



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

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

- Right of Way Permit
- Commercial Driveway Permit

Permit No: 2022-52752

**Applicant:** Nunn Constructors, Ltd.

**Job Location Site:** 2342 1/2 Watermelon Way, Richmond, TX 77406

**Bond No.**                      **Date of Bond:** 2/14/2022 **Amount:** \$5,000.00

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

**Notes:**

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required, via email, for certain construction activities in County right-of-way. Contact [permits@fbctx.gov](mailto:permits@fbctx.gov) for a copy of the notification procedure applicable to your project.
3. This permit expires one (1) year from date of permit if construction has not commenced.
4. This permit applies to work performed within right-of-ways owned and maintained by Fort Bend County only, and it is the responsibility of the applicant to acquire all other necessary permits and permissions.

On this 22nd day of March, 2022, Upon Motion of Commissioner Meyers, seconded by Commissioner Prestage, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

**Signature**

Presented to Commissioners Court and approved.

By: Sean Eglinton

Date Recorded 3/22/2022 Comm. Court No. 15 C

County Engineer

Clerk of Commissioners Court

By: N/A

By: Annika Wilcox

Drainage District Engineer/Manager

Deputy



**REVIEW BY FORT BEND COUNTY  
COMMISSIONERS COURT**

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

- Right of Way Permit  
 Commercial Driveway Permit  
Permit No: 2022-52752

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:**

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

**(2) BOND:**

- County Attorney, approval when applicable.
- Perpetual bond currently posted.      Bond No: \_\_\_\_\_      Amount: \_\_\_\_\_
- Performance bond submitted.      Bond No: [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.

  
\_\_\_\_\_  
Permit Administrator

3/14/2022

\_\_\_\_\_  
Date

3N



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

BOND NO [REDACTED]

THE STATE OF TEXAS §  
COUNTY OF FORT BEND §

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Nunn Constructors, Ltd. whose (address, phone) is 23602 Botkins, Hockley, Texas,\*hereinafter called the Principal, and Atlantic Specialty Insurance Company, a Corporation existing under and by virtue of the laws of the state of New York and authorized to do an indemnifying business in the state of Texas, and whose principal office is located at (name/address/phone) 605 Highway 169 North, Suite 800, Plymouth, MN 55441, whose officer residing in the State of Texas, authorized to accept service in all suits and actions brought within said state is Jeff Barbier and whose address is 9977 W. Sam Houston Parkway North, Suite 130, Houston, TX 77064, hereinafter called the Surety, and held and firmly bound unto , KP George, County Judge of Fort Bend County, Texas, or his successors in office, in the full sum of Five Thousand and No/Dollars (\$ 5,000.00 ) current, lawful money of the United States of America, to be paid to said KP George, 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. \*281-351-8383

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 14<sup>th</sup> day of February, 2022.

Nunn Constructors, Ltd.  
PRINCIPAL

BY Kerry Wise, Vice-President

Atlantic Specialty Insurance Company  
SURETY

BY Nancy T. Berry, Attorney-In-Fact

CCM 03/22/2022 # 15C  
Fort Bend County Clerk  
Return Div Supervisor Admin RAC  
Permit# 2022-52752

Permit No. 2022-52752



## Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Nancy T. Berry, Steven W Berry, Richard D. Bright, John Weed, Lina Foteh**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

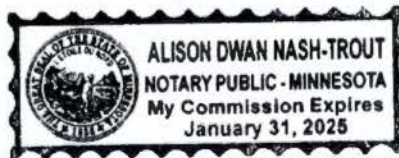
IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.



By *Paul J. Brehm*  
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA  
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.



*Alison Nash-Trout*  
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 14th day of February, 2022.



*Kara Barrow*  
Kara Barrow, Secretary

This Power of Attorney expires  
January 31, 2025



**IMPORTANT NOTICE**

To obtain information or make a complaint:

You may contact your agent.

You may call your Insurance Carrier's toll-free telephone number for information or to make a complaint at:

**1-800-321-2721**

You may also write to your Insurance Carrier at

Atlantic Specialty Insurance Company  
Paralegal

605 Highway 169 North, Suite 800  
Plymouth, MN 55441

Email: [surety@intactinsurance.com](mailto:surety@intactinsurance.com)  
Phone: 1-800-662-0156

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

**1-800-252-3439**

You may write the Texas Department of Insurance:

P.O. Box 149104, Austin, TX 78714-9104

Fax: (512) 490-1007  
Web: [www.tdi.texas.gov](http://www.tdi.texas.gov)  
E-mail: [ConsumerProtection@tdi.texas.gov](mailto:ConsumerProtection@tdi.texas.gov)

**PREMIUM OR CLAIM DISPUTES:** Should you have a dispute concerning your premium or about a claim you should contact the agent first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

**ATTACH THIS NOTICE TO YOUR POLICY:** This notice is for information only and does not become a part or condition of the attached document.

**AVISO IMPORTANTE**

Para obtener informacion o para someter una queja:

Puede comunicarse con su agente.

Usted puede llamar al numero de telefono gratis de su compañía de seguros para informacion o para someter una queja al:

**1-800-321-2721**

Usted tambien puede escribir a su compañía de seguros en:

Atlantic Specialty Insurance Company  
Paralegal

605 Highway 169 North, Suite 800  
Plymouth, MN 55441

Email: [surety@intactinsurance.com](mailto:surety@intactinsurance.com)  
Phone: 1-800-662-0156

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

**1-800-252-3439**

Puede escribir al Departamento de Seguros de Texas:

P.O. Box 149104, Austin, TX 78714

Fax: (512) 490-1007  
Web: [www.tdi.texas.gov](http://www.tdi.texas.gov)  
E-mail: [ConsumerProtection@tdi.texas.gov](mailto:ConsumerProtection@tdi.texas.gov)

**DISPUTAS SOBRE PRIMAS □ RECLAMOS:** Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el agente primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

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

**FILED AND RECORDED  
OFFICIAL PUBLIC RECORDS**

*Laura Richard*

Laura Richard, County Clerk  
Fort Bend County Texas

March 28, 2022 04:32:42 PM



FEE: \$0.00 DP2

**2022042763**

A:\1704\1801\Fort Bend County Standard\Fort Bend County Standard\Fort Bend County Standard\DRIVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION\DRIVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION.dwg



- NOTES:**
1. SAWCUT EXISTING DRIVEWAY AT R.O.W. LINE OR AS SHOWN ON DRAWING AND REMOVE EXISTING DRIVEWAY TO SAWCUT LINE.
  2. IF THERE IS EXISTING CURB ON DRIVEWAY, CONNECT PROPOSED CURB TO EXISTING CURB OTHERWISE, TAPER CURB HEIGHT AS SHOWN.
  3. SEE PAVEMENT DETAIL SHEET FOR CONCRETE CURB REINFORCEMENT.
  4. THIS DRIVEWAY INSTALLATION IS GOVERNED BY HARRIS COUNTY ITEM 360.

**MINIMUM RADII REQUIREMENTS - DRIVEWAYS**

|             | LOCAL | COLLECTOR/MAJOR |
|-------------|-------|-----------------|
| RESIDENTIAL | 5'    | -               |
| COMMERCIAL  | 10'   | 25'             |

|                          | PAVEMENT THICKNESS | COLLECTOR/MAJOR           | RESIDENTIAL (MAJOR THROUGHFARE) | RESIDENTIAL (COLLECTORS AND LOCAL STREETS) |
|--------------------------|--------------------|---------------------------|---------------------------------|--|
| REINFORCEMENT            | 6"                 | #4 @ 24" O.C.E.W.         | N/A                             | #4 @ 24" O.C.E.W.                          |
|                          | 7"                 | #4 @ 24" O.C.E.W.         | #4 @ 24" O.C.E.W.               | #4 @ 24" O.C.E.W.                          |
|                          | 8"                 | #4 @ 18" O.C.E.W.         | #4 @ 18" O.C.E.W.               | #4 @ 18" O.C.E.W.                          |
| EXPANSION DOWEL JOINT    | 6"                 | 3/4" DIA. SMOOTH BAR      | 3/4" DIA. SMOOTH BAR            | 3/4" DIA. SMOOTH BAR                       |
|                          | 7"                 | 1" DIA. SMOOTH BAR        | 1" DIA. SMOOTH BAR              | 1" DIA. SMOOTH BAR                         |
|                          | 8"                 | 1" DIA. SMOOTH BAR        | 1" DIA. SMOOTH BAR              | 1" DIA. SMOOTH BAR                         |
| CONSTRUCTION JOINT DOWEL | ALL                | #5 REBAR                  | #5 REBAR                        | #5 REBAR                                   |
|                          | ALL                | 6" CEMENT-STABILIZED SAND | 2" BANK SAND                    | 2" BANK SAND                               |
| SUBGRADE                 | ALL                | 6" CEMENT-STABILIZED SAND | 2" BANK SAND                    | 2" BANK SAND                               |
| RUNNING SLOPE            | ALL                | 2% TO 4%                  | 2% TO 6%                        | 2% TO 10%                                  |

\*10% ALLOWABLE ON PRIVATELY CONSTRUCTED PROJECTS  
6% MAX ON PUBLIC PROJECTS

| NO. | REVISIONS                | DATE   | NAME |
|-----|--------------------------|--------|------|
| 1   | ORIGINAL STANDARD ISSUED | 2-1-21 | RBB  |

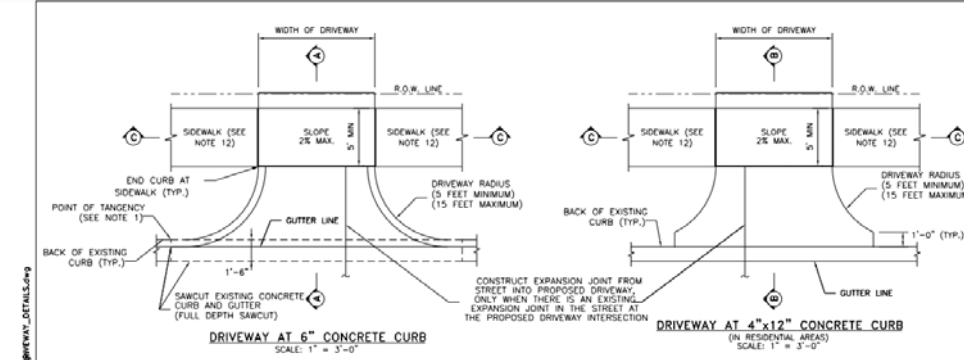
**FORT BEND COUNTY ENGINEERING DEPARTMENT**



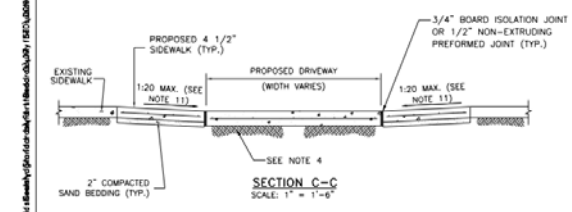
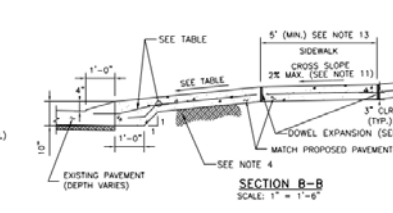
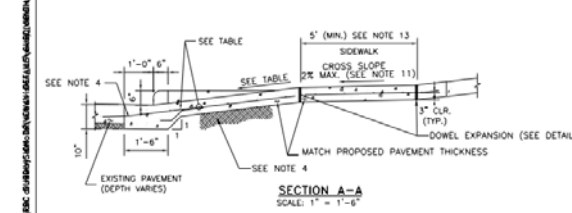
CONSULTANT LOGO (LAYER "C-NON-PRINT")

FOR INTERIM REVIEW ONLY  
DOCUMENT INCOMPLETE  
NOT SUITABLE FOR CONSTRUCTION  
REINFORCEMENT BARBERS  
(LAYER "C-NON-PRINT")  
P.E. SERIAL NO.  
DATE:

| PROJECT TITLE:                                  | DATE:  | FRCD STANDARD |
|---|--------|---------------|
| DRIVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION | 2-1-21 | # / #         |



- NOTES:**
1. PROPOSED DRIVEWAY AT 6" CONCRETE CURB SHALL MATCH EXISTING CURB AT POINT OF TANGENCY.
  2. PROPOSED DRIVEWAY SHALL BE BUILT WITH PORTLAND CEMENT CONCRETE, 5 1/2 SACK MINIMUM PER CURE YARD, 3,500 PSI STRENGTH AT 28 DAYS, THIS DRIVEWAY INSTALLATION IS GOVERNED BY HARRIS COUNTY ITEM 360.
  3. COMPACTION OF SUBGRADE TO 95% OF STANDARD PROCTOR DENSITY (ASTM D698) (± 2% OPTIMUM MOISTURE) FOR PROPOSED DRIVEWAY CONNECTION. THE COUNTY ENGINEER RESERVES THE RIGHT TO INSPECT AND REQUIRE LABORATORY TEST TO BE CONDUCTED.
  4. FOR COMMERCIAL DRIVEWAYS, USE 6" OF COMPACTED CEMENT STABILIZED SAND. FOR RESIDENTIAL DRIVEWAYS, USE 2" OF COMPACTED BANK SAND.
  5. A PROPOSED DRIVEWAY TO BE BUILT ON A CORNER LOT CANNOT BE LOCATED WITHIN ANY PORTION OF THE PUBLIC STREET CURB RADIUS (THE POINTS OF TANGENCY MAY BE THE SAME POINT ALONG THE STREET CURB LINE).
  6. PROPOSED DRIVEWAY REINFORCING STEEL SHALL BE TIED TO EXISTING CONCRETE PAVEMENT WITH A MINIMUM LAP OF 18 INCHES.
  7. IF EXISTING STREET REBAR IS CUT OFF, THEN #4 DOWEL BARS (18" LONG) NEED TO BE INSTALLED AT 24" SPACING, EMBEDDED 9 INCHES AND EXPOSED OR MATCH EXISTING SPACING IF TIGHTER.
  8. 3" NON-METALLIC CHAIRS ARE REQUIRED.
  9. FOR CAPITAL IMPROVEMENT PROJECTS, THE SUBGRADE SHALL BE STABILIZED ACCORDING TO THE GEOTECHNICAL REPORT RECOMMENDATIONS.
  10. SAW AND SEAL ALL CONSTRUCTION JOINTS.
  11. SIDEWALK SLOPES SHALL COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS 403.3 "SLOPE".
  12. IF SIDEWALK IS EXISTING, SEE SECTION C-C.
  13. SIDEWALKS MAY BE REDUCED TO 4' IN FRONT OF SINGLE-FAMILY RESIDENTIAL LOTS WHEN A 5' PASSING AREA IS PROVIDED IN THE DRIVEWAY.
  14. FOR SIDEWALK DETAILS SEE SIDEWALK DETAILS SHEET



|                          | PAVEMENT THICKNESS | COLLECTOR/MAJOR           | RESIDENTIAL (MAJOR THROUGHFARE) | RESIDENTIAL (COLLECTORS AND LOCAL STREETS) |
|--------------------------|--------------------|---------------------------|---------------------------------|--|
| REINFORCEMENT            | 6"                 | #4 @ 24" O.C.E.W.         | N/A                             | #4 @ 24" O.C.E.W.                          |
|                          | 7"                 | #4 @ 24" O.C.E.W.         | #4 @ 24" O.C.E.W.               | #4 @ 24" O.C.E.W.                          |
|                          | 8"                 | #4 @ 18" O.C.E.W.         | #4 @ 18" O.C.E.W.               | #4 @ 18" O.C.E.W.                          |
| EXPANSION DOWEL JOINT    | 6"                 | 3/4" DIA. SMOOTH BAR      | 3/4" DIA. SMOOTH BAR            | 3/4" DIA. SMOOTH BAR                       |
|                          | 7"                 | 1" DIA. SMOOTH BAR        | 1" DIA. SMOOTH BAR              | 1" DIA. SMOOTH BAR                         |
|                          | 8"                 | 1" DIA. SMOOTH BAR        | 1" DIA. SMOOTH BAR              | 1" DIA. SMOOTH BAR                         |
| CONSTRUCTION JOINT DOWEL | ALL                | #5 REBAR                  | #5 REBAR                        | #5 REBAR                                   |
|                          | ALL                | 6" CEMENT-STABILIZED SAND | 2" BANK SAND                    | 2" BANK SAND                               |
| SUBGRADE                 | ALL                | 6" CEMENT-STABILIZED SAND | 2" BANK SAND                    | 2" BANK SAND                               |
| RUNNING SLOPE            | ALL                | 2% TO 4%                  | 2% TO 6%                        | 2% TO 10%                                  |

\*10% ALLOWABLE ON PRIVATELY CONSTRUCTED PROJECTS  
6% MAX ON PUBLIC PROJECTS

| NO. | REVISIONS                | DATE   | NAME |
|-----|--------------------------|--------|------|
| 1   | ORIGINAL STANDARD ISSUED | 2-1-21 | RBB  |

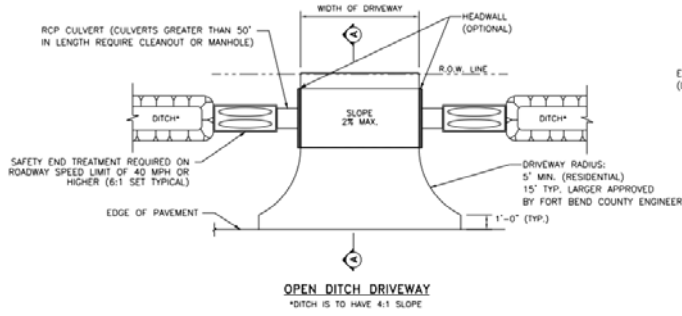
**FORT BEND COUNTY ENGINEERING DEPARTMENT**



CONSULTANT LOGO (LAYER "C-NON-PRINT")

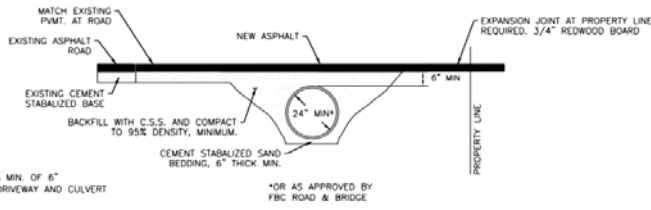
FOR INTERIM REVIEW ONLY  
DOCUMENT INCOMPLETE  
NOT SUITABLE FOR CONSTRUCTION  
REINFORCEMENT BARBERS  
(LAYER "C-NON-PRINT")  
P.E. SERIAL NO.  
DATE:

| PROJECT TITLE:                             | DATE:  | FRCD STANDARD |
|--|--------|---------------|
| DRIVEWAY DETAILS FOR RESIDENTIAL DRIVEWAYS | 2-1-21 | # / #         |

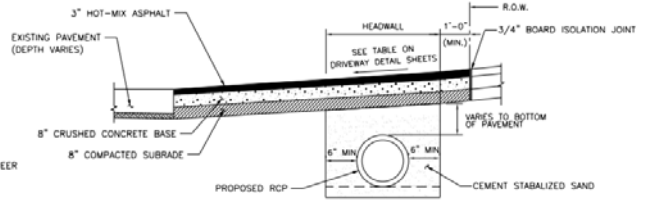


MINIMUM RADI REQUIREMENTS - DRIVEWAYS

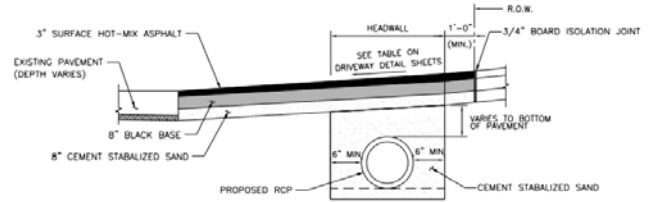
|             | LOCAL | COLLECTOR/MAJOR |
|-------------|-------|-----------------|
| RESIDENTIAL | 5'    | -               |
| COMMERCIAL  | 10'   | 25'             |



ASPHALT APRON DETAIL - DRIVEWAY PROFILE FOR CULVERT DRAINAGE



SECTION A-A FOR RESIDENTIAL DRIVEWAYS



SECTION A-A FOR COMMERCIAL DRIVEWAYS

| NO. | REVISIONS                | DATE   | NAME |
|-----|--------------------------|--------|------|
| 1   | ORIGINAL STANDARD ISSUED | 2-1-21 | FWR  |
| 2   |                          |        |      |
| 3   |                          |        |      |
| 4   |                          |        |      |

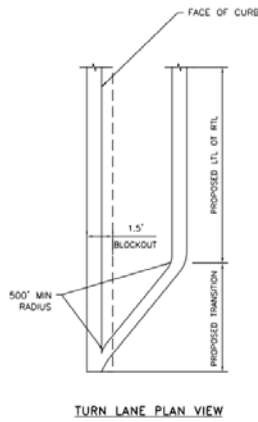
FORT BEND COUNTY  
ENGINEERING DEPARTMENT



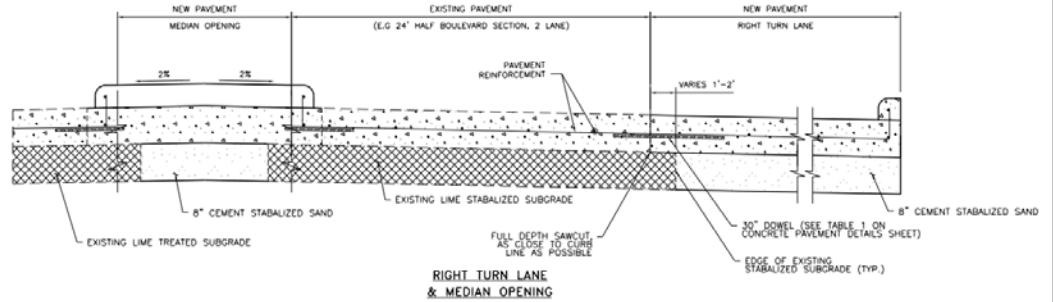
CONSULTANT LOGO  
(LAYER "C-NON-PRINT")

FOR INTERIM REVIEW ONLY  
DOCUMENT INCOMPLETE:  
NOT ADVISED FOR CONSTRUCTION.  
BEARING THE RISK OF DAMAGES  
(LAYER "C-NON-PRINT")  
P.E. SERIAL No.  
DATE:

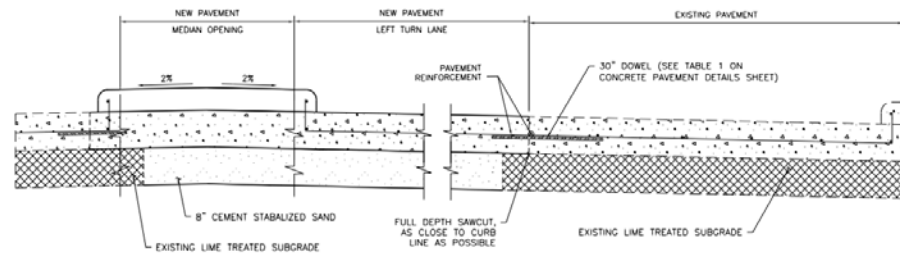
| PROJECT TITLE            | DRAWN BY       | FRCD STANDARD   |
|--------------------------|----------------|-----------------|
| ASPHALT DRIVEWAY DETAILS | FRCD           |                 |
|                          | CHECKED BY     |                 |
|                          | SCALE AS NOTED |                 |
|                          | DATE           |                 |
|                          | APPROVED BY:   |                 |
|                          |                | SHEET NO. # / # |



TURN LANE PLAN VIEW



RIGHT TURN LANE & MEDIAN OPENING



LEFT TURN LANE & MEDIAN OPENING

- NOTES
- FOR CONCRETE PAVEMENT REINFORCEMENT AND JOINT DETAILS, SEE CONCRETE PAVEMENT DETAILS SHEET

| NO. | REVISIONS                | DATE   | NAME |
|-----|--------------------------|--------|------|
| 1   | ORIGINAL STANDARD ISSUED | 2-1-21 | FWR  |
| 2   |                          |        |      |
| 3   |                          |        |      |
| 4   |                          |        |      |

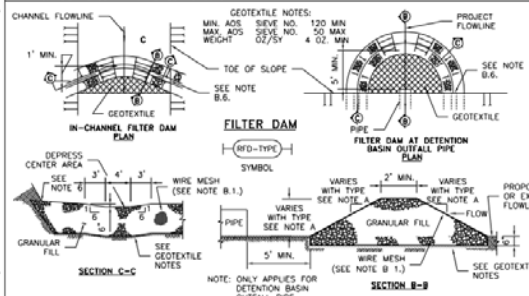
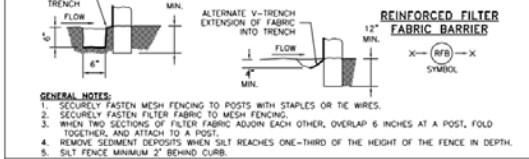
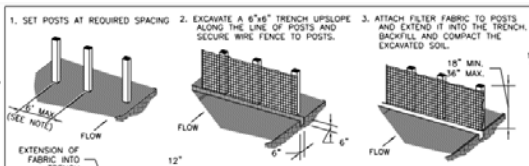
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ENGINEERING DEPARTMENT



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FOR INTERIM REVIEW ONLY  
DOCUMENT INCOMPLETE:  
NOT ADVISED FOR CONSTRUCTION.  
BEARING THE RISK OF DAMAGES  
(LAYER "C-NON-PRINT")  
P.E. SERIAL No.  
DATE:

| PROJECT TITLE                     | DRAWN BY       | FRCD STANDARD   |
|-----------------------------------|----------------|-----------------|
| TURN LANE & MEDIAN OPENING DETAIL | FRCD           |                 |
|                                   | CHECKED BY     |                 |
|                                   | SCALE AS NOTED |                 |
|                                   | DATE           |                 |
|                                   | APPROVED BY:   |                 |
|                                   |                | SHEET NO. # / # |



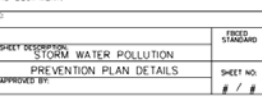
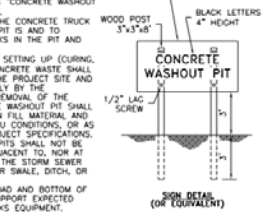
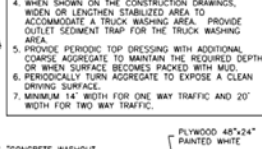
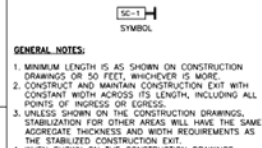
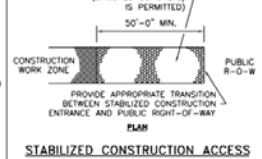
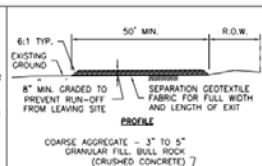
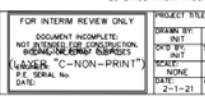
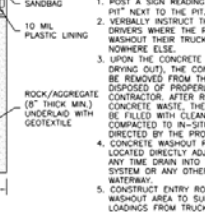
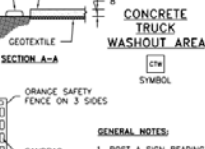
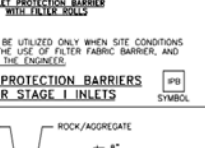
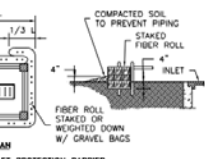
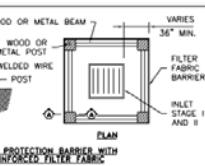
- A. TYPES OF FILTER DAMS**
- TYPE 1 (NON-REINFORCED)
    - HEIGHT - 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
    - TOP WIDTH - 2 FEET (MINIMUM).
    - SLOPES - 2:1 (MAXIMUM).
  - TYPE 2 (REINFORCED)
    - HEIGHT - 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
    - TOP WIDTH - 2 FEET (MINIMUM).
    - SLOPES - 2:1 (MAXIMUM).
  - TYPE 3 (REINFORCED)
    - HEIGHT - 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
    - TOP WIDTH - 2 FEET (MINIMUM).
    - SLOPES - 3:1 (MAXIMUM).
  - TYPE 4 (GABION)
    - HEIGHT - 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
    - TOP WIDTH - 2 FEET (MINIMUM).
  - TYPE 5. AS SHOWN ON THE PLANS.
- B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.**
- TYPE 2 AND 3 FILTER DAMS: SECURE WITH 20 GAUGE GALVANIZED BROWN WIRE MESH WITH 1 INCH DIAMETER HEXAGONAL OPENINGS.
  - PLACE GRANULAR FILL ON THE WIRE MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
    - 3-5 INCHES FOR ROCK FILTER DAM TYPES 1, 2 AND 4.
    - 4-8 INCHES FOR ROCK FILTER DAM TYPE REFER TO GRANULAR FILL IN SPECIFICATION SECTION NO. 02378 RIPRAP AND GRANULAR FILL.
  - FOLD WIRE MESH AT UPSTREAM SIDE OVER GRANULAR FILL AND TIGHTLY SECURE TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOOD RINGS.
  - IN STREAMS: SECURE OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
  - SEE HCTCD SPECIFICATION SECTION NO. 02364-FILTER DAMS. EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT HIGHER THAN CENTER OF DEPRESSED AREA AT SLOPE.

| NO. | REVISIONS                | DATE   | NAME |
|-----|--------------------------|--------|------|
| 1   | ORIGINAL STANDARD ISSUED | 2-1-21 | RWB  |
| 2   |                          |        |      |
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