAP SYMBOL
Cd	CHECKDAM		
Co	CONSTRUCTION ENTRANCE		Co
Sd1	SEDIMENT BARRIER		SILT FENCE
Sd2-F	INLET SEDIMENT TRAP FILTER FABRIC WITH SUPPORTING FRAME		
Su	SURFACE ROUGHENING		Su
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2
Du	DUST CONTROL ON DISTURBED AREAS		Du
	LIMITS OF CONSTRUCTION	N/A	LOC

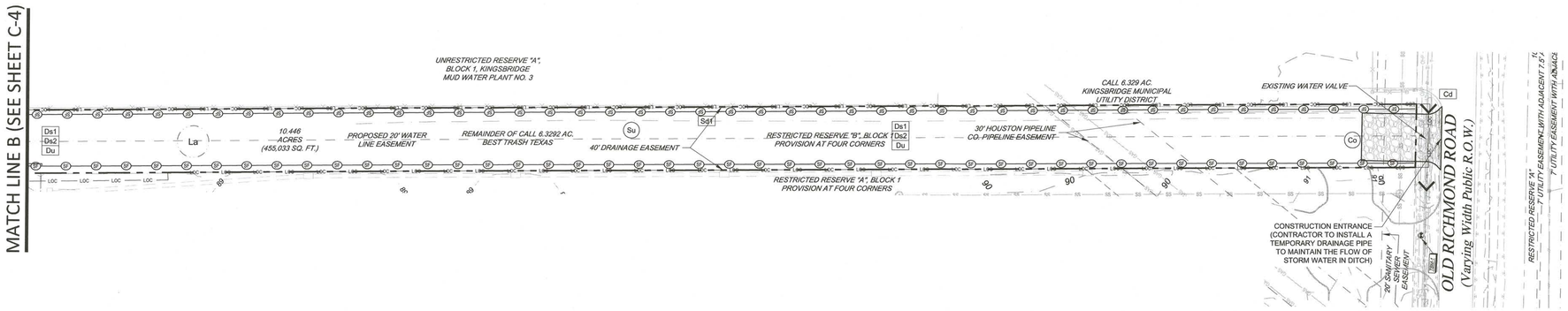
SOIL TYPE

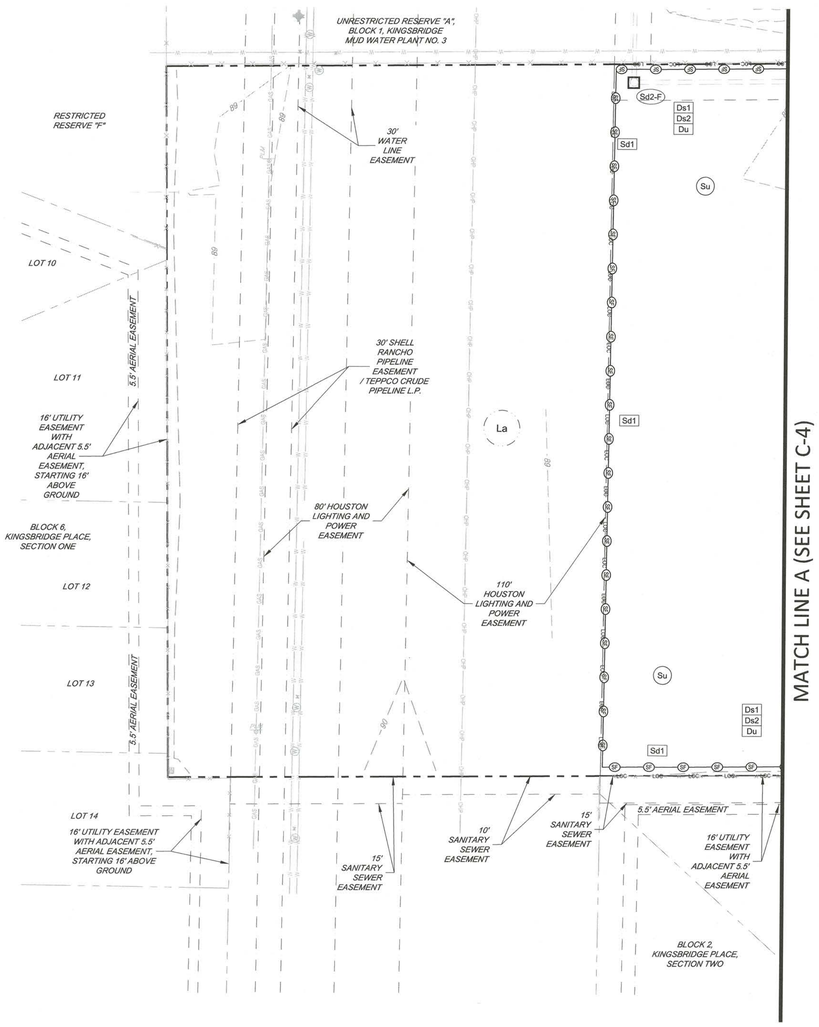
La	LAKE CHARLES CLAY, 0 TO 1 PERCENT SLOPES

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FBC DEVELOPMENT COORDINATOR 10/3/17 DATE

N

1" = 40'

40 20 0 40 80

SCALE IN FEET

ENGINEER:

FORESITE group

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CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER

09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

INITIAL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-4.1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

EROSION AND SEDIMENT CONTROL LEGEND

CODE	PRACTICE	DETAIL	MAP SYMBOL
Cd	CHECKDAM		
Co	CONSTRUCTION ENTRANCE		Co
Cw	CONCRETE WASHOUT AREA		Cw
Fr	FILTER RING		Fr
Sd1	SEDIMENT BARRIER		TYPE "C" SILT FENCE
Sd2-F	INLET SEDIMENT TRAP FILTER FABRIC WITH SUPPORTING FRAME		
Su	SURFACE ROUGHENING		Su
Tp	TOPSOILING		Tp
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2
Du	DUST CONTROL ON DISTURBED AREAS		Du
Mb	MATTING AND BLANKETING		Mb
	LIMITS OF CONSTRUCTION	N/A	LOC

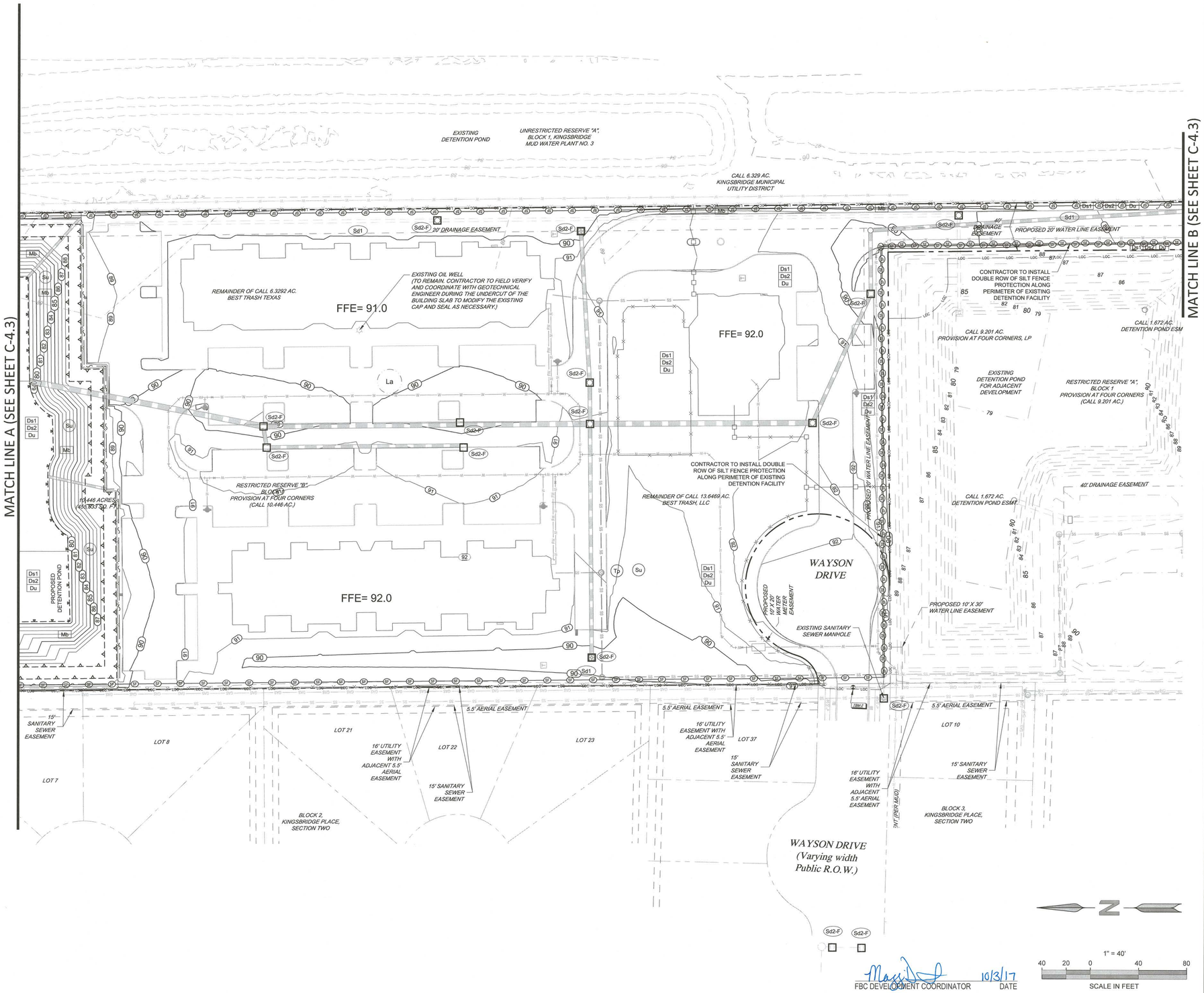
SOIL TYPE

La	LAKE CHARLES CLAY, 0 TO 1 PERCENT SLOPES

GENERAL NOTES:

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FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

1" = 40'
40 20 0 40 80
SCALE IN FEET

811 Know what's below Call before you dig

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
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Dallas, TX 75201
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w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:

GARDNER CAPITAL

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DALLAS, TX 75201
(417) 447-5538

CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

STATE OF TEXAS — JOHN B. RHODES, JR. — 112311 — LICENSED PROFESSIONAL ENGINEER

09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

INTERMEDIATE EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-4.2

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

EROSION AND SEDIMENT CONTROL LEGEND

CODE	PRACTICE	DETAIL	MAP SYMBOL
Cd	CHECKDAM		
Co	CONSTRUCTION ENTRANCE		Co
Cw	CONCRETE WASHOUT AREA		Cw
Fr	FILTER RING		Fr
Sd1	SEDIMENT BARRIER		SF — TYPE "C" SILT FENCE
Sd2-F	INLET SEDIMENT TRAP FILTER FABRIC WITH SUPPORTING FRAME		
Su	SURFACE ROUGHENING		Su
Tp	TOPSOILING		Tp
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds2
Du	DUST CONTROL ON DISTURBED AREAS		Du
Mb	MATTING AND BLANKETING		Mb
	LIMITS OF DISTURBANCE	N/A	LOC

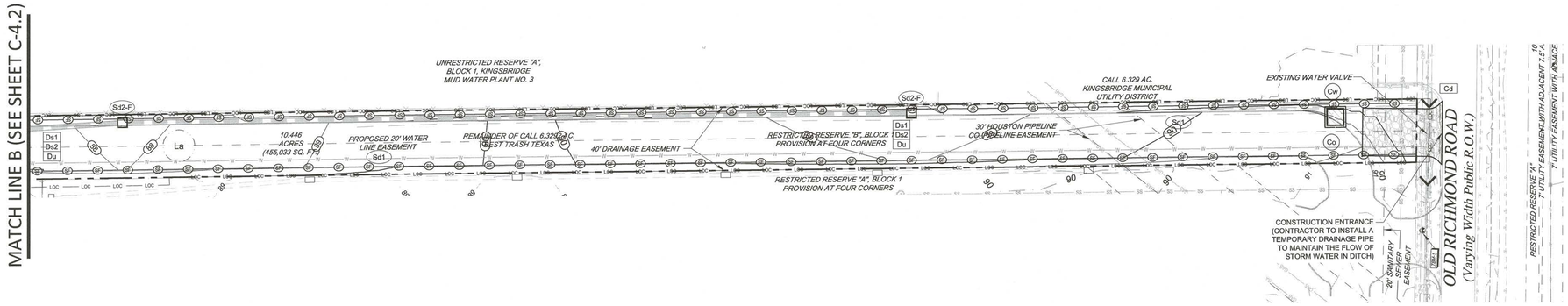
SOIL TYPE

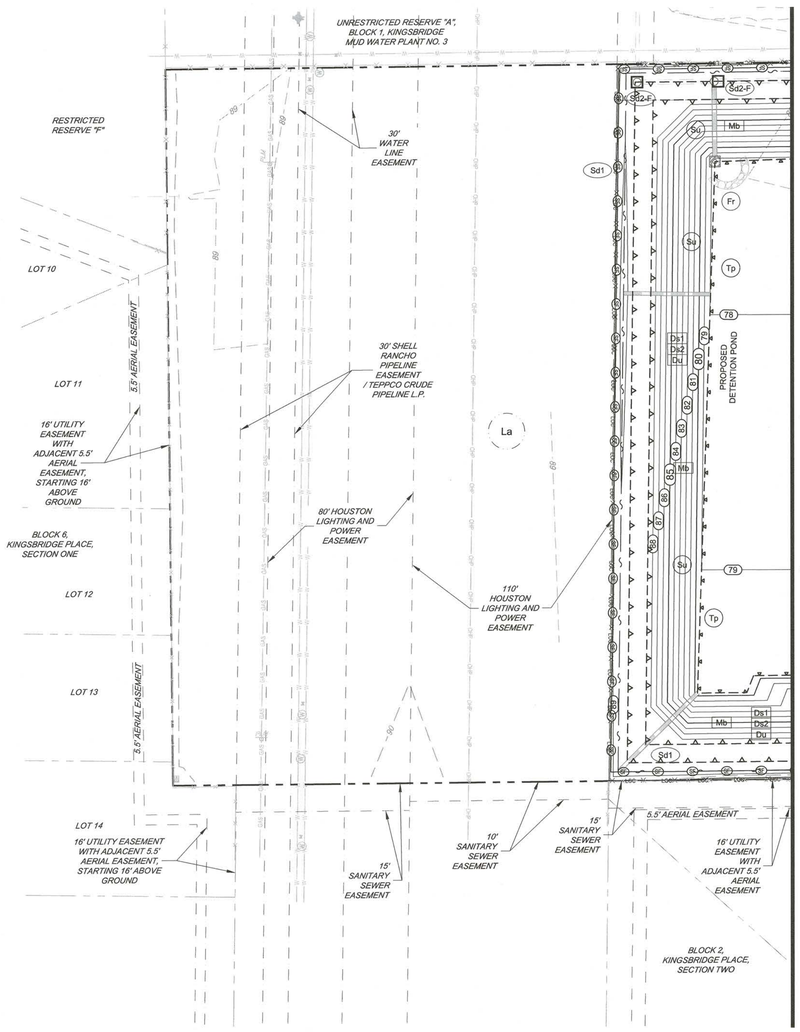
La	LAKE CHARLES CLAY, 0 TO 1 PERCENT SLOPES

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FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

1" = 40'
40 20 0 40 80
SCALE IN FEET

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ENGINEER:
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CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

INTERMEDIATE EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:
C-4.3

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

EROSION AND SEDIMENT CONTROL LEGEND

CODE	PRACTICE	DETAIL	MAP SYMBOL
Cd	CHECKDAM		
Fr	FILTER RING		Fr
Sd1	SEDIMENT BARRIER		TYPE "C" SILT FENCE
Sd2-P	INLET SEDIMENT TRAP CURB INLET PROTECTION		
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)		Ds3
	LIMITS OF DISTURBANCE	N/A	LOC

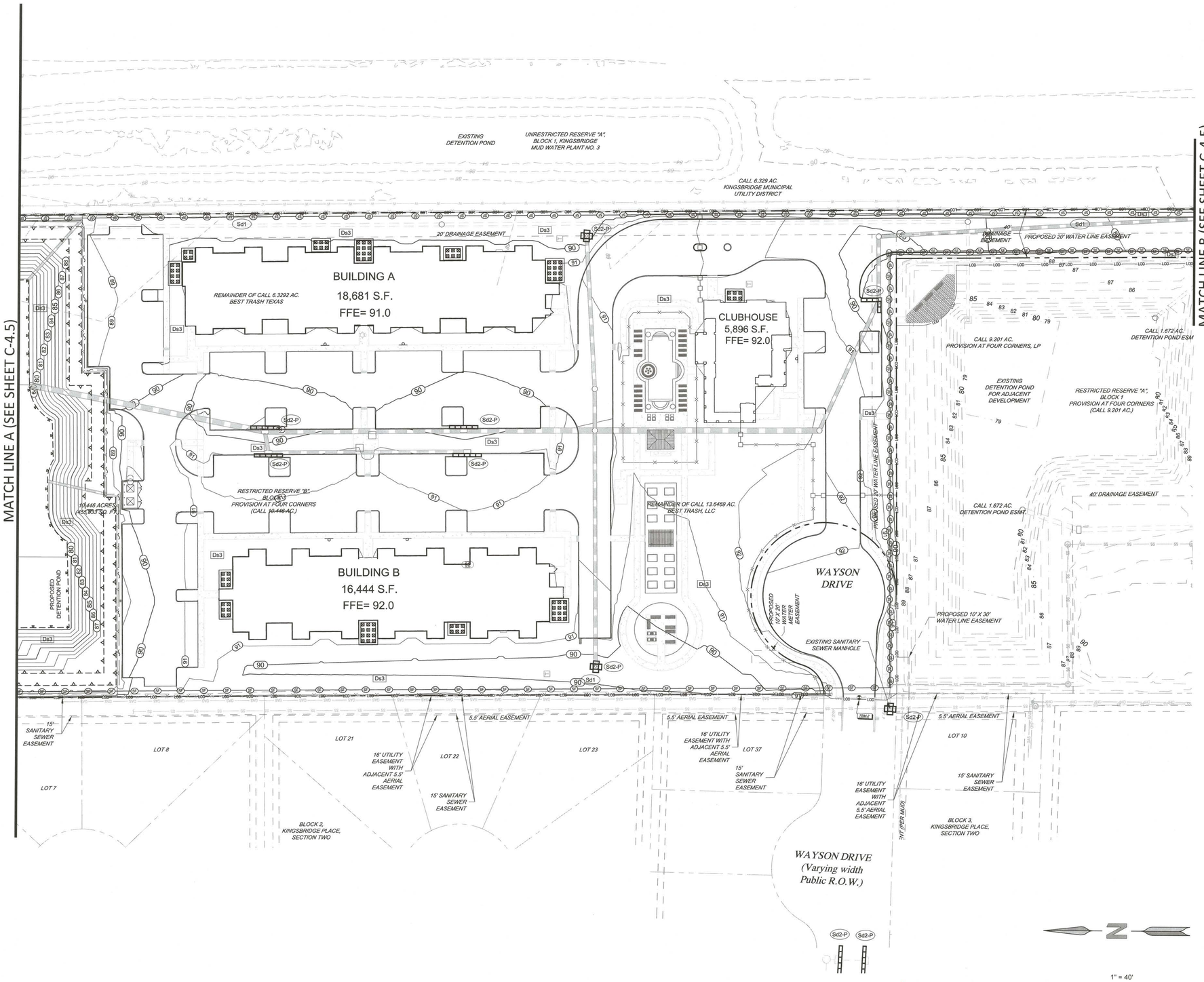
SOIL TYPE

La	LAKE CHARLES CLAY, 0 TO 1 PERCENT SLOPES

GENERAL NOTES:

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FBC DEVELOPMENT COORDINATOR — 10/3/17 DATE

Know what's below Call before you dig

ENGINEER:

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OWNER:

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CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'
TITLE:	

FINAL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-4.4

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

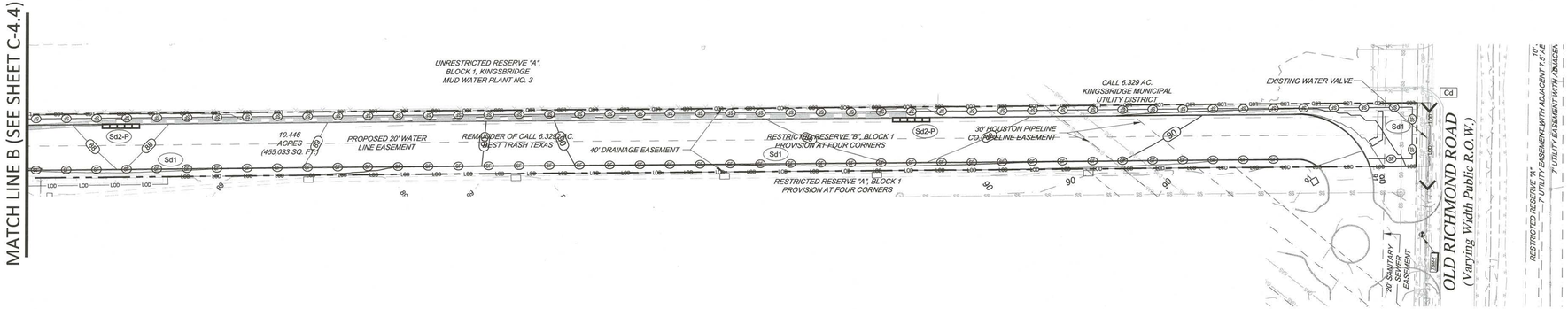
EROSION AND SEDIMENT CONTROL LEGEND			
CODE	PRACTICE	DETAIL	MAP SYMBOL
Cd	CHECKDAM		
Fr	FILTER RING		Fr
Sd1	SEDIMENT BARRIER		SF TYPE "C" SILT FENCE
Sd2-P	INLET SEDIMENT TRAP CURB INLET PROTECTION		
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)		Ds3
	LIMITS OF DISTURBANCE	N/A	LOD

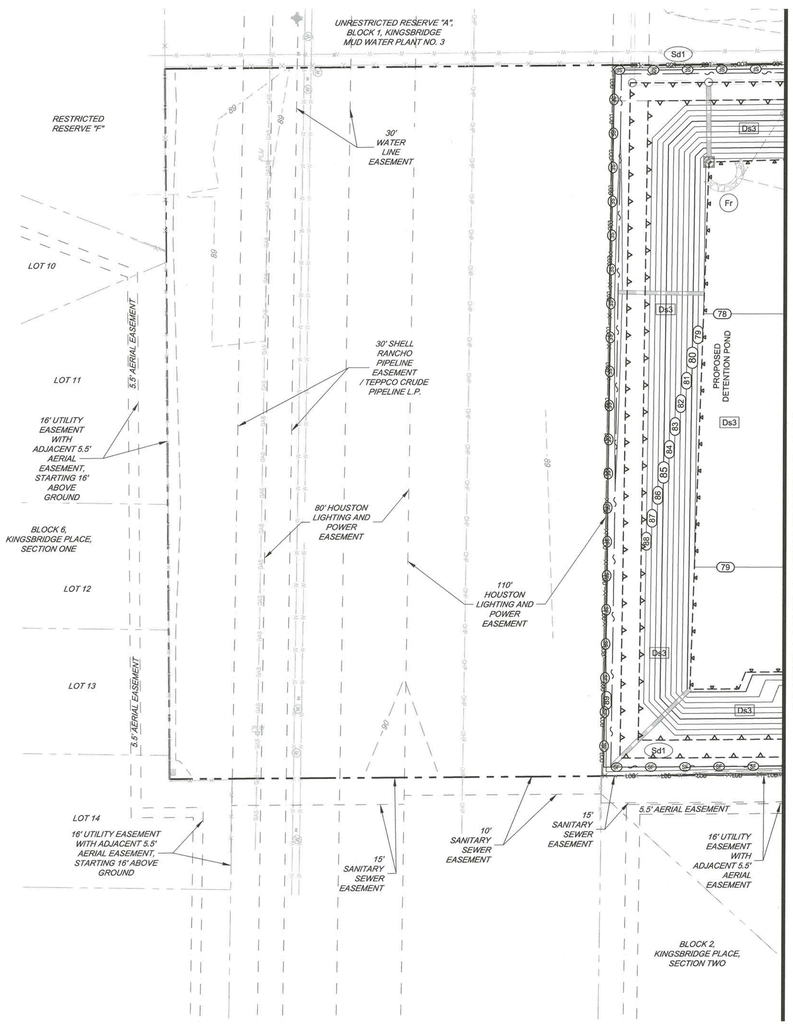
SOIL TYPE	
La	LAKE CHARLES CLAY, 0 TO 1 PERCENT SLOPES

GENERAL NOTES:

1) CONTRACTOR SHALL PROVIDE A COPY OF THE TCEQ NOI & SWPPP TO MILLER & ASSOCIATES PRIOR TO START OF CONSTRUCTION.

2) ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE PREVIOUS DESIGN PLANS BY FORESITE GROUP, INC. DATED 01/04/2017. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL EXISTING UTILITIES AND PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.





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FBC DEVELOPMENT COORDINATOR 10/13/17 DATE

1" = 40'
40 20 0 40 80
SCALE IN FEET

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St.
Suite 890
Dallas, TX 75201
o | 214.939.7123
f | 888.765.8135
w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:

GARDNER CAPITAL

2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538

CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:

FINAL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:

C-4.5

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

EROSION CONTROL NOTES:

1) THE CONTRACTOR SHALL PREPARE AND MAINTAIN A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH TCEQ REGULATIONS. CONTRACTOR SHALL PROVIDE KINGSBRIDGE MUD WITH A COPY OF THE TCEQ NOI WHEN IT IS FILED.

2) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN QUALIFIED PROFESSIONAL ADVICE WHEN QUESTIONS ARISE CONCERNING DESIGN AND EFFECTIVENESS OF EROSION CONTROL DEVICES. 24 HR CONTACT: **MR. JOHN B. RHODES, JR., PE (214) 939-7123. CONTRACTOR SHALL INFORM ENGINEER WHEN CONSTRUCTION BEGINS.**

3) THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL TAKE PLACE PRIOR TO OR CONCURRENT WITH ALL LAND DISTURBING ACTIVITIES THROUGHOUT THE ENTIRE PROJECT.

4) ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

5) EROSION AND SEDIMENT CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

6) THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, ALL LAND DISTURBING ACTIVITIES THROUGHOUT THE ENTIRE PROJECT.

7) SEDIMENT STORAGE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME.

8) THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE ACCUMULATED SILT IS ONE-THIRD (1/3) FULL FOR ALL EROSION & SEDIMENT CONTROL STRUCTURES.

9) MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNER.

10) A 25-FOOT UNDISTURBED BUFFER IS TO BE MAINTAINED ADJACENT TO ALL STREAMS.

11) DETENTION POND, DETENTION OUTLET STRUCTURES AND TEMPORARY SEDIMENT POND FEATURES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION.

12) ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

13) CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF TEN FEET OR GREATER SHALL STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING.

14) THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY THE PROFESSIONAL OR THE PROFESSIONAL'S AUTHORIZED AGENT, UNDER THE PROFESSIONAL'S DIRECT SUPERVISION.

15) EROSION CONTROL DEVICES THAT ARE INSTALLED AS DIRECTED BY THE LAND DEVELOPMENT INSPECTOR BUT NOT SHOWN ON THE APPROVED PLAN AND WHICH ALSO SUBSEQUENTLY FAIL, ARE THE RESPONSIBILITY OF THE CONTRACTOR.

16) ALL TEMPORARY AND PERMANENT SEEDING MUST BE PERFORMED AT THE APPROPRIATE SEASON. ADDITIONAL PLANTINGS WILL BE NECESSARY IF A SUFFICIENT STAND OF GRASS FAILS TO GROW.

17) TOPSOIL SHALL BE STOCKPILED AND USED TO DRESS FINAL GRADES.

18) NO PORTION OF THE SUBJECT PROPERTY LIES WITHIN A 100 YEAR FLOOD HAZARD AREA PER FIRM MAP NUMBER 48157C0145L DATED 04/02/2014.

19) THE CONTRACTOR WILL CLEAN OUT ACCUMULATED SILT IN THE STORM DRAINAGE PIPES AT END OF CONSTRUCTION WHEN DISTURBED AREAS HAVE BEEN STABILIZED.

20) ALL LOTS WITH WET LAND OR WITHIN A DAM ZONE SHALL BE DENOTED WITH AN ASTERISK.

21) APPROVAL OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY FORT BEND COUNTY OR TCEQ OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS AND/OR WHICH MAY IMPACT ENDANGERED SPECIES. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONTACT THE APPROPRIATE REGULARITY AGENCY FOR APPROVAL OF ANY DISTURBANCE WHICH MAY HAVE THIS EFFECT.

22) ALL CONSTRUCTION SHALL COMPLY WITH THE SPECIFICATIONS AND PROCEDURES DETAILED IN THE CURRENT DEVELOPMENT REGULATIONS OF FORT BEND COUNTY.

23) TWO ROWS OF SILT FENCE SHALL BE INSTALLED ADJACENT TO STATE WATERS AND WILL PROTECT STATE WATERS FROM ANY LAND DISTURBING ACTIVITIES.

24) ALL SLOPES AND AREAS DISTURBED DURING CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL APPLIED. THE AREA SHALL THAT BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL A HEALTHY STAND OF PERMANENT VEGETATION HAS BEEN ESTABLISHED FOR ALL DISTURBED AREAS. SEEDS FOR GRASSED AREAS USE THE FOLLOWING MIXTURES.

25) ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION IS COMPLETE.

26) SILT BARRIERS SHALL BE PLACED AS SHOWN AND/OR AS DIRECTED BY THE PROJECT ENGINEER AND/OR COUNTY INSPECTORS.

27) CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES UNTIL CONSTRUCTION IS COMPLETE AND PERMANENT VEGETATION HAS BEEN ESTABLISHED.

28) ALL DISTURBED AREAS SHALL BE GRASSED AS SOON AS POSSIBLE AS PER THE SEEDING SCHEDULES AND RATES.

29) ALL OPEN DRAINAGE SWALES MUST BE GRASSED AND RIP-RAP PLACED AS REQUIRED TO PREVENT EROSION.

30) MAXIMUM SLOPES ON CUT OR FILL SECTIONS SHALL NOT EXCEED 2 TO 1.

31) ALL FILL AREAS AND DITCH WORK ON THIS SITE SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR.

32) ALL DRAINAGE STRUCTURES SHALL HAVE RING AND COVER ACCESS.

33) SECONDARY PERMITTEES SHALL BE RESPONSIBLE FOR RETURNING AREAS DISTURBED DURING THEIR ACTIVITIES TO THE CONDITION PRIOR TO THEIR DISTURBANCE (TO INCLUDE SEEDING, STRAW, OR OTHER PRE-EXISTING BMP CONTROLS APPLIED).

34) EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS.

35) INSPECTIONS ARE TO BE MADE AFTER EACH RAINFALL EVENT AND SILT ACCUMULATIONS SHALL BE REMOVED FROM ANY SEDIMENT BASINS AND PLACED AT A STABLE LOCATION WHERE IT IS TO BE SEEDED AND MULCHED.

36) SEE EROSION CONTROL DETAIL SHEET FOR EROSION CONTROL DETAILS.

37) RED LINE COMMENTS ON WORKING SETS OF PLANS SHOULD BE MAINTAINED ON SITE FOR ANY CHANGES MADE TO EROSION CONTROL PLAN. COMMENTS SHOULD INCLUDE DATE AND JUSTIFICATION FOR CHANGES.

38) PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE. ANY MUD, DIRT, OR ROCK TRACKED FROM THE SITE WILL BE CLEANED AS NECESSARY. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARPAULIN.

39) PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF DISTURBANCE SHALL BE CLEARLY AND ACCURATELY MARKED WITH STAKES, RIBBON OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

40) IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.

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GENERAL NOTES:

THIS PLAN INCLUDES, AS A MINIMUM, BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION.

1) STRIPPING OF VEGETATION, CUT AND FILL OPERATIONS, AND OTHER DEVELOPMENT ACTIVITIES WILL BE CONDUCTED IN A MANNER SO AS TO MINIMIZE EROSION.

2) DEVELOPMENT PLANS CONFORM TO TOPOGRAPHY AND SOIL TYPE, SO AS TO CREATE THE LOWEST PRACTICABLE EROSION POTENTIAL.

3) THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSIVE ELEMENTS WILL BE KEPT TO A PRACTICAL MINIMUM. WHENEVER FEASIBLE, NATURAL VEGETATION WILL BE RETAINED, PROTECTED, AND SUPPLEMENTED.

4) DISTURBED SOIL WILL BE STABILIZED AS QUICKLY AS PRACTICABLE.

5) TEMPORARY VEGETATION OR MULCHING WILL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT AT A MINIMUM OF EVERY 7 DAYS IF THE SOIL HAS BEEN LEFT UNDISTURBED.

6) PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES WILL BE INSTALLED AS SOON AS PRACTICABLE.

7) TO THE EXTENT NECESSARY, SEDIMENT IN RUN-OFF WATER WILL BE TRAPPED BY THE USE OF DEBRIS BASINS, SILT FENCE, SILT TRAPS, OR SIMILAR MEASURES UNTIL THE DISTURBED AREA IS STABILIZED.

8) ADEQUATE PROVISIONS SHALL BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACES OF FILLS.

9) CUTS AND FILLS WILL NOT ENDANGER ADJOINING PROPERTY.

10) FILLS WILL NOT ENCROACH UPON NATURAL WATER COURSES OR CONSTRUCTED CHANNELS IN A MANNER SO AS TO ADVERSELY AFFECT OTHER PROPERTY OWNERS.

11) GRADING EQUIPMENT WILL CROSS FLOWING STREAMS BY THE MEANS OF BRIDGES OR CULVERTS, EXCEPT WHEN SUCH METHODS ARE NOT FEASIBLE, PROVIDED IN ANY CASE THAT SUCH CROSSINGS ARE KEPT TO A MINIMUM.

12) PROVISIONS ARE PROVIDED FOR TREATMENT OR CONTROL OF ANY SOURCE OF SEDIMENTS AND ADEQUATE SEDIMENTATION CONTROL FACILITIES TO RETAIN SEDIMENTS ON SITE OR PRECLUDE SEDIMENTATION OF ADJACENT WATERS BEYOND THE LEVELS TXR 150000; OR SPECIFIED IN THE GENERAL NPDES PERMIT NUMBER.

13) FOR COMMON DRAINAGE LOCATIONS A TEMPORARY (OR PERMANENT) SEDIMENT BASIN PROVIDING AT LEAST 67 CUBIC YARDS OF STORAGE PER ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE 67 CUBIC YARDS OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFF-SITE AREAS AND FLOWS FROM ON-SITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. FOR DRAINAGE LOCATIONS WHERE A TEMPORARY SEDIMENT BASIN PROVIDING AT LEAST 67 CUBIC YARDS OF STORAGE PER ACRE DRAINED, OR EQUIVALENT CONTROLS IS NOT ATTAINABLE, SEDIMENT TRAPS, SILT FENCES, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA. WHEN THE SEDIMENT FILLS TO A VOLUME AT MOST OF 22 CUBIC YARDS PER ACRE FOR EACH DRAINAGE AREA, THE SEDIMENT SHALL BE REMOVED TO RESTORE THE ORIGINAL DESIGN VOLUME. THIS SEDIMENT MUST BE PROPERLY DISPOSED. SEDIMENT BASINS MAY NOT BE APPROPRIATE AT SOME CONSTRUCTION PROJECTS.

14) NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

15) OFF SITE VEHICLE TRACKING OF DIRT, SOILS, AND SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED OR ELIMINATED TO THE MAXIMUM EXTENT PRACTICAL.

16) ALL DEVELOPMENT AREAS SHALL MAINTAIN COMPLIANCE WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.

17) A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.

18) THERE SHALL BE NO ON-SITE STORAGE OF PETROLEUM. MOBILE PETROLEUM TRUCKS SHALL BE USED TO FUEL CONSTRUCTION EQUIPMENT ON-SITE. NOTHING IN THIS PERMIT SHALL BE CONSTRUED TO PRECLUDE THE INSTITUTION OF ANY LEGAL ACTION OR RELIEVE THE PERMITTEE FROM ANY RESPONSIBILITIES, LIABILITIES, OR PENALTIES TO WHICH THE PERMITTEE IS OR MAY BE SUBJECT UNDER SECTION 311 OF THE CLEAN WATER ACT OR SECTION 106 OF COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT.

19) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE A "QUALIFIED PROFESSIONAL" INSPECT AND REPORT ALL DEFICIENCIES OF ALL EROSION CONTROL MEASURES AT A MINIMUM OF EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT.

20) AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

PERMITTEE REQUIREMENTS FOR INSPECTION:

1) EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING; AND (C) MEASURE RAINFALL ONCE EACH 24 HOUR PERIOD AT THE SITE. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

2) CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE THAT HAVE NOT UNDERGONE FINAL STABILIZATION; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT UNDERGONE FINAL STABILIZATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(3). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

3) BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

4) A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(4). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO TCEQ. SUCH REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE, THE REPORT SHALL CONTAIN A CERTIFICATION THAT THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND THIS PERMIT. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G. OF THIS PERMIT.

RETENTION OF RECORDS:

1) THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:

A) A COPY OF ALL NOTICES OF INTENT SUBMITTED TO TCEQ;
B) A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
C) A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;
D) A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
E) DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(1)(C) OF THIS PERMIT.

2) COPIES OF ALL NOI'S, NOT'S, REPORTS, PLANS, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE TCEQ AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

WASTE DISPOSAL:

1) WASTE MATERIALS: ALL WASTE MATERIALS WILL BE COLLECTED AND STORED TO BE PROPERLY DISPOSED OF AT A LICENSED SOLID WASTE MANAGEMENT COMPANY. LOCATE WASTE COLLECTION AREAS AWAY FROM STREETS, GUTTERS, WATERCOURSES, AND STORM DRAINS. WASTE COLLECTION AREAS, SUCH AS DUMPSTERS, ARE OFTEN BEST LOCATED NEAR CONSTRUCTION SITE ENTRANCES TO MINIMIZE TRAFFIC ON DISTURBED SOIL. DISPOSAL SHALL BE PERIODICALLY AS NEEDED. NO CONSTRUCTION MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED CONCERNING WASTE DISPOSAL. THE CONTRACTOR WILL BE RESPONSIBLE FOR THIS INSTRUCTION, AND WILL BE RESPONSIBLE FOR SEEING THAT THESE INSTRUCTIONS ARE FOLLOWED.

2) HAZARDOUS WASTE: ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

3) SANITARY WASTE: IF NEEDED, PORTABLE UNITS WILL BE USED TO COLLECT SANITARY WASTE. ALL SANITARY WASTE TO BE DISPOSED OF PROPERLY ACCORDING TO STATE AND FEDERAL CODE. A MINIMUM OF ONE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN (10) WORKERS ON SITE.

SPILL PREVENTION AND CONTROL NOTES:

1) PETROLEUM PRODUCTS: ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

2) FERTILIZERS: FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A CLEAN, DRY PLACE. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

3) PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

4) AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB

5) ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS.

6) PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL

7) SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER

8) WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER

9) MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED

10) THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

11) THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

A) PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RE-SEALABLE.
B) ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED.
C) IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

12) MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

13) MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS AS APPROPRIATE.

14) ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

15) THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

16) SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

17) THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RE-OCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

18) THE CONTRACTOR RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. ANY SPILL SHALL BE REPORTED TO HIM FOR IMMEDIATE ACTION AS SOON AS THE SPILL IS DISCOVERED.

19) THERE SHALL NOT BE A CONCRETE WASH AREA ON-SITE. IF SO, IT SHALL BE LOCATED IN AN UPLAND AREA AWAY FROM DRAINAGE AREAS FOR WASH FACILITY. CONTAIN WITH BARRICADES IF STORAGE IS CONDUCED ON-SITE.

20) FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER) OR FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HRS., 1-800-426-2675.

SITE DETAILS:

1) NATURE OF THE CONSTRUCTION ACTIVITY = DEMOLITION, CLEARING & GRUBBING, AND RETAIL DEVELOPMENT

2) CONSTRUCTION SCHEDULE = SEE G-1

3) TOTAL AREA OF THE SITE = 10.446 ACRES

4) TOTAL DISTURBED AREA OF THE SITE = 8.43 ACRES

5) PRE-DEVELOPMENT CURVE NUMBER = 80

6) POST-DEVELOPMENT CURVE NUMBER = 93

7) EXISTING TOPOGRAPHIC MAP = SEE SHEET SERIES V-1

8) PLAN INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER MAJOR GRADING ACTIVITIES = SEE SHEET C-2

9) PLAN INDICATING AREAS OF SOIL DISTURBANCE = SEE SHEET SERIES C-2

10) SEE SHEET SERIES C-4 FOR ALL STRUCTURAL AND NONSTRUCTURAL BMP'S.

11) IDENTIFICATION OF RECEIVING WATER(S) = KEEGANS BAYOU

12) BUFFERED STATE WATERS PRESENT ON SITE = N/A

13) WETLAND ACREAGE AT THE SITE = 0 ACRES TOTAL

14) NO PORTION OF THE SUBJECT PROPERTY LIES WITHIN A 100 YEAR FLOOD HAZARD AREA PER FIRM MAP NUMBER 48157C0145L DATED 04/02/2014.

15) NAMES AND ADDRESSES OF ALL SECONDARY PERMITTEES = N/A

16) DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE = SEE SHEET SERIES C-4

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St. Suite 890 Dallas, TX 75201
o | 214.939.7123
f | 888.765.8135
w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538
CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
TITLE:	

EROSION CONTROL NOTES

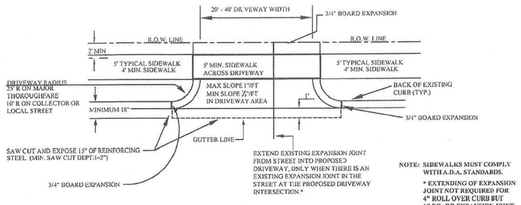
SHEET NUMBER:
C-4.6

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

WHEN A COMMERCIAL SIDEWALK, DRIVEWAY, CURB OR GUTTER IS CONSTRUCTED, RECONSTRUCTED, REPAIRED OR REGRADED ON COUNTY RIGHT-OF-WAY. FOR USE WITH CONCRETE OR ASPHALT CURB TYPE STREETS, USE SECTIONS APPLICABLE.

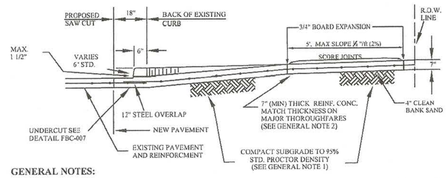
A. USE FOR ALL PROPOSED EXISTING CURB REMOVAL FOR DRIVEWAYS (PLAN VIEW NOT TO SCALE)



NOTE: SIDEWALKS MUST COMPLY WITH A.D.A. STANDARDS.

*** EXTENDING OF EXPANSION JOINT NOT REQUIRED FOR 4" ROLL OVER CURB BUT 1" BOARD EXPANSION JOINT MUST BE PROVIDED BACK OF CURB**

B. USE FOR ALL PROPOSED DRIVES ON CURBED TYPE STREETS



GENERAL NOTES:

1. COMPACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO R.O.W. LINE, COMPACT TO 95% OF STANDARD PROCTOR DENSITY(+/- 2% OPT. MOISTURE), THE COUNTY ENGINEER RESERVES THE RIGHT TO REQUIRE LABORATORY TESTS TO BE CONDUCTED.
2. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DEFORMED REINFORCING BARS (ASTM A615, GRADE 60, UNLESS NOTED)SPACED AT 24" C.C., EACH WAY, WITH 12" MINIMUM LAP FROM PROPOSED SAW CUT TO R.O.W. LINE.
3. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT (5 SACKS (3000 PSI) OF CEMENT PER CUBIC YARD OF CONCRETE), CLASS "A" STRUCTURAL (REFER TO SPECIFICTION 03301), 7" THICK, FROM PROPOSED SAW CUT TO R.O.W. LINE.
4. PROPOSED SIDEWALK SHALL BE CONSTRUCTED WITH PORTLAND CEMENT (5 SACKS (3000 PSI) OF CEMENT PER CUBIC YARD OF CONCRETE), CLASS "A" STRUCTURAL (REFER TO SPECIFICTION 03301), 4" THICK.
5. FOR TYPICAL SIDEWALK DEATAIL SEE FBC-401.

SIDEWALKS & DRIVEWAYS ON CURB TYPE STREETS COMMERCIAL AREA	DRAWN BY: L. BRDECKA DATE DRAWN: 2-1-94	REVISED BY: J. NETARDUS DATE REVISED: 4-7-09
	APPROVED BY: L. HOOD DATE: 2-1-94	DRAWING NO. FBC-025A

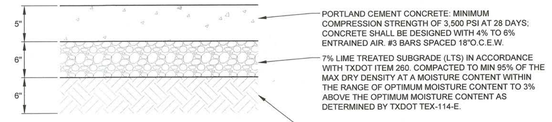
FORT BEND COUNTY ENGINEERING DEPARTMENT

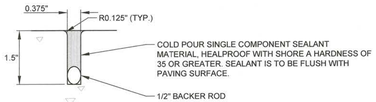
GENERAL NOTES FOR SIDEWALKS AND DRIVEWAYS

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 BACK OF CURB (GUTTER LINE) AND BREAK OUT TO EXPOSE EXISTING REINFORCEMENT STEEL.
3. COMPACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO RIGHT-OF-WAY LINE, COMPACT TO 95% OF STANDARD PROCTER DENSITY (+/- 2% OPT. MOISTURE). THE COUNTY ENGINEER RESERVES THE RIGHT TO REQUIRE 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 ROADWAY REINFORCING STEEL WITH A MINIMUM LAP OF 12 INCHES.
7. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DEFORMED RE-INFORCING BARS (ASTM A615 GRADE 60, UNLESS NOTED) SPACED AT 24 INCHES C.C., EACH WAY, WITH 12 INCHES MINIMUM LAP (6" x 6" W6 x W6 AS ALTERNATE) FROM PROPOSED SAW CUT TO RIGHT-OF-WAY LINE.
8. PROPOSED DRIVEWAY, CURB, GUTTER LINE, AND GRADE SHALL MATCH EXISTING STREET.
9. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 7 INCHES THICK, FROM PROPOSED SAW CUT TO RIGHT-OF-WAY LINE (PROPERTY LINE).
10. PROPOSED SIDEWALK SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 4 INCHES THICK AND 4 FEET 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. BRDECKA DATE DRAWN: 2-1-94	REVISED BY: L. BRDECKA DATE REVISED: 3-10-05
	APPROVED BY: L. HOOD DATE: 2-1-94	DRAWING NO. FBC-025B

FORT BEND COUNTY ENGINEERING DEPARTMENT

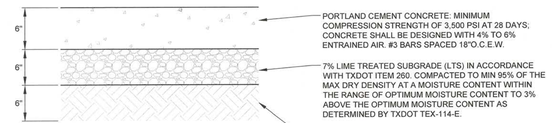


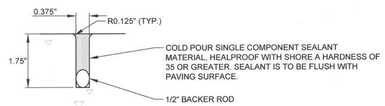


CONTROL JOINT

NOTE:
1. DETAIL REFLECTS LIGHT DUTY CONCRETE PAVING RECOMMENDATION BY PROJECT GEOTECHNICAL ENGINEER.
2. CONCRETE JOINTS SHALL NOT EXCEED 15' ON CENTER. THE JOINTS SHALL EXTEND TO A DEPTH 1/4 OF THE SLAB THICKNESS. IF SAW CUTTING THE JOINTS IS TO BE EMPLOYED, THE JOINTS SHOULD BE CUT WHILE THE CONCRETE IS STILL "GREEN" AND AS SOON AFTER PLACEMENT AS THE EQUIPMENT CAN BE MOVED ONTO THE PAVEMENT WITHOUT DISTURBING THE CONCRETE FINISH.
3. ALL CONTROL JOINTS SHOULD BE FORMED OR SAWED TO A DEPTH OF AT LEAST 1/4 THE THICKNESS OF THE CONCRETE SLAB. SAWING OF CONTROL JOINTS SHOULD BEGIN AS SOON AS THE CONCRETE WILL NOT RAVEL, GENERALLY THE DAY AFTER PLACEMENT. CONTROL JOINTS MAY BE HAND FORMED OR FORMED BY USING A PREMOLDED FILLER. WE RECOMMEND THAT ALL LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS BE DOWELLED TO PROMOTE LOAD TRANSFER. EXPANSION JOINTS ARE NEEDED TO SEPARATE THE CONCRETE SLAB FROM FIXED OBJECTS SUCH AS DROP INLETS, LIGHT STANDARDS AND BUILDINGS. EXPANSION JOINT SPACINGS ARE NOT TO EXCEED A MAXIMUM OF 60 FT AND NO EXPANSION OR CONSTRUCTION JOINTS SHOULD BE LOCATED IN A SWALE OR DRAINAGE COLLECTION LOCATIONS.
4. A LIQUID MEMBRANE-FORMING CURING COMPOUND SHOULD BE APPLIED AS SOON AS PRACTICAL AFTER BROOM FINISHING THE CONCRETE SURFACE.

1 C-5 STANDARD DUTY CONCRETE PAVING
NOT TO SCALE

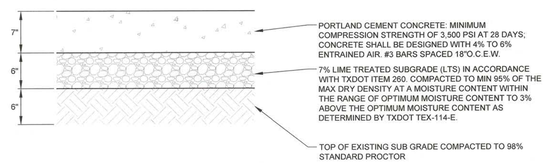


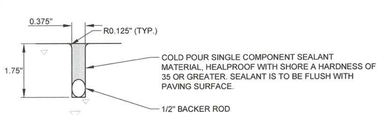


CONTROL JOINT

NOTE:
1. DETAIL REFLECTS DRIVE LANES, FIRE LANES, AND BUS LANES CONCRETE PAVING RECOMMENDATION BY PROJECT GEOTECHNICAL ENGINEER.
2. CONCRETE JOINTS NOT EXCEED 15' ON CENTER. THE JOINTS SHALL EXTEND TO A DEPTH 1/4 OF THE SLAB THICKNESS. IF SAW CUTTING THE JOINTS IS TO BE EMPLOYED, THE JOINTS SHOULD BE CUT WHILE THE CONCRETE IS STILL "GREEN" AND AS SOON AFTER PLACEMENT AS THE EQUIPMENT CAN BE MOVED ONTO THE PAVEMENT WITHOUT DISTURBING THE CONCRETE FINISH.
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4. A LIQUID MEMBRANE-FORMING CURING COMPOUND SHOULD BE APPLIED AS SOON AS PRACTICAL AFTER BROOM FINISHING THE CONCRETE SURFACE.

2 C-5 HEAVY DUTY CONCRETE PAVING
NOT TO SCALE

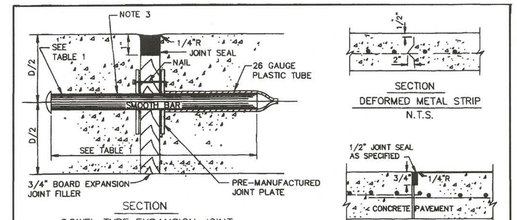




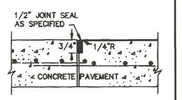
CONTROL JOINT

NOTE:
1. DETAIL REFLECTS DUMPSTER AREAS CONCRETE PAVING RECOMMENDATION BY PROJECT GEOTECHNICAL ENGINEER.
2. CONCRETE JOINTS NOT EXCEED 15' ON CENTER. THE JOINTS SHALL EXTEND TO A DEPTH 1/4 OF THE SLAB THICKNESS. IF SAW CUTTING THE JOINTS IS TO BE EMPLOYED, THE JOINTS SHOULD BE CUT WHILE THE CONCRETE IS STILL "GREEN" AND AS SOON AFTER PLACEMENT AS THE EQUIPMENT CAN BE MOVED ONTO THE PAVEMENT WITHOUT DISTURBING THE CONCRETE FINISH.
3. ALL CONTROL JOINTS SHOULD BE FORMED OR SAWED TO A DEPTH OF AT LEAST 1/4 THE THICKNESS OF THE CONCRETE SLAB. SAWING OF CONTROL JOINTS SHOULD BEGIN AS SOON AS THE CONCRETE WILL NOT RAVEL, GENERALLY THE DAY AFTER PLACEMENT. CONTROL JOINTS MAY BE HAND FORMED OR FORMED BY USING A PREMOLDED FILLER. WE RECOMMEND THAT ALL LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS BE DOWELLED TO PROMOTE LOAD TRANSFER. EXPANSION JOINTS ARE NEEDED TO SEPARATE THE CONCRETE SLAB FROM FIXED OBJECTS SUCH AS DROP INLETS, LIGHT STANDARDS AND BUILDINGS. EXPANSION JOINT SPACINGS ARE NOT TO EXCEED A MAXIMUM OF 60 FT AND NO EXPANSION OR CONSTRUCTION JOINTS SHOULD BE LOCATED IN A SWALE OR DRAINAGE COLLECTION LOCATIONS.
4. A LIQUID MEMBRANE-FORMING CURING COMPOUND SHOULD BE APPLIED AS SOON AS PRACTICAL AFTER BROOM FINISHING THE CONCRETE SURFACE.

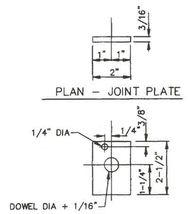
3 C-5 DUMPSTER AREA CONCRETE PAVING
NOT TO SCALE



SECTION
DOWEL TYPE EXPANSION JOINT
N.T.S



SECTION
CONSTRUCTION JOINT SEAL
N.T.S.



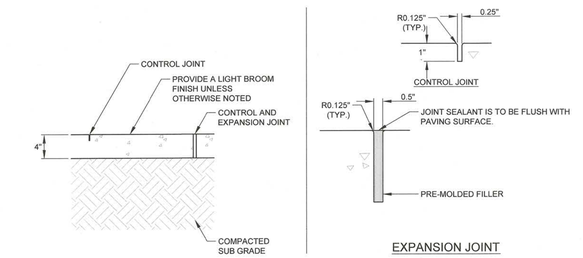
ELEVATION - JOINT PLATE
N.T.S.

NOTES:
1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. UNITS TO BE SPACED ON 12" CENTERS.
2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS.
3. CENTER DOWEL HORIZONTALLY ON JOINT.
4. CENTER DOWEL VERTICALLY IN CONCRETE BASE. EXTEND THICKENED CONCRETE AS NEEDED TO MAINTAIN 3" MIN. COVER.
5. CITY OF HOUSTON APPROVED PRODUCTS MAY BE USED AS JOINT PLATE ALTERNATIVE

TABLE 1

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
6	3/4	18	12
7	1	18	12
8	1	18	12
9	1 1/4	18	12
10	1 1/4	18	12
11	1 1/4	18	12
12	1 1/4	18	12

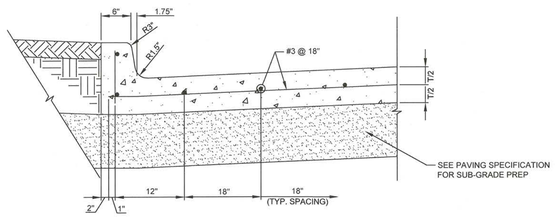
CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION	
PAVEMENT EXPANSION AND CONSTRUCTION JOINT DETAILS (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: June-01-2003	DWG NO: 02752-01



EXPANSION JOINT

NOTE:
1. UNLESS OTHERWISE INDICATED, PREFORMED EXPANSION JOINTS TO BE 40'-0" O.C. MAX. OR AT BACK OF CURB, CHANGE OF DIRECTION, OTHER WALK UTILITY APPURTENANCE, OR FACE OF STRUCTURE.
2. UNLESS OTHERWISE INDICATED, CONTROL JOINTS AT 5'-0" O.C.
3. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1/4" PER FT.

4 C-5 CONCRETE SIDEWALK
NOT TO SCALE



NOTE:
1. 1/2" PRE FORMED EXPANSION JOINTS REQUIRED AT ALL STRUCTURES AND RADIUS POINTS.
2. MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS = 40.0'
3. MAXIMUM DISTANCE DUMMY JOINTS = 12.5'
4. CONCRETE STRENGTH = 3,000 P.S.I.

5 C-5 CONCRETE CURB
NOT TO SCALE 1" = 1'

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

ENGINEER:
FORESITE group
TBPE Firm No. F-12878
Foresite Group, Inc.
1999 Bryan St.
Suite 890
Dallas, TX 75201
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w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

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SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

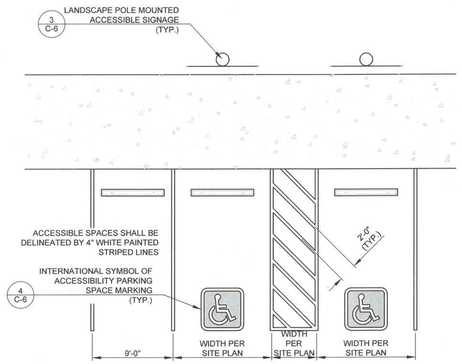
PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:
PAVING DETAILS

SHEET NUMBER:
C-5

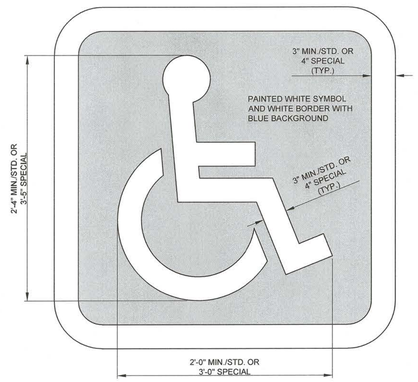
COMMENTS:
NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER:
693.011

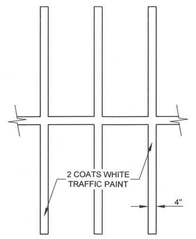


NOTE:
SEE GRADING PLAN FOR ELEVATIONS. ACCESSIBLE SPACES AND LOADING AREAS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

1 C-6 **ACCESSIBLE PARKING**
NOT TO SCALE

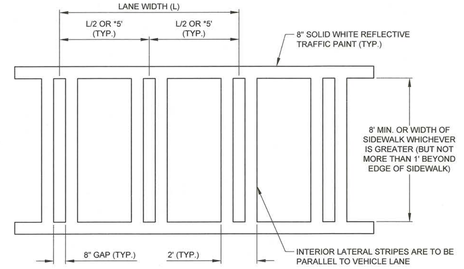


4 C-6 **INTERNATIONAL SYMBOL OF ACCESSIBILITY PARKING SPACE MARKING**
NOT TO SCALE



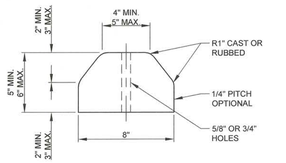
NOTE: SEE SITE DEVELOPMENT PLAN FOR PARKING DIMENSIONS & LAYOUT

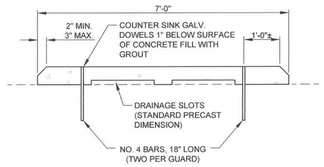
5 C-6 **PAVEMENT STRIPING**
NOT TO SCALE

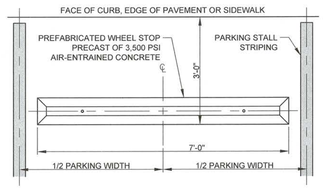


* USE WHERE LANE WIDTH EXCEEDS 12' OR WHERE LANE LINES HAVE BEEN OMITTED

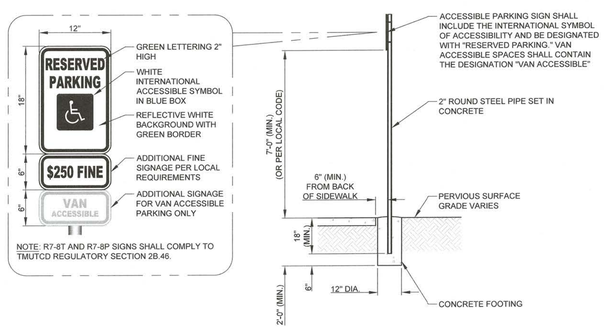
6 C-6 **CROSSWALK STRIPING**
NOT TO SCALE



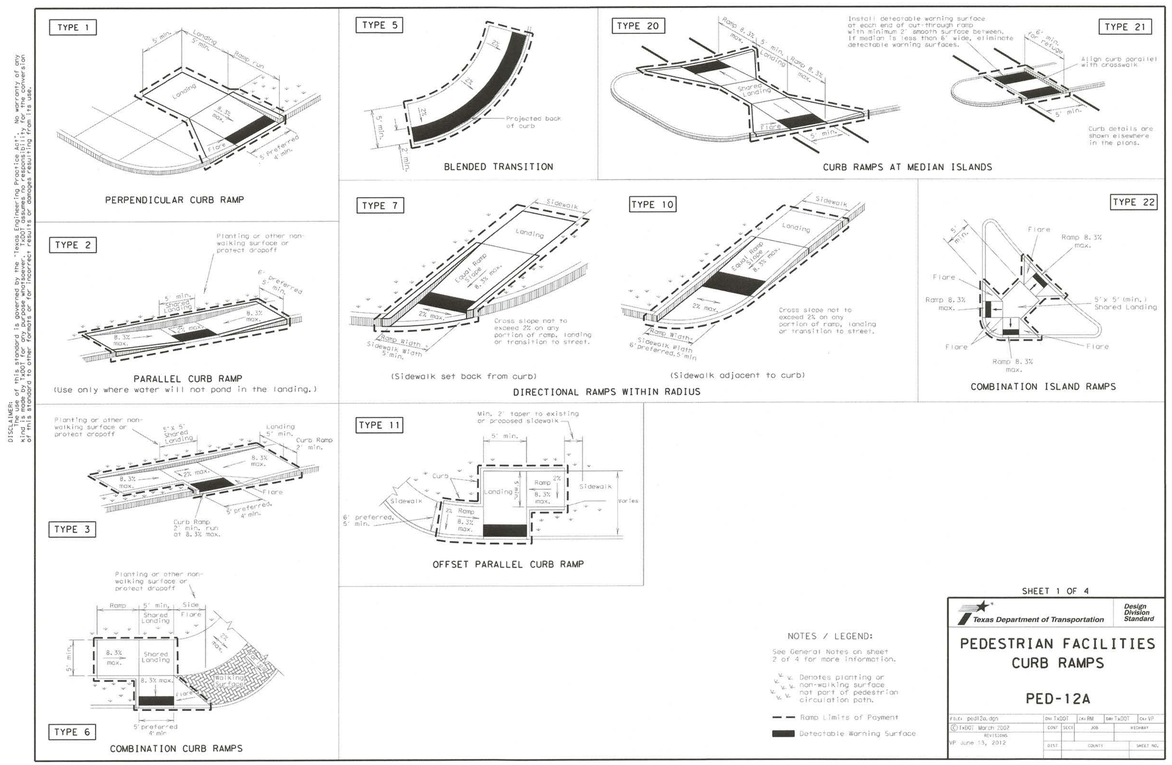




2 C-6 **WHEEL STOP**
NOT TO SCALE



3 C-6 **LANDSCAPE POLE MOUNTED ACCESSIBLE SIGNAGE**
NOT TO SCALE



DISCLAIMER:
The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by the Texas Department of Transportation for any particular use or application of this standard and no liability is assumed in connection with any use or application of this standard by the Texas Department of Transportation. The Texas Department of Transportation shall not be responsible for incorrect results or damages resulting from its use.

SHEET 1 OF 4

Texas Department of Transportation — Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-12A

FILE: ped12a.dgn	DW: TxDOT	CK: RM	DW: TxDOT	CK: VP
© TxDOT March 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS				
VP June 13, 2012	DIST	COUNTY		SHEET NO.

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
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Suite 890 — f | 888.765.8135
Dallas, TX 75201 — w | www.fg-inc.net
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2501 N. HARWOOD ST, SUITE 1501
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(417) 447-5538

CONTACT: MR. RUBEN ESQUEDA

PROJECT:

GALA AT FOUR CORNERS

15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:

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JOHN B. RHODES, JR.
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REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:

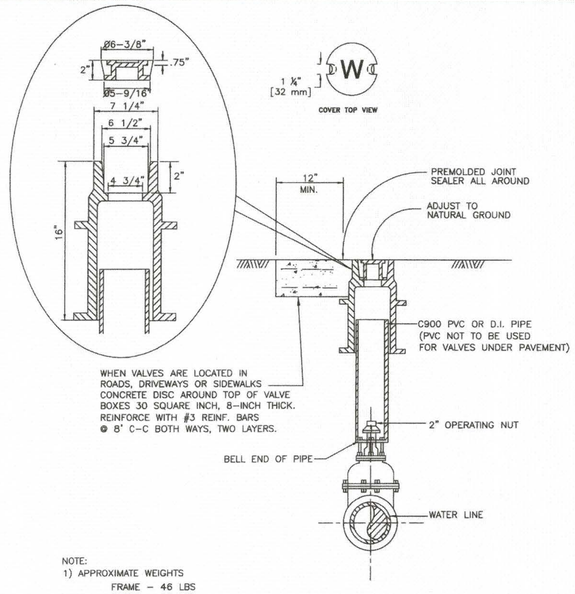
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SHEET NUMBER:

C-6

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011



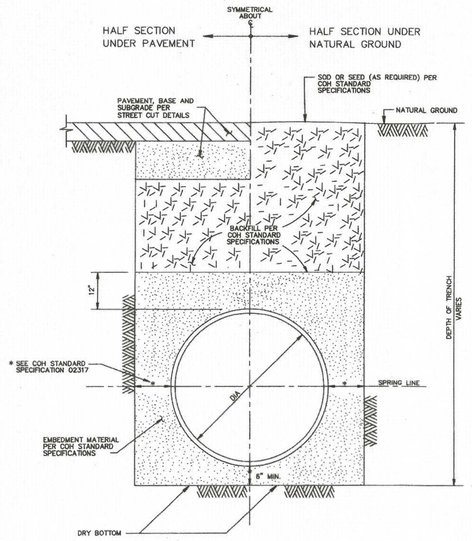
NOTE:
1) APPROXIMATE WEIGHTS
FRAME – 46 LBS
COVER – 10 LBS
2) MATERIAL – GRAY IRON ASTM A48 CL35B

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

VALVE BOX DETAIL

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF. DATE: JULY 01, 2010 | DWG. NO: 02085-03

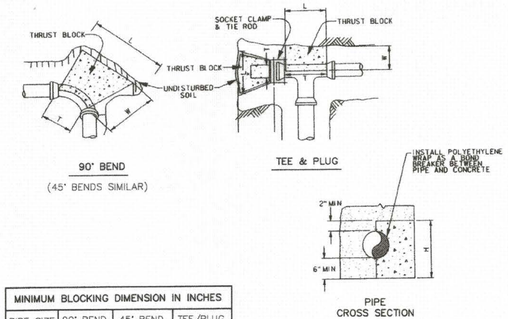


CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER DISTRIBUTION MAIN BEDDING AND BACKFILL FOR OPEN CUT TRENCHES

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010 | DWG NO: 02317-04



MINIMUM BLOCKING DIMENSION IN INCHES												
PIPE SIZE	90° BEND				45° BEND				TEE/PLUG			
	W	H	L	T	W	H	L	T	W	H	L	T
4"	6	12	14	10	6	8	11	8	6	10	12	12
6"	8	14	26	12	8	14	14	12	8	14	19	19
8"	10	16	40	16	10	18	20	16	10	18	26	26
10"	12	24	42	18	12	22	25	18	12	24	30	30
12"	14	36	40	30	14	26	30	22	14	26	40	40

CORRECTION FACTORS		
SOIL TYPE	SOIL BEARING STRENGTH S_b (lb/ft²)	MULTIPLY "L" AND "H" BY
SOFT CLAY	1000	1.73
SILT	1500	1.41
SANDY SILT	3000	1.00
SAND	4000	0.87
SANDY CLAY	6000	0.71
HARD CLAY	9000	0.58

NOTES:
1. DEPTH "H" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE.
2. BLOCKING MUST BE PLACED AGAINST UNDISTURBED EARTH. WHERE THIS IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL MUST BE COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY.
3. PROVIDE CONCRETE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 03315 – CONCRETE FOR UTILITY CONSTRUCTION.
4. BLOCKING DIMENSIONS SHOWN ARE BASED ON 3000 PSI SOIL BEARING STRENGTH AND 125 PSI INTERNAL WATER PRESSURE. FOR OTHER SOIL CONDITIONS, MULTIPLY DIMENSIONS "L" AND "H" BY THE APPROPRIATE CORRECTION FACTOR.

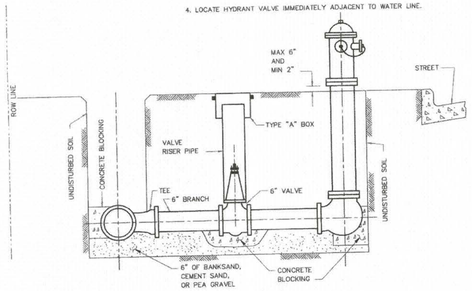
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

THRUST BLOCK DETAIL FOR WATER LINES (4-INCH TO 12 INCH)

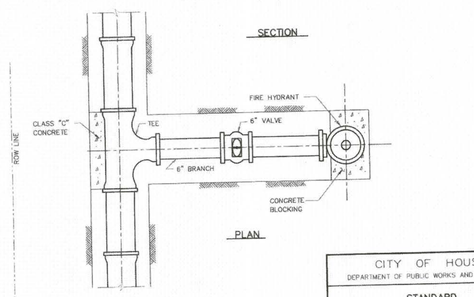
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER | DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF. DATE: JULY-01-2010 | DWG NO: 02511-02

NOTES:
1. LOCATE FIRE HYDRANTS AT PCs OF THE INTERSECTION CURB RADIUS, 3 FEET BEHIND CURB OR PROJECTED FUTURE CURB.
2. ON OPEN-DITCH ROADWAYS, SET THE FIRE HYDRANTS WITH IN 5 FEET OF RIGHTS-OF-WAY LINES.
3. FIRE HYDRANT STEAMER NOZZLE SHALL FACE THE STREET.
4. LOCATE HYDRANT VALVE IMMEDIATELY ADJACENT TO WATER LINE.



SECTION



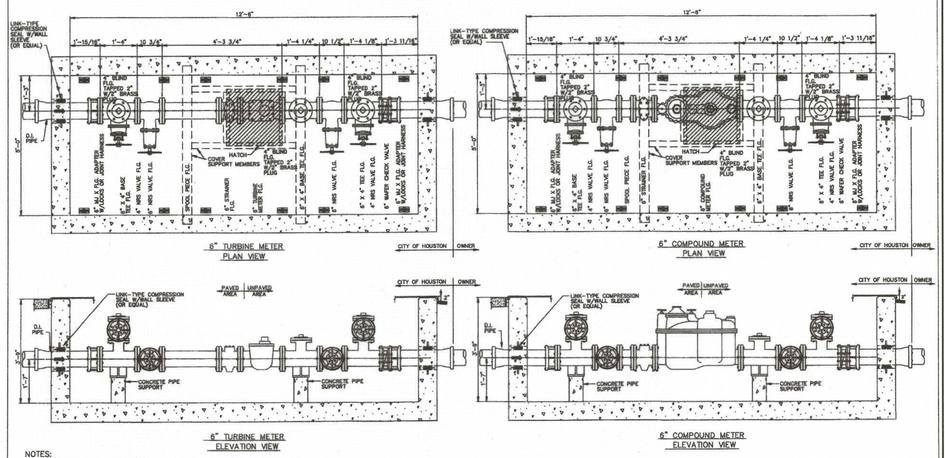
PLAN

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STANDARD FIRE HYDRANT DETAIL

(NOT TO SCALE)

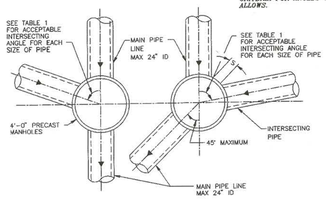
APPROVED BY: CITY ENGINEER | DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2010 | DWG NO: 02520-01


12'-6"
LINK-TYPE COMPRESSION SEAL W/WALL SLEEVE (OR EQUAL)
4" BLIND FLG. TAPPED 2" W/2" BRASS PLUG
6" MJ X FLG ADAPTER W/GRIP OR JOINT HARNESS
6" GATE VALVE
6" MJ X FLG ADAPTER W/GRIP OR JOINT HARNESS
6" TEE FLG.
4" MJ X FLG ADAPTER W/GRIP OR JOINT HARNESS
4" MJ X FLG ADAPTER W/GRIP OR JOINT HARNESS
4" MJ X FLG ADAPTER W/GRIP OR JOINT HARNESS
4" MJ X FLG ADAPTER W/GRIP OR JOINT HARNESS
4" GATE VALVE

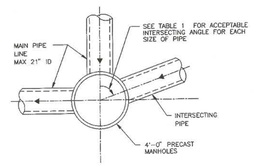
NOTES ON USE OF STANDARD DETAIL 02082-02

NOTES TO SPECIFIER:

1. "–" INDICATES THAT A SPECIAL DESIGN OR THE NEXT LARGER MANHOLE SIZE SHALL BE USED.
2. TABLE 1 IS BASED ON A MIN SEPARATION DISTANCE "S" OF 16.5" OR INTERSECTION PIPE OD/2, WHICHEVER IS GREATER, BETWEEN MAIN AND INTERSECTING PIPES ALONG THE MANHOLE INSIDE WALL ARC.
3. PIPE WALL THICKNESS USED IN TABLE 1 ARE BASED ON RCP. THE DESIGN ENGINEER MAY CALCULATE TO SEE IF THINNER WALL PIPES CAN MEET THE SEPARATION CRITERIA FOR ANGLES SMALLER THAN THE TABLE ALLOWS.



MAX 24" ID MAIN PIPE ALLOWED FOR STRAIGHT THROUGH TO 45° DEFLECTION



MAX 21" ID MAIN PIPE ALLOWED FOR 45° TO 90° DEFLECTION

TABLE 1
MIN ANGLE AND INTERSECTING PIPE SIZES FOR A 4'-0" DIA MANHOLE

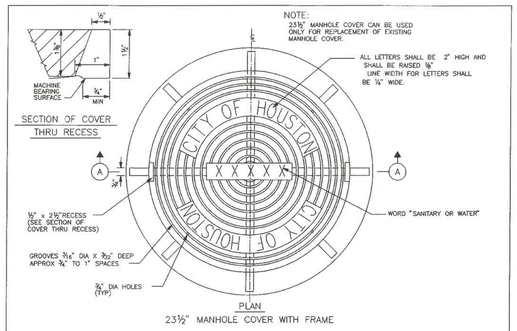
INTERSECTING PIPE SIZE (INCHES)	MIN INTERSECTING ANGLE IN DEGREES FOR FOR VARIOUS MAIN PIPE SIZES IN INCHES							
	6"	8"	10"	12"	15"	18"	21"	24"
6	55	58	60	65	70	75	80	85
8		60	63	68	73	77	82	87
10			66	71	75	80	85	90
12				76	80	85	90	–
15					85	90	–	–
18						–	–	–
21							–	–
24								–

NOT APPLICABLE UNLESS HYDRAULICS DICTATE. (INTERSECTING PIPE > MAIN PIPE)

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER
4'-0" DIAMETER PRECAST
CONCRETE MANHOLE NOTES
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002 DWG NO: 02082N-02

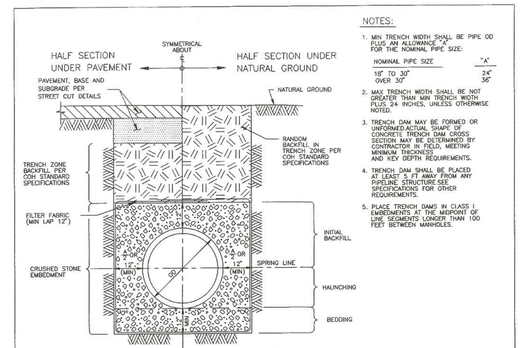


1) NOTE APPROXIMATE WEIGHTS.
FRAME– 170 LBS 77KG
COVER – 270 LBS 123 KG
UNIT 440 LBS 200 KG
2) MATERIAL – GRAY IRON ASTM A48 CL35B
3) CASTING TO MEET M306 PROOF LOAD SPECIFICATION.
4) MODEL V–1420 ASY OR APPROVED EQUAL

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER AND WATER
MANHOLE FRAME AND COVER
(NOT TO SCALE)

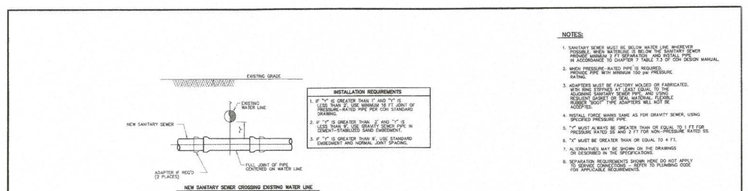
APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002 DWG NO: 02084–01



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER EMBEDMENT AND TRENCH ZONE BACKFILL FOR DRY OR WET STABLE TRENCH
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002 DWG NO: 02317–01



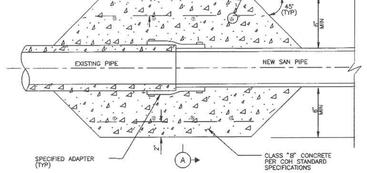
NOTES:
1. SANITARY SEWER MUST BE BELOW WATER LINE WHENEVER POSSIBLE WHEN WATERLINE IS BELOW THE SANITARY SEWER THE SEPARATION MUST BE AS SHOWN IN TABLE 1 OF THIS DETAIL IN ACCORDANCE TO CHAPTER 7 TABLE 7.3 OF COH DESIGN MANUAL.
2. WHEN PRESSURE–RATED PIPE IS REQUIRED, PREFER PIPE WITH MINIMUM 150 psi PRESSURE RATING.
3. ADAPTERS MUST BE FACTORY MOLDED OR FABRICATED. BOTH END SURFACES AT LEAST EQUAL TO THE NOMINAL SANITARY SEWER PIPE WALL THICKNESS. ADAPTERS MUST BE COMPATIBLE WITH SEWER PIPE RUBBER GASKET. LINE SEAM MUST NOT BE ALLOWED.
4. INSTALL JOINTS WHERE SAME AS FOR GRAVITY SEWER, USING SPECIFIED EMBEDMENT TYPE.
5. "X" SHALL NOT BE SMALLER THAN OR EQUAL TO 1 FT FOR NON–PRESSURE RATED SS AND 2 FT FOR NON–PRESSURE RATED SS.
6. "Y" MUST BE GREATER THAN OR EQUAL TO 4 FT.
7. ALTERNATIVES MAY BE SHOWN ON THE DRAWINGS OR DESIGNED IN THE SPECIFICATIONS.
8. SEPARATION REQUIREMENTS SHOWN HEREIN DO NOT APPLY TO SEWERS CROSSING STORM SEWERS. REFER TO STORM CODE FOR APPLICABLE REQUIREMENTS.

INSTALLING SANITARY SEWERS CROSSING OR PARALLEL TO WATER LINES

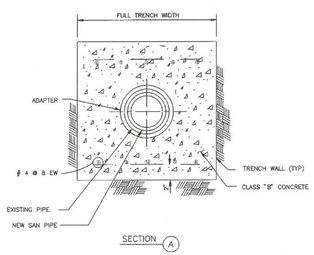
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER
INSTALLING SANITARY SEWERS CROSSING OR PARALLEL TO WATER LINES
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2010 DWG NO: 02531–05



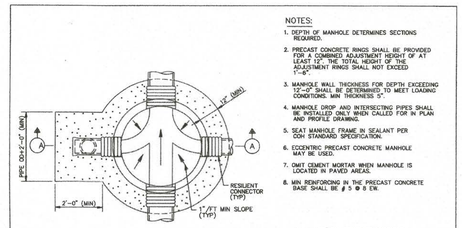
NOTES:
1. PLACE AND COMPACT EMBEDMENT AND TRENCH ZONE BACKFILL PER COH STANDARD SPECIFICATIONS.



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER
PIPE TRANSITION FOR 36" SEWER AND SMALLER
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002 DWG NO: 02531–04



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER
4'–0" DIAMETER PRECAST CONCRETE MANHOLE
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY–01–2010 DWG NO: 02082–02

10/3/17
FBC DEVELOPMENT COORDINATOR — DATE

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09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
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PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
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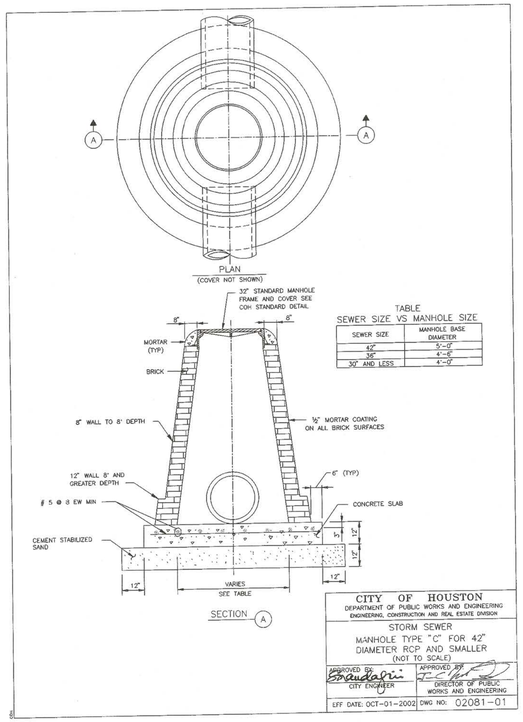
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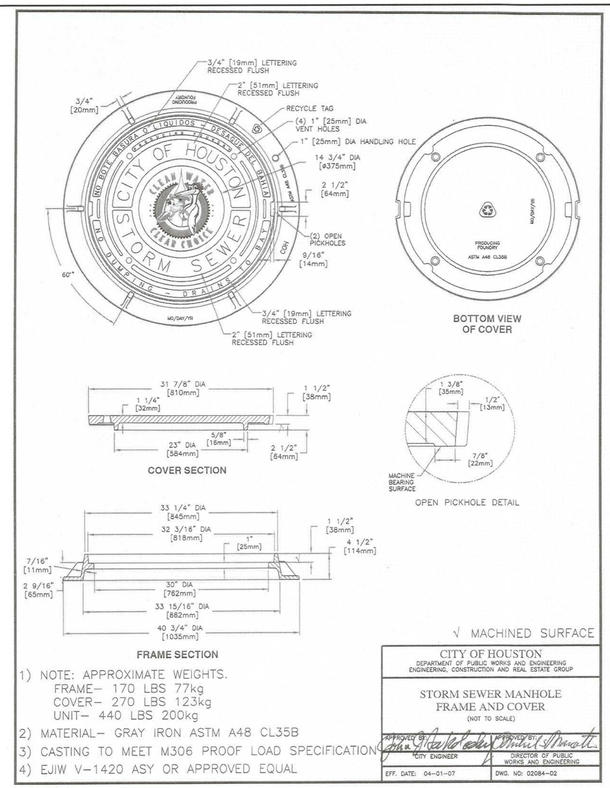
SANITARY SEWER DETAILS

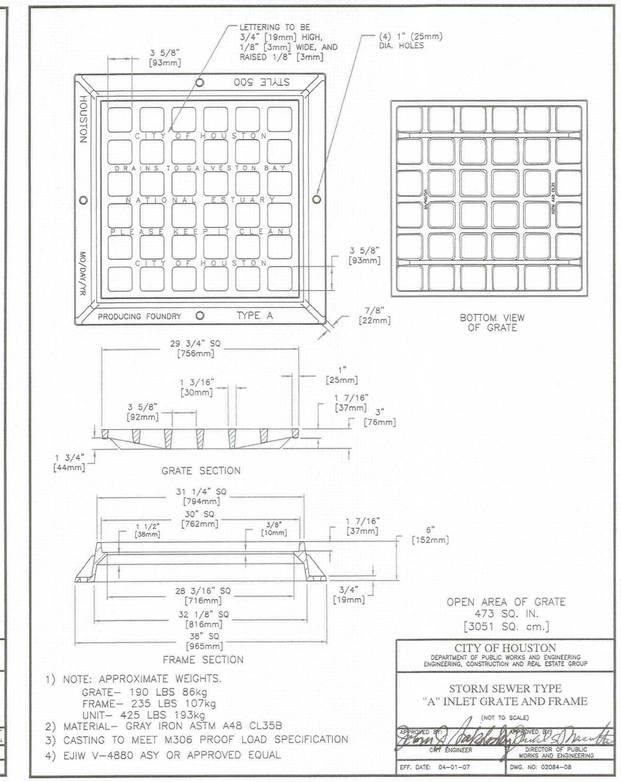
SHEET NUMBER:
C-7.1

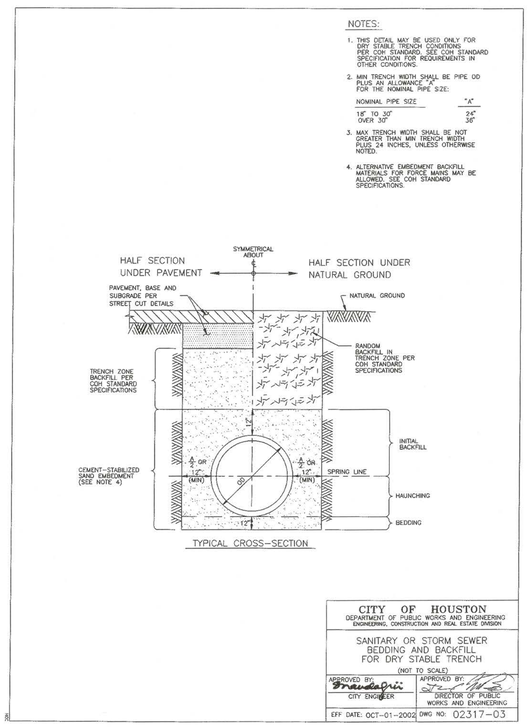
COMMENTS:
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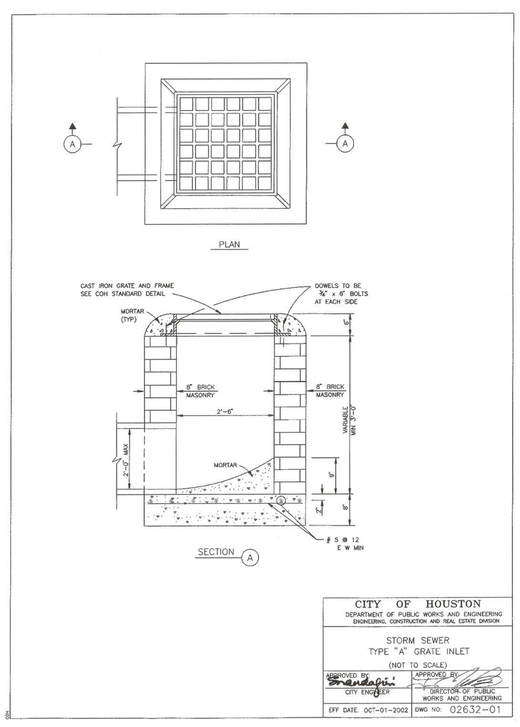
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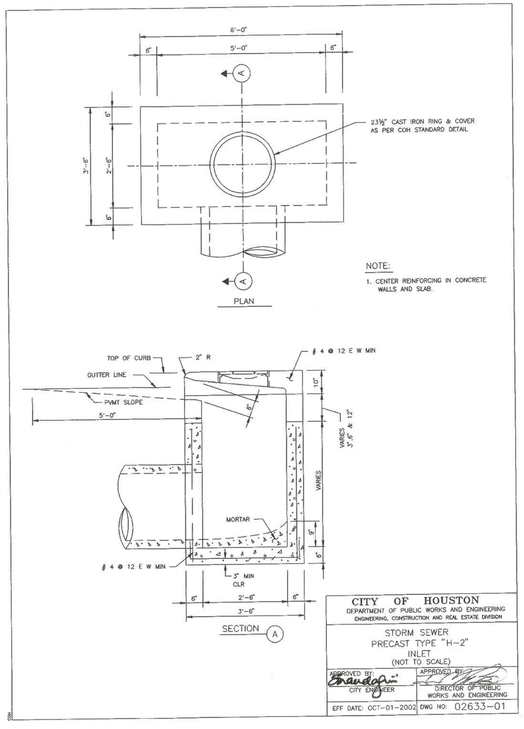












10/3/17
FBC DEVELOPMENT COORDINATOR — DATE

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SEAL:
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112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
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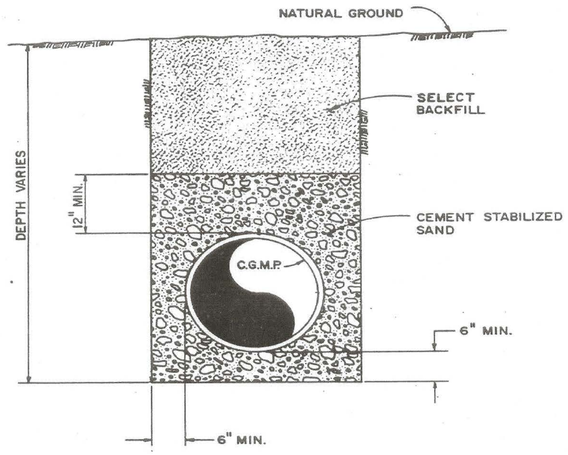
PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN
TITLE:	

STORM SEWER DETAILS

SHEET NUMBER:
C-7.2

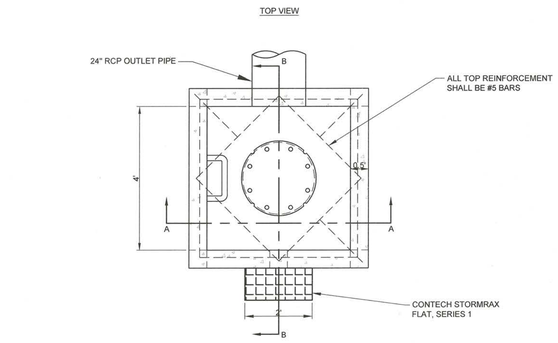
COMMENTS:
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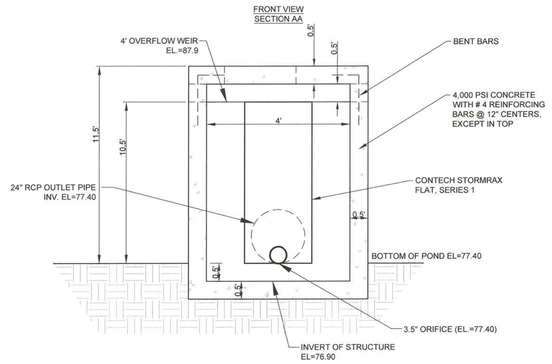
JOB/FILE NUMBER:
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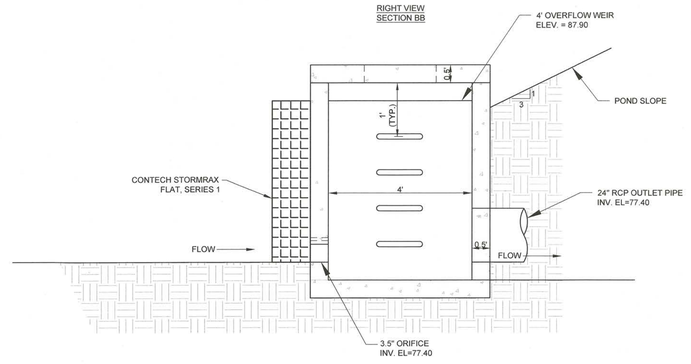


BEDDING AND BACKFILL DETAIL

TYPICAL BEDDING AND BACKFILL DETAIL FOR C.G.M.P. OUTFALL FOR FORT BEND COUNTY, TEXAS	
August 1986	FIGURE 3-7







1 / C-7.3 DETENTION OUTFALL DETAIL
NOT TO SCALE

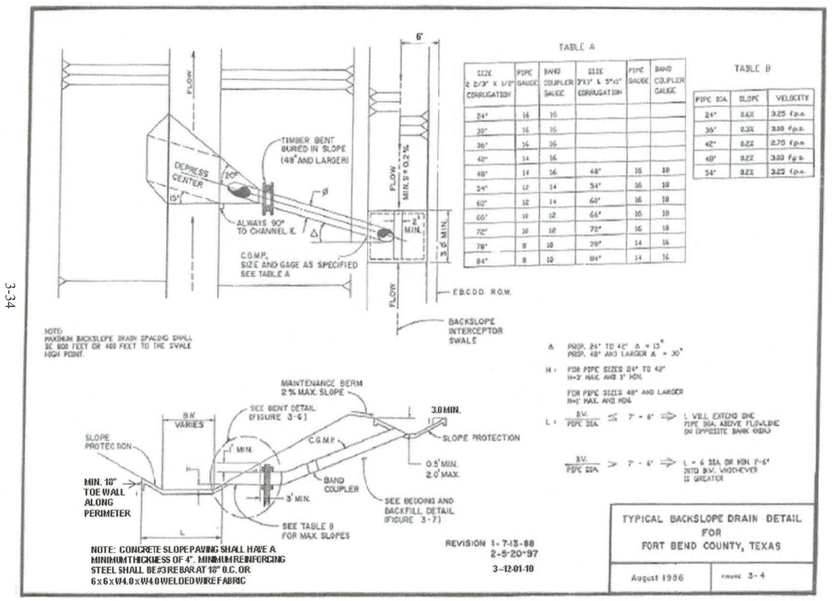


TABLE A

SIZE 2 2/3" x 1/2" CORRUGATION	PIPE GAUGE	BAND COUPLER GAUGE	SIZE 3"x1" & 5"x1" CORRUGATION	PIPE GAUGE	BAND COUPLER GAUGE
24"	16	16			
30"	16	16			
36"	16	16			
42"	14	16			
48"	14	16	48"	16	16
54"	12	14	54"	16	16
60"	12	14	60"	16	16
66"	10	12	66"	16	16
72"	10	12	72"	16	16
78"	8	10	78"	14	16
84"	8	10	84"	14	16

TABLE B

PIPE DIA.	SLOPE	VELOCITY
24"	0.6%	3.25 f.p.s.
30"	0.3%	3.00 f.p.s.
42"	0.2%	2.75 f.p.s.
48"	0.2%	3.00 f.p.s.
54"	0.2%	3.25 f.p.s.

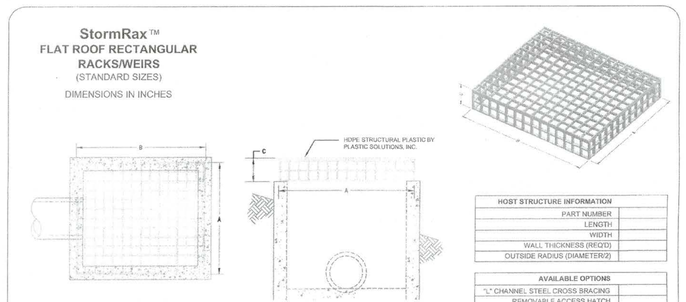
A PROP. 24" TO 42" A = 15°
PROP. 48" AND LARGER A = 30°

H FOR PIPE SIZES 24" TO 48" H=2' MAX. AND 3' MIN.
FOR PIPE SIZES 48" AND LARGER H=6' MAX. AND MIN.

L = B.W. / PIPE DIA. ≤ 7' - 6" ⇒ L WILL EXTEND ONE PIPE DIA. ABOVE FLOWLINE ON OPPOSITE BANK (DIA)

B.W. / PIPE DIA. > 7' - 6" ⇒ L = 6 DIA OR MIN 7'-6" INTO B.W. WHICHEVER IS GREATER

TYPICAL BACKSLOPE DRAIN DETAIL FOR FORT BEND COUNTY, TEXAS	
August 1986	FIGURE 3-4



Width (A)	11 3/8	16 3/4	22 1/8	27 1/2	32 7/8	38 1/4	43 5/8	49	54 3/8	59 3/4	65 1/8
CODE	02	03	04	05	06	07	08	09	10	11	12
Length (B)	11 3/8	16 3/4	22 1/8	27 1/2	32 7/8	38 1/4	43 5/8	49	54 3/8	59 3/4	65 1/8
CODE	02	03	04	05	06	07	08	09	10	11	12
Height (C)	7 1/2	12 7/8									
CODE	01	02									

Flat Roof (FR) _____ Width (A) _____ Length (B) _____ Height (C)

Plastic Solutions, Inc.
PO Box 4386, Winchester, VA 22604
238 McGhee Rd, Winchester, VA 22603
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http://www.plastic-solution.com

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PROJECT: DRAWN BY:
APPD BY:
DETAIL:

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TBPE Firm No. F-12878
Foresite Group, Inc.
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Suite 890 f | 888.765.8135
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SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112.311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

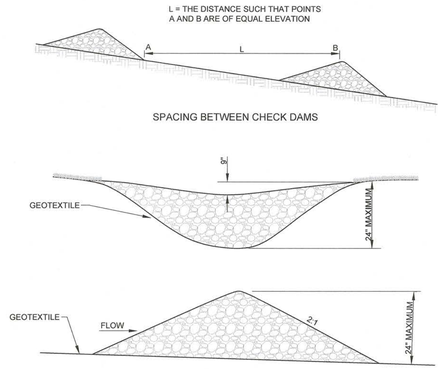
PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN
TITLE:	

STORM SEWER DETAILS

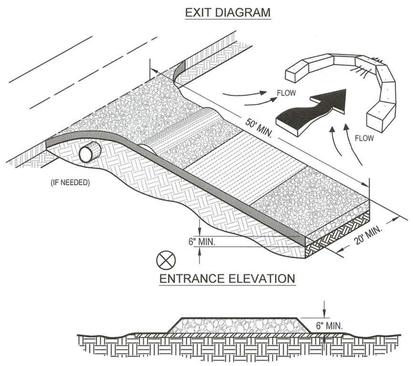
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C-7.3

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

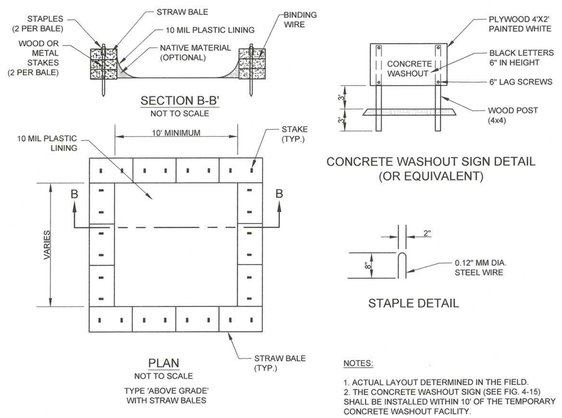


Cd-S STONE CHECK DAM
NOT TO SCALE



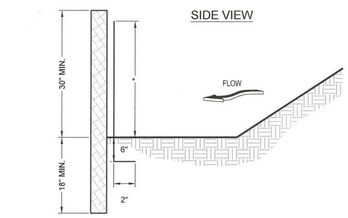
NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%..
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Co CRUSHED STONE CONSTRUCTION EXIT
NOT TO SCALE



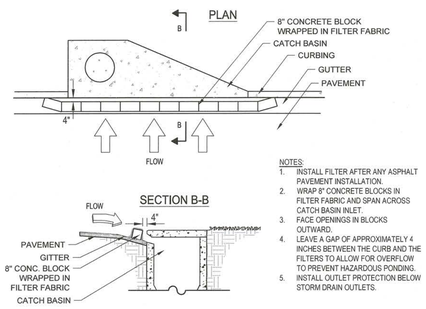
NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN (SEE FIG. 4-15) SHALL BE INSTALLED WITHIN 10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

Cw CONCRETE WASHOUT
NOT TO SCALE

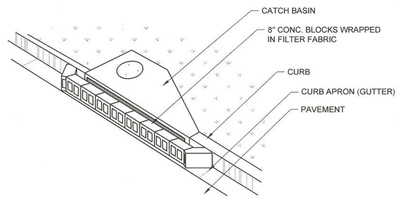


NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

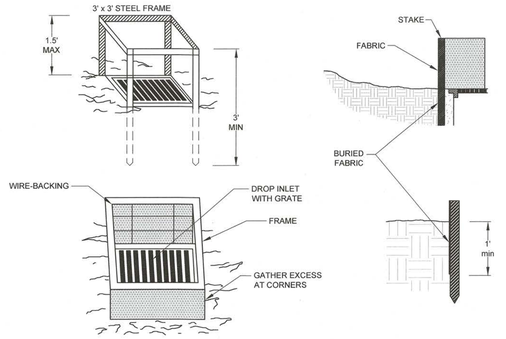
Sd1-C SILT FENCE -TYPE SENSITIVE
NOT TO SCALE



NOTES:
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
3. FACE OPENINGS IN BLOCKS OUTWARD.
4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.

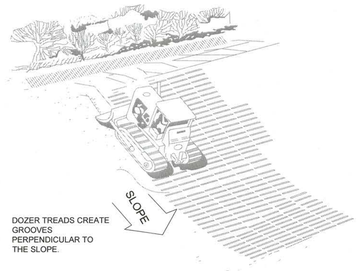


Sd2-P CURB INLET FILTER "PIGS IN BLANKET"
NOT TO SCALE

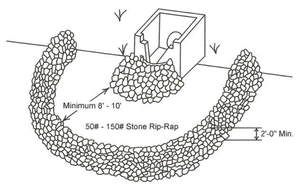


NOTES:
1. FOR STAKES, USE STEEL WITH A MINIMUM LENGTH OF 3 FEET.
2. SPACE STAKES EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART, AND SECURELY DRIVE THEM INTO THE GROUND, MINIMUM OF 18 INCHES DEEP.
3. TO PROVIDE NEEDED STABILITY TO THE INSTALLATION, FRAME WITH 2 X 4 INCH WOOD STRIPS AROUND THE CREST OF THE OVERFLOW AREA AT A MAXIMUM OF 1.5 FEET ABOVE THE DROP INLET CREST.
4. PLACE THE BOTTOM 12 INCHES OF THE FABRIC IN A TRENCH AND BACKFILL THE TRENCH WITH CRUSHED STONE OF COMPACTED SOIL.
5. FASTEN FABRIC SECURELY TO THE STAKES AND FRAME. JOINTS MUST BE OVERLAPPED TO THE NEXT STAKE.
6. THE TOP OF THE FRAME AND FABRIC MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE FROM THE DROP INLET TO KEEP RUNOFF FROM BYPASSING THE INLET. IT MAY BE NECESSARY TO BUILD A TEMPORARY DIKE ON THE DOWN SLOPE SIDE OF THE STRUCTURE TO PREVENT BYPASS FLOW.

Sd2-F INLET SEDIMENT TRAP - FILTER FABRIC WITH SUPPORTING FRAME
NOT TO SCALE



Su SURFACE ROUGHENING - WITH TRACKING
NOT TO SCALE



Fr FILTER RING
NOT TO SCALE

FBC DEVELOPMENT COORDINATOR 10/3/17 DATE

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SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN

TITLE:
EROSION CONTROL DETAILS

SHEET NUMBER:
C-8

COMMENTS:
NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER:
693.011

MATTING AND BLANKETING

ALL SLOPE STABILIZATION PRODUCTS MUST HAVE A DOCUMENTED "C" FACTOR OF 0.080 PER ASTM D6459.

ROLLED EROSION CONTROL PRODUCT (RECP) CLASSIFICATIONS:

- SHORT TERM - FUNCTIONAL LONGEVITY OF 12 MONTHS
- EXTENDED TERM - FUNCTIONAL LONGEVITY OF 24 MONTHS
- LONG TERM - FUNCTIONAL LONGEVITY OF 36 MONTHS

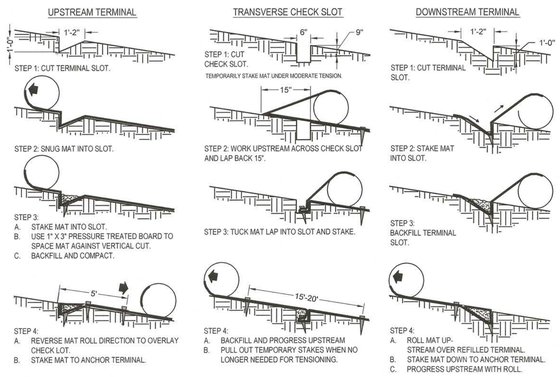
SITE PREPARATION

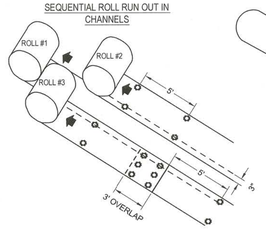
AFTER THE SITE HAS BEEN SHAPED AND GRADED TO DESIGN, PREPARE A FRIABLE SEEDBED RELATIVELY FREE FROM CLODS AND ROCKS MORE THAN ONE INCH IN DIAMETER, AND ANY FOREIGN MATERIAL THAT WILL PREVENT CONTACT OF THE SOIL STABILIZATION MAT WITH THE SOIL SURFACE. SURFACE MUST BE SMOOTH TO ENSURE PROPER CONTACT OF BLANKETS OR MATTING TO THE SOIL SURFACE. IF NECESSARY, REDIRECT ANY RUNOFF FROM THE DITCH OR SLOPE DURING INSTALLATION.

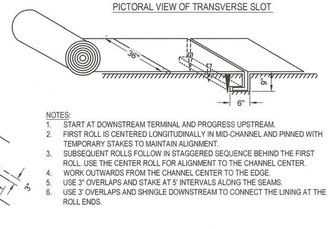
MAINTENANCE

ALL EROSION CONTROL BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL THEY BECOME PERMANENTLY STABILIZED.

BLANKET AND MATTING CROSS-SECTIONS







NOTES:
1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
5. USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.
6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

Mb **TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)**
NOT TO SCALE

Ds1 MULCHING FOR TEMPORARY STABILIZATION WITHOUT VEGETATION

WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.

SITE PREPARATION

1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCH MATERIALS AND APPLICATION RATES	
MATERIAL	RATE
STRAW OR HAY	2-4" DEEP
WOOD WASTE, CHIPS, SAW DUST, OR BARK	2-3" DEEP (ABOUT 6-9 TONS/ACRE)
MATTING OR NETTING	ACCORDING TO MANUFACTURER RECOMMENDATIONS
POLYETHYLENE FILM	CAN BE LAID OVER SENSITIVE AREAS AND STOCKPILES, MUST BE SECURED.

APPLICATION

1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, ADD 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT.

ANCHORING MULCH

1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.
2. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1. THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION TB - TACKIFERS AND BINDERS. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
3. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.
4. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

GRADING AND SHAPING

1. EXCESSIVE WATER RUNOFF SHALL BE REDUCED BY PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, AND OTHERS
2. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION

1. WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
2. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

LIME AND FERTILIZER

1. SOIL TESTS MUST BE PERFORMED DETERMINE THE REQUIRED AMOUNTS OF FERTILIZER, LIME, AND OTHER AMENDMENTS. SOIL TESTS SHOULD INCLUDE RECOMMENDATIONS FOR APPLICATION RATES.
2. APPLY AGRICULTURAL LIME AT A RATE DETERMINED BY SOIL TEST FOR PH. QUICK ACTING LIME SHOULD BE INCORPORATED TO MODIFY PH DURING THE GERMINATION PERIOD.
3. ALL GRADED AREAS REQUIRE LIME APPLICATION UNLESS SOIL TEST INDICATE OTHERWISE.
4. BIOSTIMULANTS SHOULD ALSO BE CONSIDERED WHEN THERE IS LESS THAN 3% ORGANIC MATTER IN THE SOIL.
5. FERTILIZER SHOULD BE APPLIED BEFORE SEEDBED PREPARATION AND INCORPORATED WITH A DISK, RIPPER, OR CHISEL. ON SLOPES TOO STEEP FOR, OR INACCESSIBLE TO EQUIPMENT, FERTILIZER SHALL BE HYDRAULICALLY APPLIED, PREFERABLY IN THE FIRST PASS WITH SEED AND SOME HYDRAULIC MULCH, THEN TOPPED WITH THE REMAINING REQUIRED APPLICATION RATE.
6. FOR LOW FERTILITY SOILS, AGRICULTURAL LIME & FERTILIZER REQUIRED UNLESS SOIL TESTS SHOW IT IS NOT REQUIRED AND THAT SOILS ARE REASONABLY FERTILE. FOR LOW FERTILITY SOILS, APPLY 10-10-10 FERTILIZER AT 500-700 LB/ACRE. APPLY AGRICULTURAL LIME AT 1 TON PER ACRE.

SEEDING

SEEDING SHALL CONFORM TO TxDOT SPECIFICATION ITEM 164.

MULCHING

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH, PROVIDED THERE IS LITTLE TO NO EROSION POTENTIAL. HOWEVER, THE USE OF MULCH CAN OFTEN ACCELERATE AND ENHANCE GERMINATION AND VEGETATION ESTABLISHMENT. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DS1 - DISTURBED AREA STABILIZATION (Ds1).

IRRIGATION

DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

Du DUST CONTROL ON DISTURBED AREAS

REFER TO THE POLLUTION CONTROL NOTES FOR RECOMMENDED SEQUENCE AND PRACTICE OF DUST CONTROL MEASURES.

TEMPORARY METHODS

1. *APPLICATION OF MULCH* (SEE Ds1)
2. *TEMPORARY VEGETATIVE COVER* (SEE Ds2)
3. *SPRAY ON ADHESIVES* (SEE Tac)
4. *TILLAGE* - THE ROUGHENING OF SOIL AND BRING CLODS TO THE SURFACE. IT SHOULD BE USED AS AN EMERGENCY MEASURE BEFORE HIGH WIND EROSION POTENTIAL.
5. *IRRIGATION* - SPRINKLE WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.
6. *BARRIERS* - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, BALES OF HAY, AND SIMILAR MATERIALS TO BE PLACED TO RIGHT ANGLES OF PREVAILING CURRENTS. TO BE EFFECTIVE, BARRIERS MUST BE AT INTERVALS OF APPROX. 15 TIMES THEIR HEIGHT.
7. *CALCIUM CHLORIDE APPLICATION* - APPLY AS NEEDED TO KEEP SURFACE MOIST.

PREMANENT METHODS

1. PERMANENT VEGETATION - (SEE Ds3)
2. TOPSOILING - COVER WITH LESS EROSIVE TOPSOIL
3. STONE - COVER AREAS SUBJECT TO WIND EROSION AND HIGH TRAFFIC AREAS WITH CRUSHED STONE OR COARSE GRAVEL.

10/3/17
FBC DEVELOPMENT COORDINATOR DATE

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1999 Bryan St. Suite 890
Dallas, TX 75201
o | 214.939.7123
f | 888.765.8135
w | www.fg-inc.net
D/B/A Foresite Consulting Group of Texas, Inc.

OWNER:
GARDNER CAPITAL
2501 N. HARWOOD ST, SUITE 1501
DALLAS, TX 75201
(417) 447-5538

CONTACT: MR. RUBEN ESQUEDA

PROJECT:
GALA AT FOUR CORNERS
15010 OLD RICHMOND ROAD
SUGAR LAND, FORT BEND COUNTY, TX 77498

SEAL:
STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	AS SHOWN
TITLE:	

EROSION CONTROL DETAILS

SHEET NUMBER:
C-8.1

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

NOTES:

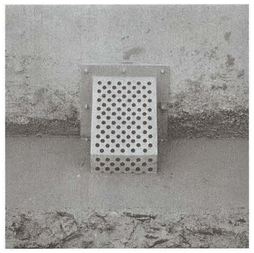
1) OWNER'S ENGINEER SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT THE STRUCTURAL BEST MANAGEMENT PRACTICES DEPICTED ON THE THESE PLANS HAVE BEEN IMPLEMENTED.

2) NOW - STRUCTURAL BEST MANAGEMENT PRACTICES APPROPRIATE FOR THIS DEVELOPMENT ARE LISTED AND DESCRIBED ON THIS SHEET.

3) OWNER HAS CERTIFIED THAT IT ACKNOWLEDGES THE RESPONSIBILITY TO IMPLEMENT, MAINTAIN AND INSPECT THE STORM WATER MANAGEMENT PLAN (SWMP).

4) OWNER SHALL HAVE AN ANNUAL INSPECTION AND ASSESSMENT OF THE SWMP AND ISSUE A CERTIFICATION OF PROPER MAINTENANCE TO THE KINGSBRIDGE MUD ENGINEER.

5) ALL EXISTING INFORMATION SHOWN FOR THE PROVISION AT FOUR CORNERS DEVELOPMENT IS DEPICTED FROM THE DESIGN PLANS. CONTRACTOR SHOULD FIELD VERIFY THE LOCATION AND EXISTENCE OF ALL PERTINENT ITEMS ON THE PROVISION AT FOUR CORNERS PROPERTY.



TRASH RACK

MATCH LINE A (SEE SHEET C-9.1)

MATCH LINE B (SEE SHEET C-9.1)

EXISTING DETENTION POND

UNRESTRICTED RESERVE "A", BLOCK 1, KINGSBRIDGE MUD WATER PLANT NO. 3

CALL 6.329 AC. KINGSBRIDGE MUNICIPAL UTILITY DISTRICT

S 03°15'15" E 2,187.07'

20' DRAINAGE EASEMENT

REMAINDER OF CALL 6.3292 AC. BEST TRASH TEXAS

BUILDING A
18,681 S.F.
FFE= 91.0

CLUBHOUSE
5,896 S.F.
FFE= 92.0

40' DRAINAGE EASEMENT

PROPOSED 20' WATER LINE EASEMENT

N 03°15'15" W 1,119.52'

CALL 9.201 AC. PROVISION AT FOUR CORNERS, LP

CALL 1.672 AC. DETENTION POND ESMT

EXISTING DETENTION POND FOR ADJACENT DEVELOPMENT

RESTRICTED RESERVE "A", BLOCK 1 PROVISION AT FOUR CORNERS (CALL 9.201 AC.)

PROPOSED INLET INSERTS

RESTRICTED RESERVE "B", BLOCK 1 PROVISION AT FOUR CORNERS (CALL 10.446 AC.)

10.446 ACRES (455,303 SQ. FT.)

REMAINDER OF CALL 13.6469 AC. BEST TRASH, LLC

PROPOSED 20' WATER LINE EASEMENT

S 86°50'26" W 277.02'

WAYSON DRIVE

PROPOSED 10' X 20' WATER METER EASEMENT

PROPOSED 10' X 30' WATER LINE EASEMENT

BUILDING B
16,444 S.F.
FFE= 92.0

PROPOSED DETENTION POND

N 03°09'34" W 1,005.55'

459.61'

139.06'

15' SANITARY SEWER EASEMENT

5.5' AERIAL EASEMENT

LOT 8

LOT 7

LOT 21

LOT 22

LOT 23

LOT 37

LOT 10

16' UTILITY EASEMENT WITH ADJACENT 5.5' AERIAL EASEMENT

BLOCK 2, KINGSBRIDGE PLACE, SECTION TWO

BLOCK 3, KINGSBRIDGE PLACE, SECTION TWO

EMENT (TIER MUD)

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING STORM PIPE
- PROPOSED STORM PIPE

Know what's below Call before you dig

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

1" = 40'

40 20 0 40 80

SCALE IN FEET

ENGINEER:

FORESITE group

TBPE Firm No. F-12878
Foresite Group, Inc.
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SEAL:

STATE OF TEXAS
JOHN B. RHODES, JR.
112311
LICENSED
PROFESSIONAL ENGINEER
09/19/17

REVISIONS	DATE
COUNTY COMMENTS	04/10/2017
MUD / DRAINAGE DISTRICT COMMENTS	07/21/2017
MUD COMMENTS	09/19/2017

PROJECT MANAGER:	DN
DRAWING BY:	PA
JURISDICTION:	FORT BEND COUNTY
DATE:	01/03/2017
	1" = 40'

TITLE:

STORMWATER MANAGEMENT PLAN

SHEET NUMBER:

C-9

COMMENTS: NOT RELEASED FOR CONSTRUCTION

JOB/FILE NUMBER: 693.011

NOTES:

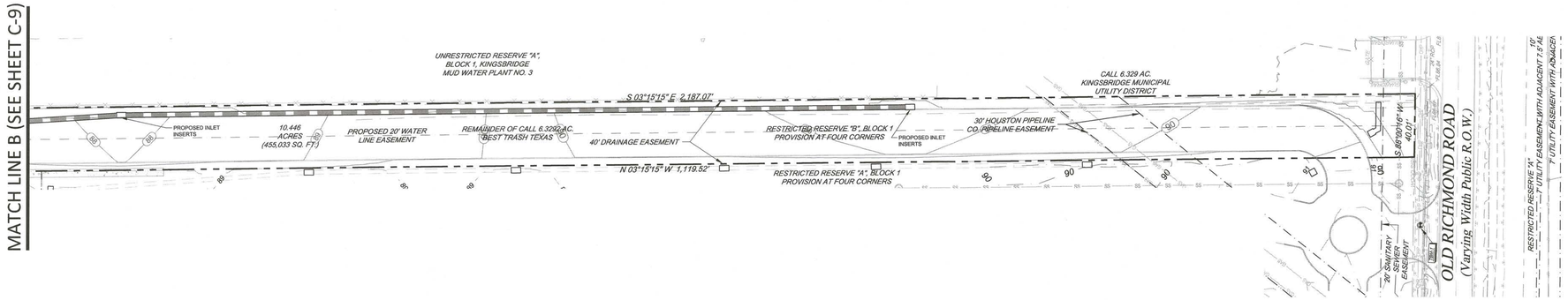
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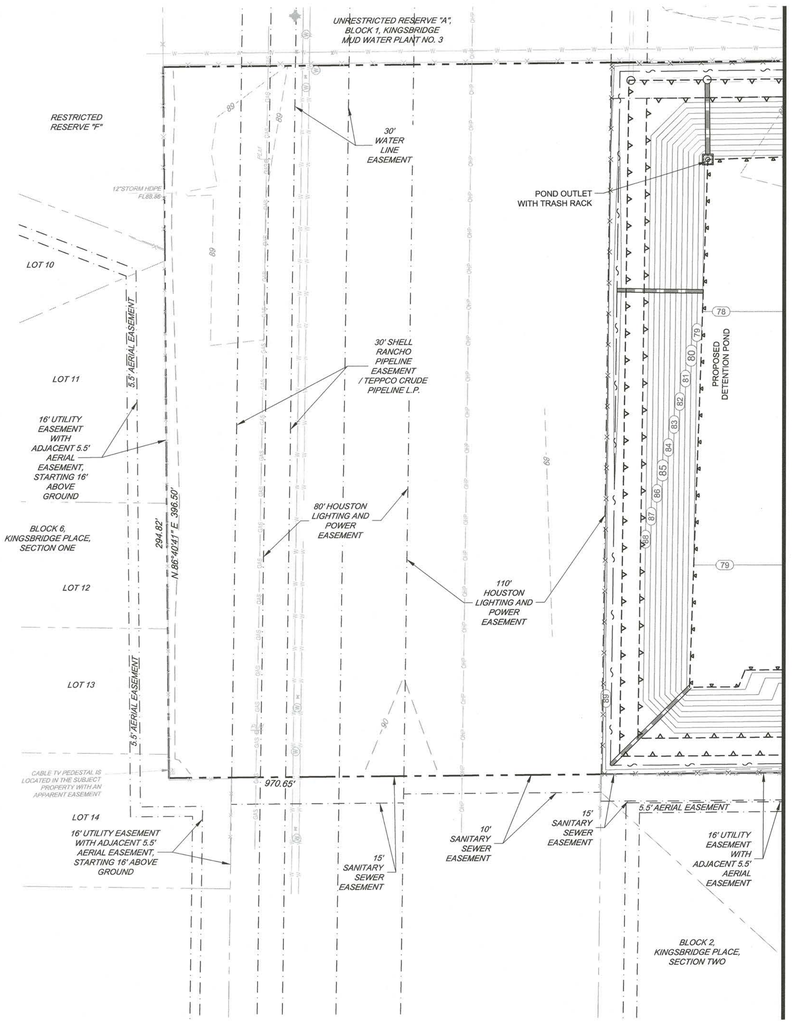
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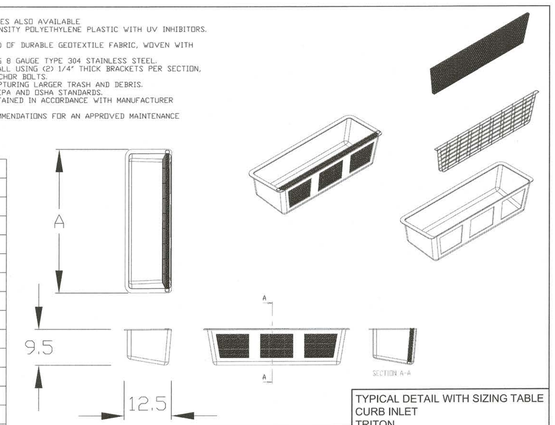


LEGEND	
XXXX	EXISTING CONTOURS
XXXX	PROPOSED CONTOURS
	EXISTING STORM PIPE
	PROPOSED STORM PIPE



NOTES
1. ALL DIMENSION ARE IN FEET. CUSTOM SIZES ALSO AVAILABLE
2. UNITS ARE CONSTRUCTED FROM HIGH DENSITY POLYETHYLENE PLASTIC WITH UV INHIBITORS. OVER 40% RECYCLED CONTENT.
3. DISPOSABLE MEDIA-PAK IS CONSTRUCTED OF DURABLE GEOTEXTILE FABRIC, WOVEN WITH PERFORATED POLYPROPYLENE.
4. MEDIA-PAK CAGE IS CONSTRUCTED USING 8 GAUGE TYPE 304 STAINLESS STEEL.
5. FILTER BODY IS SECURED TO INSIDE WALL USING (2) 1/4" THICK BRACKETS PER SECTION, ATTACHED USING 3/8" X 3" EXPANSION ANCHOR BOLTS.
6. OPTIONAL STORMWEB, DESIGNED FOR CAPTURING LARGER TRASH AND DEBRIS.
7. FILTER MEDIA IS NON-HAZARDOUS PER EPA AND OSHA STANDARDS.
8. FILTER SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
9. PLEASE REFER TO MANUFACTURER RECOMMENDATIONS FOR AN APPROVED MAINTENANCE PROGRAM.

STANDARD DIMENSIONS	
MODEL #	A*
~~TRC2~~	~~2.00~~
~~TRC2.5~~	~~2.50~~
~~TRC3~~	~~3.00~~
~~TRC3.5~~	~~3.50~~
~~TRC4~~	~~4.00~~
TRC5	5.00
~~TRC6~~	~~6.00~~
~~TRC7~~	~~7.00~~
~~TRC8~~	~~8.00~~
~~TRC9~~	~~9.00~~
~~TRC10~~	~~10.00~~
~~TRC12~~	~~12.00~~
~~TRC14~~	~~14.00~~
~~TRC21~~	~~21.00~~
~~TRC28~~	~~28.00~~



TYPICAL DETAIL WITH SIZING TABLE
CURB INLET
TRITON

REVISIONS
REV | DESCRIPTION:

CONTECH STORMWATER SOLUTIONS
contechstormwater.com

SCALE: NONE
DRAWN: JBS
CHECKED: TWD
FILE NAME: TYPTBLTCP
DATE: 4/10/07

811 Know what's below Call before you dig

FBC DEVELOPMENT COORDINATOR — DATE 10/3/17

N

1" = 40'
40 20 0 40 80
SCALE IN FEET

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