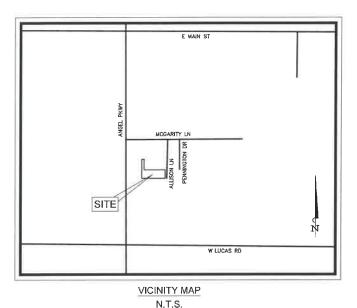
# CITY OF LUCAS, HOMERUN ALLEY

# ENGINEERING SITE PLAN FOR

# HOMERUN ALLEY

**MCGARITY LN & ALLISON LN** CITY OF LUCAS, **COLLIN COUNTY, TEXAS** 



	SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE	REVISION DATE
C-0	COVER	05/11/2020
	FINAL PLAT	
SP-1	CITY SITE PLAN	05/11/2020
C-1	GENERAL NOTES	05/11/2020
C-2	EROSION CONTROL PLAN	05/11/2020
C-3	EROSION CONTROL DETAILS	05/11/2020
C-4	DIMENSION CONTROL AND PAVING PLAN	05/11/2020
C-5	GRADING PLAN	05/11/2020
C-6	DRAINAGE AREA MAP	05/11/2020
C-7	DRAINAGE CALCULATIONS	05/11/2020
C-8	UTILITY PLAN	05/11/2020
C-9	WATER LINE PROFILES	05/11/2020
C-10	CONSTRUCTION DETAILS	05/11/2020
C-11	CONSTRUCTION DETAILS	05/11/2020
C-12	CONSTRUCTION DETAILS	05/11/2020
L-1	LANDSCAPE PLANTING	04/29/2020

# PLAN SUBMITTAL LOG DESCRIPTION SUBMITTAL DATE 02/18/2020 SUBMITTAL 2ND SUBMITTAL 03/30/2020 3RD SUBMITTAL

**ENGINEER** 



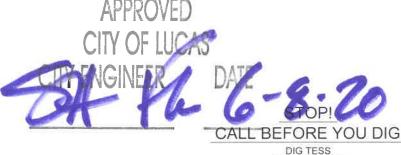
TEXAS REGISTRATION #14199 1903 CENTRAL DRIVE SUITE #406 BEDFORD, TX 76092 PH. 817.281.0572 CONTACT: DREW DONOSKY, PE EMAIL: DREW@CLAYMOOREENG.COM

# OWNER/DEVELOPER

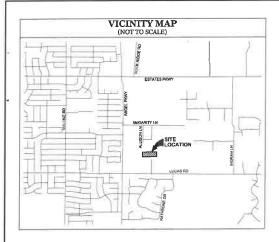
SIRIUS BUILDING COMPANY CONTACT: JUSTIN NUNN 15036 BELTWAY DR. ADDISON, TX 75001



MAY 2020



1-800-DIG-TESS (@ least 72 hours prior to digging)





## **GENERAL NOTES**

- 1.) The purpose of this plat is to create an official lot of record from a tract of land.
- 2.) This property is located in "Non-shaded Zone X" according to the F.E.M.A. Floor Insurance Rate Map dated June 2, 2009 as shown on Map Numbe 48085C0405J.
- 3.) The grid coordinates shown on this plat are based on GPS observations utilizing the AllTerra RTKNET Cooperative network. NAD 83(2011) State Plane Coordinate System (Texas North Central Zone - 4202).
- 4.) Selling a portion of this addition by metes and bounds is a violation of City Ordinance and State Law, and is subject to fines and/or withholding of utilities and building permits.
- All interior property corners are marked with a 1/2-inch iron rod with a greet plastic cap stamped "EAGLE SURVEYING" unless noted otherwise.
- 6) The hearings shown on this plat are based on GPS observations utilizing the AllTerra RTKNET Cooperative network, NAD 83(2011) Datum

	LINE TABL	Æ
LINE	BEARING	DISTANCE
L1	N 00°46'46" W	126.29'
L2	N 89°43'45" E	36.73'
L3	N 89°13'14" E	101.94'
L4	S 00°46'46" E	24.00'
L5	S 89"13'14" W	101.94'
L6	S 00°46'46" E	66.49'
L7	S 89°43'45" W	49.321
L8	N 89°43'45" E	50.52'
L9	N 00°46'46" W	32.42'
L10	S 00°46'46" E	47.19
L11	N 89°43'45" E	6.45'
L12	N 00°10'30" W	16.01
L13	N 89°43'45" E	15.00"
L14	S 00°10'30" E	16.01"
L15	N 89°43'45" E	433.74'
L16	N 00°38'34" W	196.00'
L17	N 89°43'45" E	109.54

			CURVE TABL	.E	
CURVE	ARC LENGTH	RADIUS	<b>DELTA ANGLE</b>	CHORD BEARING	CHORD LENGTH
C1	28.25'	30.00'	53°57'24"	N 26°11'56" E	27.22
C2	40.41'	54.00'	42°52'26"	N 20°39'27" E	39.47'
C3	22.45'	30.00'	42°52'26"	N 20°39'27" E	21.93'
C4	18.40'	30.00	35°08'34"	S 73"12'29" E	18.11'
C5	47.12'	30.00'	90°00'00"	S 44°13'14" W	42.43'
C6	40.41'	54.00	42°52'26"	S 20°39'27" W	39,47'
C7	22.45'	30.00	42°52'26"	S 20°39'27" W	21.93'
C8	29.01'	30.00	55°24'12"	S 28°28'52" E	27.89'

# LEGEND

1912.026-05

05/01/202

JDC

Drafter

VOL = VOLUME POB = POINT OF BEGINNING

CIRS = CAPPED IRON ROD SET CIRF = CAPPED IRON ROD FOUND DOC. NO. = DOCUMENT NUMBER

P.R.D.C.T. = PLAT RECORDS, COLLIN COUNTY, TEXAS

O.P.R.C.C.T. = OFFICIAL PUBLIC RECORDS

# LOT SUMMARY TABLE GROSS 3.08 AC. 134,257 S.F. R.O.W. 0.15 AC. 6,760 S.F. NET 2.93 AC. 127,497 S.F.



EAGLE SURVEYING, LLC 210 S. Flm Street, Suite: 104 Denton, TX 76201 (940) 222-3009 TX Firm #10194177

SURVEYOR
Eagle Surveying, LLC
Contact: John Cox
210 S. Elm Street, Suite: 104 Denton, TX 76201 (940) 222-3009

ENGINEER Claymoore Engineering, Inc. Contact: Matt Moore 301 S. Coleman, Suite: 40 Prosper, TX 75078 (817) 281-0572

OWNER
Pennington Partners, Ltd.
Contact: William W. Shipley
3445 Shenandoah Street
Dallas, TX 75205
(214) 522-3386

# The Director of Planning and Community Development of the City of Lucas, Texas hereby certifies that to the best of his/her knowledge or belief, this subdivision plat conforms to all requirements of the Code of Ordinance, or as may have been amended or modified, as allowed, by the Planning and Zoning Planning and Zoning Chairman nission as to which his/her approval is required. ATTEST: Director of Planning & Community Development City Secretary

# OWNER'S CERTIFICATE & DEDICATION

ATE OF TEXAS UNTY OF COLLIN

HEREAS, PENNINGTON PARTNERS, LTD., is the owner of a 3.08 acre tract of land out of the WILLIAM SNIDER SURVEY, ABSTRACT MBER 821, situated in the City of Lucas, Collin County, Texas and being a portion of a called 21.751 acre tract of land conveyed to natington Partners, LTD by deed of record in Document No. 20020806000809110 of the Official Public Records of Collin County, Texas and ng more particularly described by metes and bounds as follows:

GINNING, at a 1/2 inch iron rod with plastic cap stamped "RPLS 5310" found in the West right-of-way line of Allison Lane (45 foot wide t-of-way), being the Northeast comer of the North terminus of that certain 45 foot wide right-of-way dedicated in SC Lucas Addition, a division of record in Volume 2015, Page 380 of the Plat Records of Collin County, Texas, also being the Southeast corner of said 21.751 acre

ENCE, S89°43'45"W, leaving the West right-of-way line of Allison Lane, along the South line of said 21,751 acre tract, being in part, the mmon North line of said 45 foot wide right-of-way dedicated in SC Lucas Addition and in part, the common North line of Lot 1R, Block A of blat of Lot 1R, Block A of SC Lucas Addition, a subdivision of record in Volume 2017, Page 757 of said Plat Records, a distance of 645.22 feet 1/2 inch iron rod with unstamped yellow plastic cap found at the Southeast comer of Lot 1, Block A of Angel Parkway Pet Hospital Addition, a division of record in Volume 2018, Page 62 of said Plat Records, being the Southwest corner of said 21.751 acre tract and hereof;

ENCE, N00°46'46"W, leaving the North line of said Lot 1R, along the West line of said 21.751 acre tract, being in part, the common East line aid Lot 1 and in part, the common East line of a called 1.140 acre tract of land conveyed to O'Reilly Auto Enterprises. LLC by deed of record in and but a fail in light in the committee assistance of a class of a light and the committee of the committee nped "HUITT-ZOLLARS" found at the Northeast comer of said 1.140 acre tract bears N00°46'46"W, a distance of 86.99 feet;

ENCE, N89°43'45'E, leaving the East line of said 1.140 acre tract, over and across said 21.751 acre tract, a distance of 645.71 feet to 12 Inch Iron rod with green plastic cap stamped "EAGLE SURVEYING" set in the West right-of-way line of Allison Lane, being the common Une of said 21 751 acre tract, for the Northeast comer hereof:

NCE, S00°38'34"E, along the West right-of-way line of Allison Lane and the common East line of said 21.751 acre tract, a distance of 208.00 to the POINT OF BEGINNING and containing a net area of 3.08 Acres, or (134.257 Square Feet) of land and a gross area (post dedication) .87 Acres or (124,897 Square Feet) of land, more or less

#### W THEREFORE KNOW ALL MEN BY THESE PRESENTS:

HAT, PENNINGTON PARTNERS, LTD., does hereby adopt this plat, designating herein described property as HOME RUN ALLEY ADDITION, addition to the City of Lucas, Collin County, Texas, and does hereby dedicate to public use forever all streets, alleys, parks, watercourses, ains, easements and public places thereon shown for the purpose and consideration therein expressed. No buildings, fences, trees, shrubs or ret improvements or growths shall be constructed or placed upon, over or across the drainage and utility desements as shown. Said drainage du utility easements being hereby reserved for the mutual use and accommodation of all public utilities desiring to use same. All and any public high shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs or timprovements or growths which are in any way endanger or interfere with the construction, maintenance, or efficiency of its respective system on the drainage and utility sement and all public utilities shalls at all times have the full right of ingress and egress to or from and upon the said drainage and utility sements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or parts of its spective systems without the necessity at any time of procuring the permission of anyone.

NER: PENNINGTON PARTNERS, LTD., a Texas limited partnership

BY: Shipley Development Corporation, a Texas corporation (its general partner)

William W. Shipley		Date	
President			
TATE OF TEXAS	§		
OUNTY OF	§		

ORE ME, the undersigned authority, on this day personally appeared WILLIAM W. SHIPLEY, as President of Shipley Development noration, on behalf of PENNINGTON PARNTERS, LTD., its general partner, known to me to be the person whose name is subscribed to the going instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed and in the

EN UNDER MY HAND AND SEAL OF THE OFFICE this \_\_\_\_\_ day of \_\_\_\_

ry Public in and for the State of Texas

# CERTIFICATE OF SURVEYOR

TE OF TEXAS INTY OF COLLIN

ED A. GOSSETT, Registered Professional Land Surveyor, do hereby certify that this plat was prepared from an actual survey made on the und and that the monuments shown hereon were found or placed with 1/2-inch fron rods with green plastic caps stamped "EAGLE RVEYING" under my direction and supervision in accordance with the current provisions of the Texas Administrative Code and the Ordinances he City of Lucas, Collin County, Texas.

PRELIMINARY this document shall not be recorded for any purpose and shall not be used or viewed or relied upon as a final survey document A. Gossett, R.P.L.S. # 5991 TE OF TEXAS NTY OF TARRANT

ORE ME, the undersigned authority, on this day personally appeared TED A. GOSSETT, known to me to be the person whose name is crosed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein essed and in the capacity therein stated.

EN UNDER MY HAND AND SEAL OF THE OFFICE this \_\_\_\_\_\_ day of \_\_\_\_

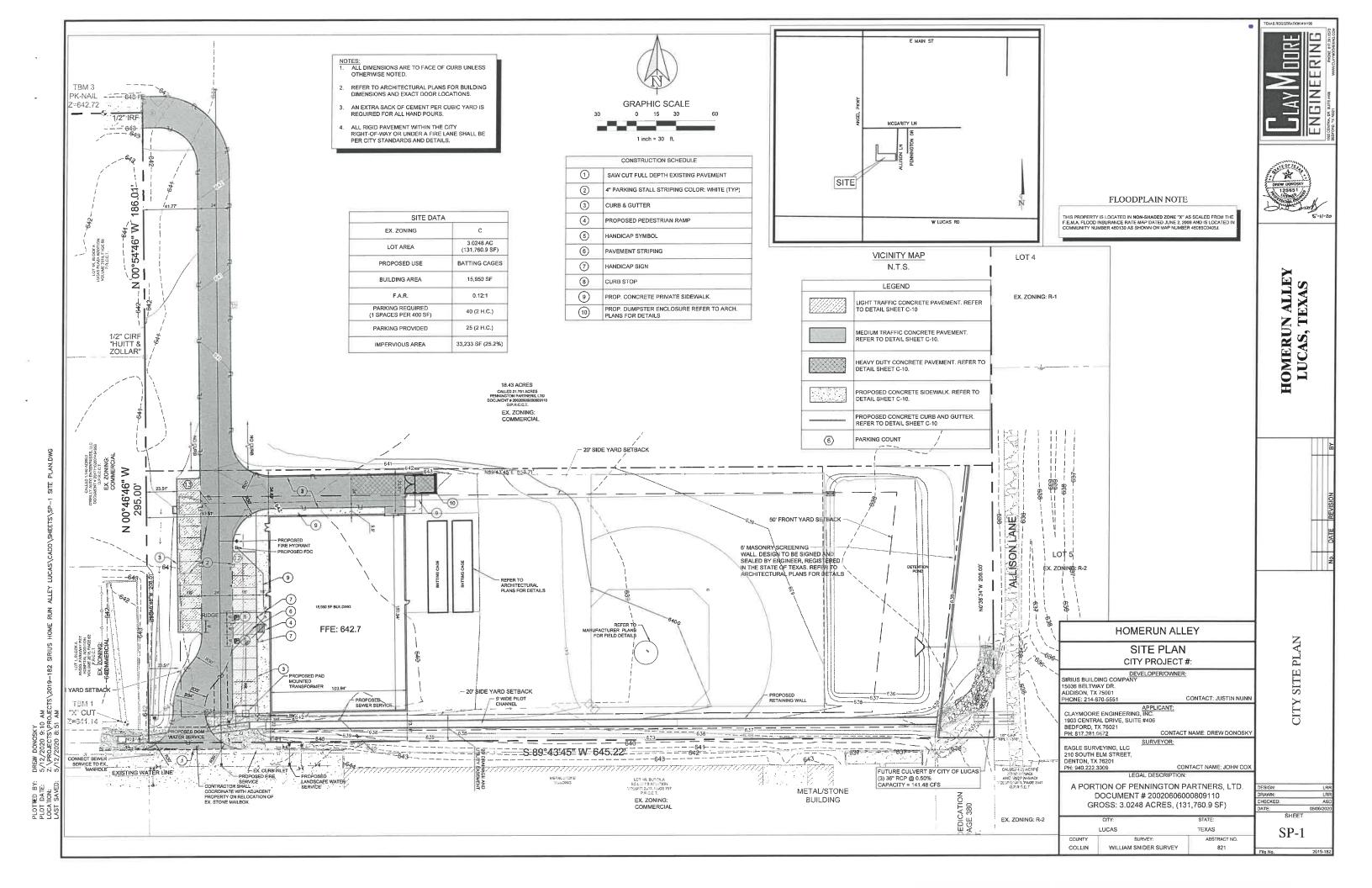
Cox, Notary Public in and for the State of Texas

# FINAL PLAT HOME RUN ALLEY ADDITION LOT 1, BLOCK A ZONED: C

BEING 3.08 ACRES OF LAND SITUATED IN THE WILLIAM SNIDER SURVEY, ABSTRACT No. 821, CITY OF LUCAS, COLLIN COUNTY, TEXAS

PAGE 1 OF 1

			LOT 2
LOT 1, BLOCK A DONALD ALAN ADDITION VOLUME 2019, PAGE 700 P.R.C.C.T.  WATER, DRAIMAGE, UTILITY, PEDESTRAIM AND VERCULAR INGRESS AND EGYESSE SEGMENT DOC. NO. DR. C.C.T. FIRE LAME ACDESS, DRAIMAGE AND UTILITY EASEMENT DOC. R.D. CASSEMENT DOC. R.D.			LOTS
FIRE LANE, ACCESS, DRAMAGE  AND UTILITY EASEMBERT  VOLUME 2019, PAGE 595  P.R.G.C.T.  LOT 1R, BLOCK A LUCAS PLAZA ADDITION  VOLUME 2019, PAGE 88  P.R.C.C.T.  P.R.C.C.T.	CALLED 21751 AGRES PENNINGTON PARTNERS, LTD DOC. NO. 20020606000606110 O.P.R.C.C.T.	ALLISON LANE	LOT 4
1/2 CIRF TUTUTY E DOUBLOOF & UTILITY E DOC. NO. 2016/03/2000 O.P.R.C.C.T.  N: 7084878.65 E: 2544548.83 CIRS O'RELLY AUTO ENTERPRISES, LLC DOC. NO. 2017/10/2001464850 O.P.R.C.C.T.  1088  117 CIRF 20 LARS 15 DOUBLOOF & UTILITY E DOC. NO. 2016/03/2000 O.P.R.C.C.T.	N 89°43'45" E 645.71'  625.71' 20' BUILDING SETBACK  24' FIRE LANE, ACCESS, DRAINAGE & UTILITY EASEMENT  DRAINAGE & UTILITY EASEMENT  TR IL (0) (2) K. (A)	30 PERMANENT UTILITY EASEMENT DOC. NO. 2019/25/2000666760 O.P. R.C.C.T.  L17  O.15 ACRE / 6,760 SQ. FEET RIGHT-OF-WAY DEDICATION BY THIS PLAT	LOTS
LOT 1. BLOCK A ANGEL PARGWAY PET HOSPITAL ADDITION VOLUME 2016, PAGE 92 PR.C.O.T.  PROPERTY OF THE PROPERTY OF	MATER JEMENT  LIAM SNIDER SURVEY,  LIAM SNIDER SURVEY,  ABSTRACT NO. 821  2.93 ACRES 2.7497 SC. FEET  GROSS: 3.08 AC. FEET  GROSS: 3.08 AC. FEET  GROSS: 3.08 AC. FEET  2.75 MET: 2.30 AC. FEET  ABNAGE & UTILITY EASEMENT  S89°43'45" W 645.22'	S 06"12"57" W 209.34" E  S 06"12"57" W 209.34" E  S 00"38"34" E	
LOT 2, BLOCK A SCLUCAS ADDITION VOLUME 20), FADES 380 P.R.C.C.T.	LOT 1R, BLOCK A SC LUCAS ADDITION VOLUME 2017, PAGE 757 P.R.C.C.T.	45 RIGHT OF WAY MOULUME 2015 HOGE 580 P.R.G.C.T.	CALLED 4.00 ACRES ASAO AHMADI & ANITA AHMADI VOLUME 4451, PAGE 2441 O.P.R.C.C.T.  CALLED 7.764 ACRES TEXAS RANGERS RANCH, LIC DOC. NO. 2000131000144770 O.P.R.C.C.T.
	CERTIFICATE OF APPROVAL  The Director of Public Works of the City of Lucas, Texas hereby certifies that to the best of his/her knowledge or belief, this subdivision plat conforms to all requirements of the Code of Ordinance and with engineering construction standards and processes adopted by the City of Lucas, Texas as to which his/her approval is required.	P&Z CERTIFICATE OF	APPROVAL
	Director of Public Works Date	APPROVED by the City of Lucas Planning on this day of	



- 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIALS AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS, ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.

  3. THE CONTRACTOR SHALL CONTACT ALL FRANCHISE UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISE UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS, IF ANY, ARE CONCEPTUAL.

  4. THE CONTRACTOR SHALL PROTECT ALL PUBLIC AND PRIVATE UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL
- MANHOLES, CLEANOUTS, VALVE BOXES, POWER POLES, SIGNS, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVINE. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.

  5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE
- PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF
- 6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE RECORDS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO AVAILABLE NECODOS AND ARE CONSIDERED AFFOCAMENTE. IT STATE BE THE CONTRACTOR STATES AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY
- 7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERT INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
- 8. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY
- TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.

  9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

  10. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, FROSION CONTROL PLANS SWPPP AND INSPECTION REPORTS.
- EROSION CONTROL PLANS, SWIPPE AND INSPECTION REPORTS.

  1. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT

  AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE

  WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF
- THE AFFECTED ITEM.

  12. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS SHALL BE SENT TO THE ARCHITECT, CIVIL ENGINEER, CONTRACTOR AND OWNER DIRECTLY FROM THE TESTING AGENCY.

  13. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR
- UTILITY SERVICE COMPANIES SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.

  14. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF
- IMPROVEMENTS
- IS CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL LANDSCAPE MED ARCHITECTURAL AND OTHER PRIOR TO COMMENCING CONSTRUCTION, OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
- 16. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES UNLESS OTHERWISE NOTED
- 17. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISE UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION. PAYMENT FOR RELOCATION AND INSTALLATION WILL BE NEGOTIATED ONCE IDENTIFIED.
- 18 ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE SHOWN
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL
- DRAWINGS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL PLANS.

  21.CONTRACTOR SHALL GIVE NOTICE TO ALL AFFECTED PARTIES AND ALL AUTHORIZED INSPECTORS,
- SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS
- OPERATIONS, AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

  22. ALL "RECORD" DIMENSIONS SHALL CONFORM TO THE DESIGN DIMENSIONS PLUS OR MINUS 0.02 FEET. ALL "RECORD" SLOPES SHALL CONFORM TO THE DESIGNED SLOPES PLUS OR MINUS 0.05 FOOT/FOOT.

  23. CONTRACTOR SHALL CONTACT CITY BUILDING OFFICIAL TO LEARN OF ANY UNUSUAL CONSTRUCTION SEQUENCING
- REQUIREMENTS THAT THE CITY MAY REQUIRE. THE CONTRACTOR IS CAUTIONED THAT THIS AND PERHAPS OTHER ICH REQUIREMENTS MAY EXIST AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND COMPLY WITH

# PAVING AND STRIPING NOTES

- 1 THE REINFORCED PORTLAND CEMENT CONCRETE SHOULD HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI IN LIGHT DUTY AREAS, AND 3,500 PSI IN DRIVE LANES, FIRE LANES, AND TRUCK AREAS AND A MINIMUM
  REINFORCING THAT SHOULD BE IN ACCORDANCE WITH ACCEPTED CODES AND SHALL STRICTLY ADHERE TO DETAILS
  INCLUDED IN THIS SET. A BASE SUB-GRADE PER THE GEOTECHNICAL REPORT IS REQUIRED BENEATH ALL PAVING.
- TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN AGENCY, APPROVED BY THE OWNER, FOR TESTING MATERIALS, PROCUREMENT OF THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE, BY THE STANDARD TESTING PROCEDURES, THAT THE WORK CONSTRUCTED MEETS THE
- REQUIREMENTS OF THE CITY AND PROJECT SPECIFICATIONS.

  3. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 4. THE CONTRACTOR SHALL REVIEW LOCATION OF ALL TRAFFIC CONTROL DEVICES WITH THE OWNER PRIOR TO
- INSTALLATION. SEE M.E.P. PLANS FOR LOCATION OF PROPOSED SLEEVING AND CONDUITS.
- 6. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE MOST RECENT VERSION OF THE AMERICANS WITH DISABILITIES ACT OF 1994 AND THE TEXAS ARCHITECTURAL BARRIERS ACT OF 1994, AND ALL
- ADDENDUMS OR UPDATES. 7. CONTRACTOR SHALL SUBMIT A PAVEMENT JOINTING PLAN TO THE ENGINEER AND OWNER PRIOR TO THE BEGINNING
- OF ANY CONCRETE PAVING WORK.

  5. ANY EXISTING CONCRETE OR ASPHALT SHOWN TO BE REMOVED SHALL BE PROPERLY DISPOSED OF BY THE

OF ANY BLOCK OUT IN PAVEMENT AND SAWED DUMMY JOINTS EVERY 12' IN BOTH DIRECTIONS.

- CONTRACTOR OFF SITE. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM. CONSTRUCTION JOINTS SHALL BE REQUIRED AT INTERRUPTIONS OF PAVING OPERATIONS SUCH AS THOSE OCCURRING AT THE END OF THE DAY OR DUE TO WEATHER OR EQUIPMENT BREAKDOWN. PLACE AT LONGITUDINAL
- CONSTRUCTION OR ISOLATION JOINT LOCATIONS. 10. CONTRACTOR TO INSTALL CONSTRUCTION JOINTS IN CONCRETE PAVEMENT AT ALL PC'S AND AS CONVENIENT TO PHASING OF POURS. CONCRETE PAVEMENT TO BE CONSTRUCTED WITH ISOLATION JOINTS AROUND THE PERIMETER
- 11. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
- 12 RADIAL JOINTS SHALL BE NO SHORTER THAN 24".
- 13. ALL CONSTRUCTION JOINTS SHALL BE SAWED, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED WITH HOT POURED RUBBER JOINT SEALING COMPOUND

- CONTRACTOR SHALL FIELD VERIFY THE VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CONSTRUCTION MANAGER IMMEDIATELY IF A CONFLICT IS DISCOVERED.
- 28. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS, GRATE INLETS, AND ALL UTILITIES CROSSING THE STORM SEWER. FLOW LINES AND RIMS OF PROPOSED INLETS SHALL BE VERIFIED WITH THE PROPOSED GRADE PRIOR TO CONSTRUCTION.
- THE END OF ALL STORM SEWER LATERALS THAT CONNECT TO WORK BY PLUMBER SHALL BE TIGHTLY PLUGGED OR CAPPED AND MARKED 5.0 FEET OUTSIDE THE BUILDING UNTIL FINAL CONNECTIONS ARE MADE BY PLUMBING CONTRACTOR.
- 4. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS.
- 6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- 7. EXISTING MANHOLE TOPS AND ALL OTHER DRAINAGE FACILITIES SHALL BE ADJUSTED AS REQUIRED TO MATCH FINAL GRADES AS SHOWN ON GRADING PLAN, NO SEPARATE PAY ITEM.

  8. ALL RCP SHALL BE CLASS 3 OR APPROVED EQUAL.

#### STORM SEWER DISCHARGE AUTHORIZATION

- 1. IF THE TOTAL DISTURBED AREA EXCEEDS ONE (1) ACRE A NOTICE OF INTENT (N.O.I.) SHALL BE SUBMITTED BY THE CONTRACTOR TO THE TOEQ NO LESS THAN 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES
- 2. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN A
- CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.

  3. A COPY OF THE SWPPP, INCLUDING CONTRACTOR CERTIFICATIONS AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY AND FILED WITH THE CONSTRUCTION PLANS. AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION
- 4. A NOTICE OF TERMINATION (N.O.T.) SHALL BE SUBMITTED TO THE TOEQ BY THE CONTRACTOR WHEN THE SITE HAS 100% OF THE DISTURBED AREAS STABILIZED AND THE SITE NO LONGER HAS STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES (CONSTRUCTION), OR THE N.O.T. PERMITTEE OR CO-PERMITTEE NO LONGER HOLDS OPERATIONAL CONTROL OF THE CONSTRUCTION.

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE, THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.

  2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- HORIZONTAL AND VERTICAL BLOCKING FOR WATER LINES HAS BEEN OMITTED FOR CLARITY. HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
- 4. TRENCHES WHICH LAY OUTSIDE EXISTING OR FUTURE PAVEMENTS SHALL BE BACK FILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE 'C' BACKFILL MATERIALS. WHEN TYPE 'C' BACKFILL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINEER TYPE 'B' MATERIAL SHALL BE USED. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% PROCTOR DENSITY BY MEANS OF TAMPING ONLY. TRENCHES WHICH CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACK FILLED PER FIGURE 'A' WITH 98% PROCTOR STANDARD DENSITY OF -2, +4 OF OPTIMUM MOISTURE CONTENT.
- 5. TOP OF WATER LINES SHALL BE A MINIMUM OF 42" BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN
- 5. FIRE HYDRANTS SHALL BE A MINIMUM 3' BEHIND THE FACE OF THE CURB UNLESS OTHERWISE DIRECTED BY THE CITY.
- FIRE HYDRANTS AND VALVES AS SHOWN ON THESE PLANS ARE SYMBOLIC ONLY.
  7. CORPORATION STOPS SHALL BE TESTED FOR FULL FLOW WHEN THE SYSTEM IS PRESSURE TESTED.
- 8. ALL NEW WATER MAINS SHALL BE FULLY PURGED.
  9. ALL 6", 8", 10" & 12" WATER MAINS SHALL BE PVC AWWA C900, DR-14.
- 10. FITTINGS SHALL BE DUCTILE IRON AND MECHANICAL JOINT TYPE, WITH "COR-BLUE" BOLTS AND SHALL BE CLASS 250.

# SANITARY SEWER NOTES

- 1. EXISTING UTILITY DATA IS PROVIDED FOR INFORMATION ONLY. ALTHOUGH THIS DATA IS SHOWN AS ACCURATELY AS POSSIBLE. THE CONTRACTOR IS CAUTIONED THAT THE DEVELOPER AND THE ENGINEER NEITHER ASSUMES NOR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA
- 2. THE CONTRACTOR IS TO VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 3. TRENCHES WHICH LIE OUTSIDE EXISTING PAVEMENTS SHALL BE BACKFILLED ABOVE THE TOP OF THE EMBEDMENT WITH TYPE "C" BACKFILL MATERIAL, WHEN TYPE "C" BACKFILL MATERIAL IS NOT SUITABLE AND AT THE DIRECTION OF THE ENGINEER, TYPE "B" MATERIAL SHALL BE USED. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM DAY DENSITY BY MEANS OF TAMPING ONLY. TRENCHES THAT CROSS UNDER EXISTING OR FUTURE PAVEMENT SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DRY DENSITY WITH MOISTURE CONTENT-2 AND +4% OF OPTIMUM MOISTURE CONTENT.
- 4. TYPICAL LOCATION OF SANITARY SEWER PIPE SHALL BE A MINIMUM OF 4'-0" BELOW TOP OF CURB EXCEPT WHERE SHOWN OTHERWISE IN THESE PLANS.
- 5. ALL FLEXIBLE SANITARY SEWER MAINS SHALL BE TESTED WITH STANDARD 5% DEFLECTION MANDREL
- 6. ALL SANITARY SEWER LINES SHALL BE CAPPED WITH AN APPROPRIATE CAP AT THE END OF EACH WORKDAY 7. WHEN EXISTING GRADES ARE LOWER THAN PROPOSED MAINS, THE FILL AREA OVER THE PIPE SHALL BE FILLED AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY TO THE PROPOSED FINISHED GRADE PRIOR TO INSTALLING ANY MAIN.
- 8. ALL SEWER SERVICES SHALL BE CONSTRUCTED OF SDR-35 PIPE.

# TRAFFIC CONTROL NOTES

- 1 CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS TO THE OWNER, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.
- 2. ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), LATEST VERSION.
- THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE INTENT OF THESE TRAFFIC CONTROL PLANS TO AVOID CONFUSION TO THE TRAVELING PUBLIC.
- THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN-KIND AS ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
- 5 ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANFOLIS TRAFFIC CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC CONTROL MEASURES REPLACED AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATIONS.
- 6. ACCESS TO THE ADJACENT SHOPPING AREA AND BUSINESS SHALL BE MAINTAINED AT ALL TIMES, ANY CLOSURE OF ACCESS LANES SHALL BE COORDINATED WITH THE OWNER OF THE SHOPPING AREA

#### EROSION CONTROL NOTES

- 1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER PIPES OR PROPOSED OR EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT-OF-WAYS. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND PERMANENT SOIL STABILIZATION IS ACHIEVED.
- CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH EXISTING TOPSOIL AND VEGETATION. 3. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED (OR SODDED), IRRIGATED, AND MAINTAINED UNTIL PERMANENT STAND OF GRASS IS ACHIEVED WITH A MINIMUM OF 70% COVERAGE. UNLESS OTHERWISE NOTED, PRIVATE LAWN AREAS AND PARKWAYS IN FRONT OF
- PRIVATE LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH BLOCK SOD SIMILAR TO THAT
- 4. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED NTRANCE AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.
- 5 CONSTRUCTION ENTRANCE:
  - MINIMUM SIZE STONE: 6-INCHES DIAMETER THICKNESS: NOT LESS THAN 12-INCHES
  - LENGTH: MINIMUM 100 FEET
  - WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS.
- MAINTENANCE REQUIREMENTS: AS NECESSARY TO PREVENT TRACKING OR FLOWING MUD INTO PUBLIC RIGHT-OF-WAY OR PARKING AREAS.
- 6. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON A PUBLIC ROADWAYS HALL BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBLIC ROADWAY, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE
- 7. CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES CONTRACTOR RESPONSIBLE FOR FROM MAINTENEED IN REQUIRED PROSIDE CONTROL BEFORE DEPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION. THE CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH IS DISTURBED.

  8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE
- CONTRACTOR SHALL USE FILTER BARRIER (OR OTHER METHOD APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT ADVERSE OFF SITE IMPACTS OR STORM WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING ONTO ADJACENT PROPERTIES AS REQUIRED BY THE CITY.
- 9. BEFORE ANY EARTHWORK IS DONE. THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS
  AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY
  ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- 10. CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING CONSTRUCTION.

  11. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH
- ALL CONDITIONS ATTACHMENTS EXHIBITS AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY THE T.C.E.Q. OR THE GOVERNING

# GRADING NOTES

- 1. IF A GRADING PERMIT IS REQUIRED FROM THE CITY PRIOR TO STARTING CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMIT AND PAYING ALL ASSOCIATED FEES.
- 2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
- 3. ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE
- 4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE EXISTING AND PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR ADJUSTMENTS TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED WITH THE PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.

  5. THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VALUE LIDS, FIRE HYDRANTS, POWER
- POLES, GUY WIRES, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING
- 6. ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR, OFFSITE UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER.
- 7. ALL CLEARING, GRADING, COMPACTION AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE TO THE GEOTECHNICAL REPORT.
- 8. GRADING CONTRACTOR TO COORDINATE WITH THE FRANCHISE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.
- 9. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES AND USE TO DETERMINE HIS BID
- 10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. & T.A.S)
  EXIST TO AND FROM EVERY DOOR. IN NO CASE SHALL HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12
  HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A. AND

CITY OF LUCAS GENERAL NOTES WILL **GOVERN OVER ANY CONFLICTS IN INFORMATION** SHOWN ON THE PRIVATE GENERAL NOTES.

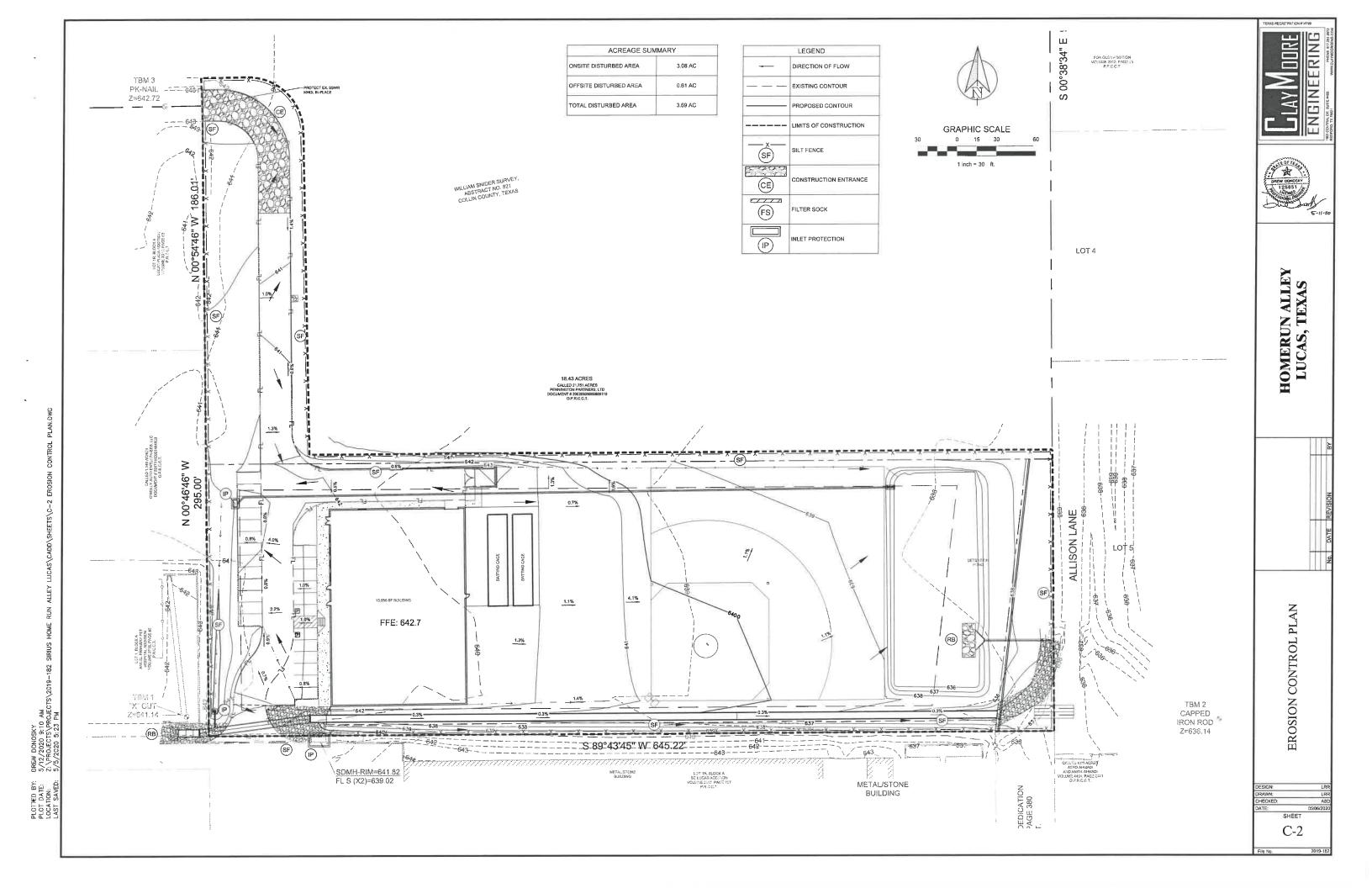




HOMERUN ALLEY LUCAS, TEXAS

NOTES GENERAL

C-1



ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY OF LUCAS.

IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT THE EROSION CONTROL PLAN WILL BE REQUIRED TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.

IF OFF-SITE BORROW OR SPOILS SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THIS INFORMATION SHALL BE DISCLOSED AND SHOWN ON THE EROSION CONTROL PLAN. OFF—SITE BORROW AND SPOILS AREAS ARE CONSIDERED PART OF EROSION CONTROL REQUIREMENTS. THESE AREAS SHALL BE STABILIZED WITH GROUND COVER PRIOR TO FINAL APPROVAL OF THE PROJECT.

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO INSURE THAT THE DEVICES ARE FUNCTIONING PROPERLY. WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN STONES OR MUD IS BEING TRACKED ONTO A PUBLIC ROADWAY THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED, RUNOFF FROM THE WASH DOWN OPERATION HALL SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL OFF SITE SEDIMENTATION.
PERIODIC RE-GRADING OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN THE FEFICIENCY OF THE INSTALLATION.

- 6. CONTRACTOR SHALL HAVE A COPY THE SWPPP ON SITE AT ALL TIMES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTAL OF N.O.I., N.O.T. AND ANY ADDITIONAL INFORMATION REQUIRED BY THE E.P.A. CONTRACTOR SHALL COMPLY WITH ALL E.P.A. STORM WATER POLLUTION PREVENTION REQUIREMENTS.

## EROSION CONTROL SCHEDULE AND PHASING

THE PROJECT SHALL GENERALLY CONFORM TO THE FOLLOWING:

PHASE 1 - DEMOLITION / GRADING

PHASE 1 — DEMOLITION/GRADING

A. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE, SILT FENCE, AND TREE
PROTECTION FENCE ACCORDING TO THE APPROXIMATE LOCATION SHOWN ON
GRADING AND EROSION CONTROL PLAN, NOTES, AND DETAIL SHEETS.

B. BEGIN CLEARING AND GRADING OF SITE.

C. SEED AND REVEGETATE SLOPES WHERE SHOWN.

PHASE 2 - UTILITIES

A. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE.
B. INSTALL STORM DRAINS AS SPECIFIED ON PLAN SHEETS.

C. INSTALL INLET PROTECTION.

PHASE 3 - PAVING

A. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE.
REMOVE AS NEEDED TO PAVE.

STABILIZE SUBGRADE

C. PAVE PARKING LOT AND SIDEWALKS AS SPECIFIED ON PLAN SHEETS.
D. REMOVE TEMPORARY CONSTRUCTION ENTRANCE.

E. MAINTAIN INLET PROTECTION.

PHASE 4 - LANDSCAPING AND SOIL STABILIZATION

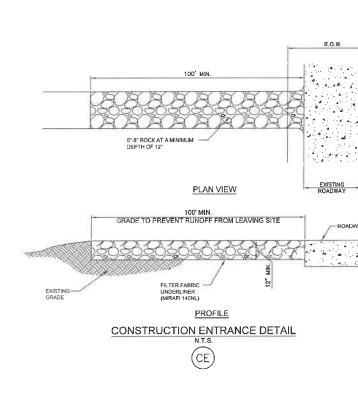
A. REVEGETATE LOT AND PARKWAYS
B. LANDSCAPE CONTRACTOR SHALL REVEGETATE ALL AREAS RESERVED FOR LANDSCAPE VEGETATIVE COVERS.
C. REMOVE EROSION CONTROL DEVICES WHEN GROUND COVER ESTABLISHED.

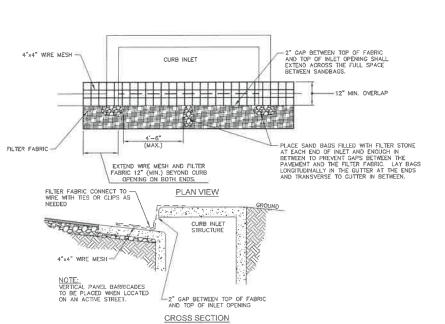
B.M.P. MAINTENANCE SCHEDULE TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE FACILITY IS FUNCTIONING PROPERLY. AGGREGATE PAD SHALL BE WASHED DOWN OR REPLACED WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN THE STONES OR MUD IS BEING TRACKED ONTO THE PUBLIC ROADWAY. RUNOFF FROM WASH DOWN OPERATION SHALL BE FILTERED THROUGH ANOTHER B.M.P. PRIOR TO DRAINING OFF-SITE.

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS. SEDIMENT SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE—THIRD THE HEIGHT OF THE FENCE ABOVE GRADE. FENCE SHALL BE INSPECTED FOR GAPS AT BASE. INSPECT SUPPORTING POSTS AND FILTER FABRIC. REPLACE IF REQUIRED.

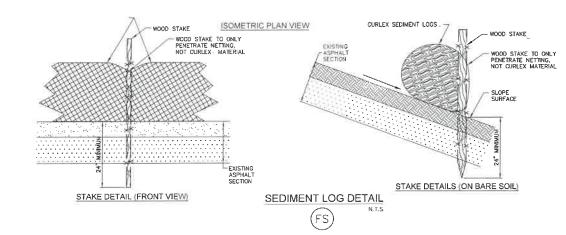
INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. SEDIMENT SHALL BE REMOVED FROM THE STORAGE AREA WHEN SEDIMENT DEPTH HAS BUILT UP TO ONE—HALF THE DESIGN DEPTH. IF DE—WATERING OF THE STORAGE VOLUME IS NOT OCCURRING, CLEAN OR REPLACE THE FILTER STONE SURROUNDING THE INLET. CLEAN THE STONE SURFACE THE FIRST FEW TIMES BY RAKING. REPEATED SEDIMENT BUILD—UP WILL REQUIRE FILTER STONE REPLACEMENT.

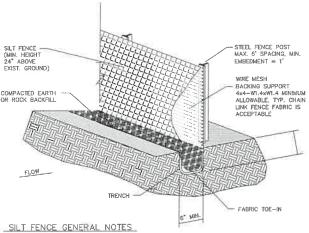




**CURB INLET PROTECTION DETAIL** N.T.S.

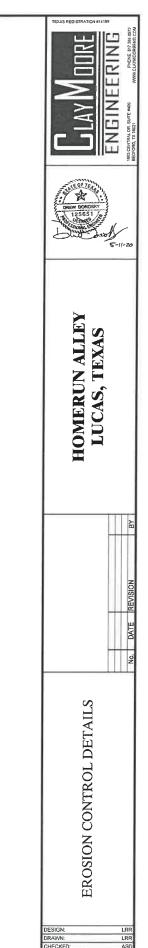
(IP)



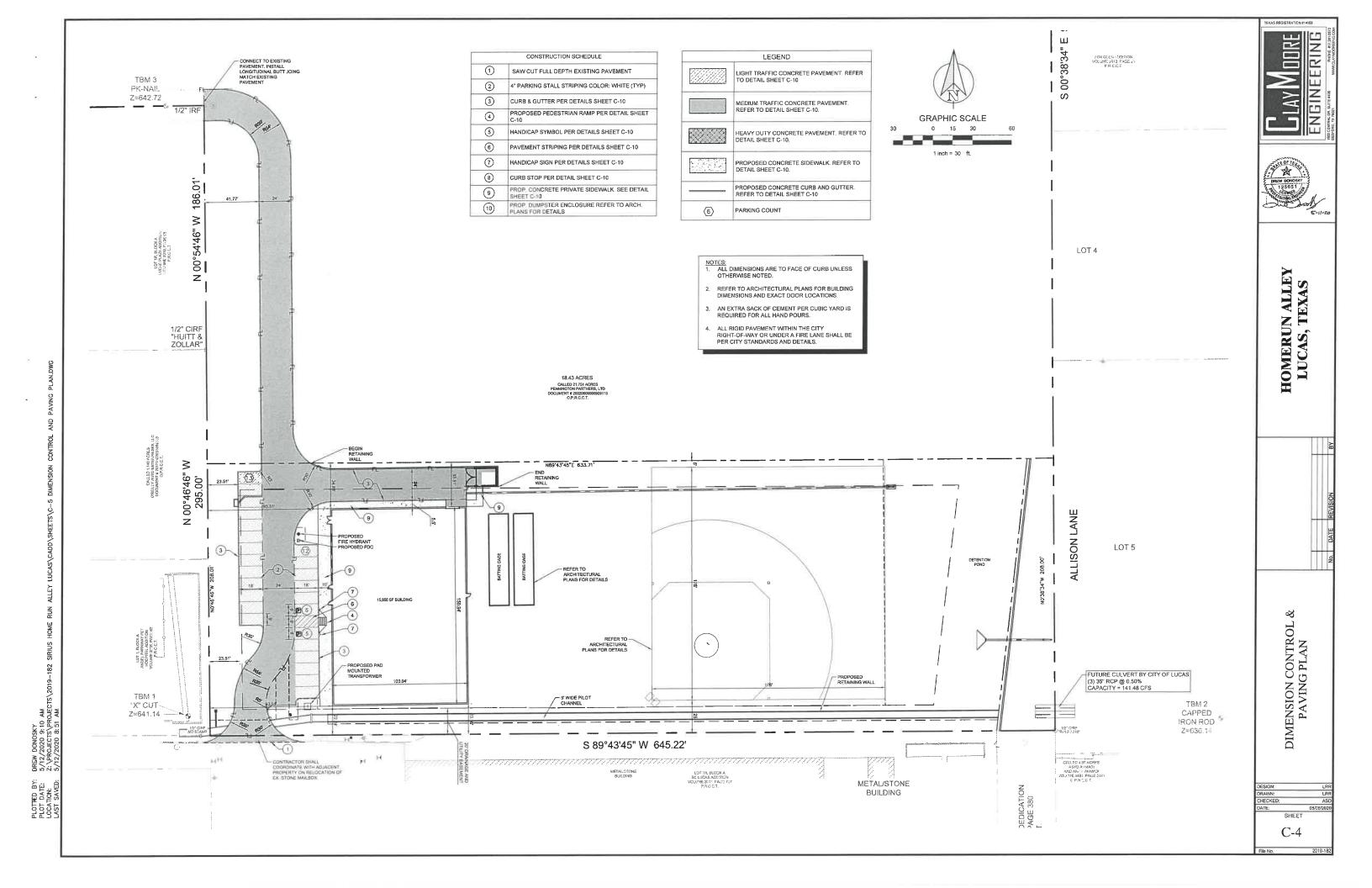


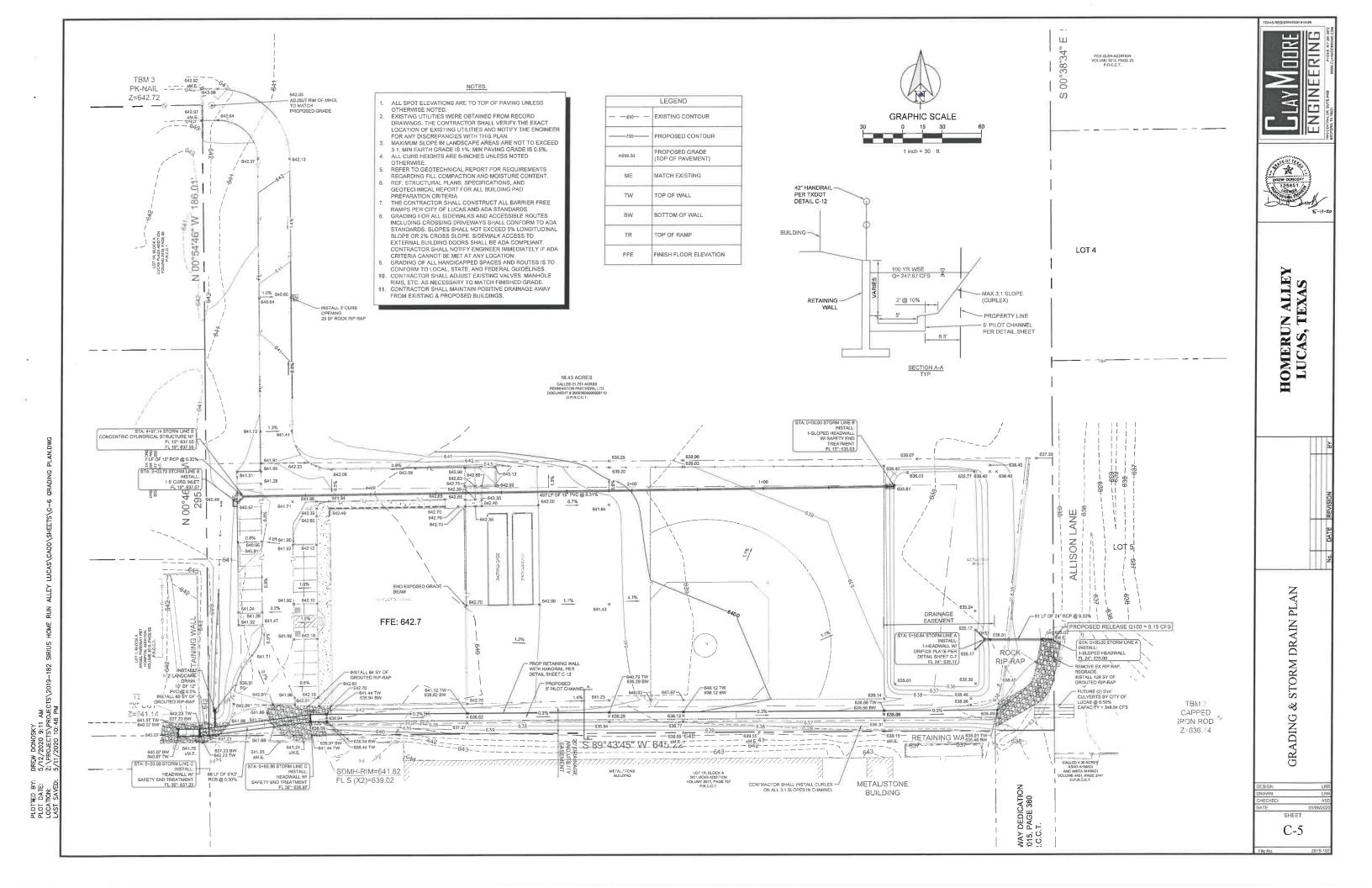
- STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGH ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
- 4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
- INSPECTION SHALL BE MADE EVERY WEEK AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
- 8. NO STEEL POSTS SHALL BE SET WITHIN THE RIGHT-OF-WAY.

CONSTRUCTION OF A FILTER BARRIER

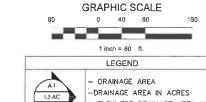


SHEET C-3









# FLOODPLAIN NOTE

- DRAINAGE AREA BOUNDARY

THIS PROPERTY IS LOCATED IN NON-SHADED ZONE "X" AS SCALED FROM THE F.E.M.A. FLOOD INSURANCE RATE MAP DATED JUNE 2, 2009 AND IS LOCATED IN COMMUNITY NUMBER 480130 AS SHOWN ON MAP NUMBER 48085C0405J.

DRAINAGE AREA	AREA (AC.)	TC (MIN)	С	I <sub>2</sub> (IN/HR)	Q <sub>2</sub> (CFS)	I <sub>s</sub> (IN/HR)	Q <sub>5</sub> (CFS)	l <sub>25</sub> (IN/HR)	Q <sub>25</sub> (CFS)	(IN/HR)	Q <sub>100</sub> (CFS)	COLLECTION POINT
Α	2.23	10	0.90	4.91	9.85	5.74	11.52	7.29	14.63	8.74	17.54	DETENTION POND
В	0.35	10	0.90	4.91	1.55	5.74	1.81	7.29	2.30	8.74	2.75	GRATE INLET- DETENTION POND
С	0.12	10	0.35	4.91	0.21	5.74	0.24	7.29	0.31	8.74	0.37	OFFSITE - (BY PASS POND)
D	0.37	10	0.90	4.91	1.64	5.74	1.91	7.29	2.43	8.74	2.91	ALLISON LANE R.O.W. DEDICATION
E	0.01	10	0.90	4.91	0.04	5.74	0.05	7.29	0.07	8.74	0.08	OFFSITE TO CURB INLET
OS-1	5.78	10	0.35	4.91	9.93	5.74	11.61	7.29	14.75	8.74	17.68	FLOW FROM STORAGE DEVELOPMENT POND
OS-2	•	10	•		-		-	-	3	-	241.00	CITY OF ALLEN OFFSITE (UNDETAINED)*
O\$-3	2.10	10	0.35	4.91	3.61	5.74	4.22	7.29	5.36	8.74	6.42	FLOW FROM VET HOSPITAL POND
OS-4	16.66	10	0.35	4.91	28.63	5.74	33.47	7.29	42.51	8.74	50.96	REMAINDER SHIPLEY TRACT (UNDEVELOPED
TOTAL	27.62				55,46		64.83		82.34		339.72	

\* 100 YEAR PASS THRU FLOW PER TXDOT PLANS FOR FM 2551 BY PC&Y DATED 8/15/2019.

DRAINAGE AREA	(AC.)	TC (MIN)	C	I <sub>2</sub> (IN/HR)	Q <sub>2</sub> (CFS)	I <sub>5</sub> (IN/HR)	Q <sub>5</sub> (CFS)	l <sub>25</sub> (IN/HR)	Q <sub>25</sub> (CFS)	I <sub>too</sub> (IN/HR)	Q <sub>100</sub> (CFS)	COLLECTION POINT
EX-1	3.08	10	0.35	4.91	5.29	5.74	6.19	7.29	7.86	8.74	9.42	CULVERT UNDER ALLISON LANE
OS-1	5.78	10	0.35	4.91	9.93	5.74	11.61	7.29	14.75	8.74	17.68	FLOW FROM STORAGE DEVELOPMENT PONI
OS-2		10	*		-		-		-	-	241.00	CITY OF ALLEN OFFSITE (UNDETAINED)*
OS-3	2.10	10	0.35	4.91	3.61	5.74	4.22	7.29	5.36	8.74	6.42	FLOW FORM VET HOSPITAL POND
OS-4	16.66	10	0.35	4.91	28,63	5.74	33.47	7.29	42.51	8.74	50.96	REMAINDER SHIPLEY TRACT (UNDEVELOPED
TOTAL	27.62				47.46		55.49		70.47		325,49	

**C**LAY MODRE ENGINEERING FLOW FOR DRAINAGE AREA IN

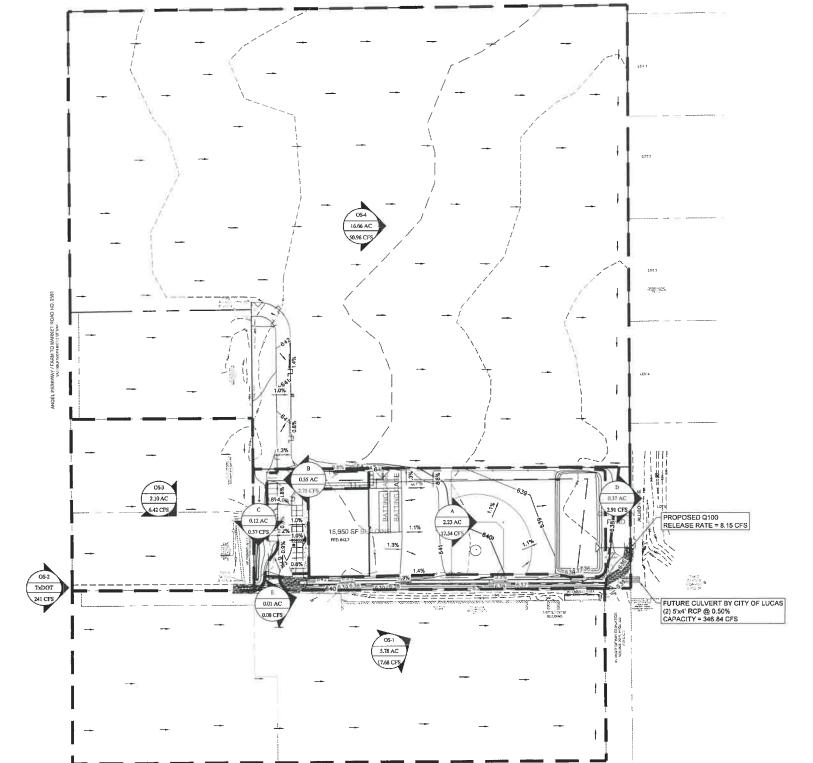


HOMERUN ALLEY LUCAS, TEXAS

DRAINAGE AREA MAP

DESIGN; DRAWN: CHECKED: SHEET

C-6



MOGARITY LANE

PLOTTED BY: PLOT DATE: LOCATION:

	Rational N		lations (5	
Required S	itorage Vol	ume	8,874 0.204	
Provided S	torage Volu	ıme	8,874 0.204	cu
Existing Co				
Area		acres		
Time (Tc)		minutes		
C value	0.35	l in/hr		
I-5yr Q5yr			Existing Flo	
Q5yr		cfs	Areas Bypa	
Q5yr		cfs	Allowable I	
Q5yr (T)		cfs	10% Overd	et
Daveloped				
Area		acres		
Time (Tc)	0.90	minutes		
C value I-5vr		in/hr		
Q5yr			Developed	R
Runoff per				
Time (min.)	I-5yr	Ç Are		
10	5.74	0.90	2.58	
15	4.92	0.90	2.58	
30 60	3.66 2.35	0.90	2.58 2.58	
120	1.50	0.90	2.58	
180	1.10	0.90	2.58	
360	0.66	0.90	2.58	
Inflow per S		Inflow		
Storm Even		(ft^3)		
10	13.33	7,997		
15	11.42	10,282		
30	8.50	15,297		
60	5.46	19,644		
120 180	3.48 2.55	25,078 27,585		
360	1.53	33,102		
Max Allowa	ble Outflow	per Storm	Event Outflow	
Storm	Time Re		(ft^3)	
10	20	5.35	3,212	
15	25 40	5.35 5.35	4,015 6,424	
	70	5.35	11,241	
30 60		5.35	20,876	
30 60 1 <b>20</b>	130	5.35	30,512	
60 120 180	190		59,418	
60 120		5.35	33,410	
60 120 180 360	190 370 oluma Req	5.35 ulred		,
60 120 180 360 Detention V	190 370 oluma Required Inflow Ou	5.35 ulred utflow	Storage (ff^3)	
60 120 180 360 Detention V Storm 10	190 370 oluma Required Inflow Ou 7,997	5.35 ulred utflow 3,212	Storage (ft^3) 4,785	
60 120 180 360 Detention V Storm 10 15	190 370 Oluma Required Inflow Cu 7,997 10,282 4	5.35 ulred utflow 3,212 4,015	Storage (ff^3) 4,785 6,267	
60 120 180 360 Detention V Storm 10 15 30	190 370 foluma Required Inflow Ou 7,997 10,282 4 15,297 6	5.35 ulred utflow 3,212 4,015 3,424	Storage (ff^3) 4,785 6,267 8,874	
60 120 180 360 Detention V Storm 10 15 30 60	190 370 foluma Required Inflow Ou 7,997 10,282 4 15,297 6 19,644 1	5.35 ulred ulflow 3,212 4,015 3,424 11,241	Storage (ff^3) 4,785 6,267 8,874	
60 120 180 360 Detention V Storm 10 15 30	190 370 Folume Required for 1997 10,292 4 15,297 6 19,644 1 25,078 2 27,585 3	5.35 ulred ulflow 3,212 4,015 3,424 11,241	Storage (ft^3) 4,785 6,267 8,874 8,403 4,201 (2,926)	

	/ Detenti Rational M		lations (5	YEAR EVENT)	Modified R			lations (1	YEAR EVENT)	D M
uired S	torage Vol	ume		cubic-feet	Required St	torage Volu	μme		cubic-feet	Re
vidad S	torage Volu	me		acre-feet cubic-feet	Provided St	orage Volu	ame		cubic-feet	Pr
*1050 0	torago ron	.,,,,		acre-feet				0.230	acre-feet	
stina Co	nditions				Existing Co	nditions				E> Ar
a		acres			Area		acres			Tie
e (Tc)		minutes			Time (Tc)	10	minutes			C
alue	0.35				C value	0.35	,			1-2
r		in/hr			I-10yr	6.36	in/hr			Q
r	6.19		Existing Flo	aw .	Q10yr	6.86	cfs	Existing FI	ow	Q
r	0.24			assing Pond (Areas C)	Q10yr	0.27			assing Pond (Areas C)	Q
r	5.95	cfs	Allowable 8	Release Rate	Q10yr	6.59			Release Rate	Q
r (T)	5.35	cfs	10% Overd	etained Release Rate	Q10yr (T)	5.93	cfs	10% Overd	etained Release Rate	De
	F11- B				Developed F	Flow to Por	nd			Ar
вюреа	Flow to Po				Area		acres			Ti
a (Te)		acres minutes			Time (Tc)		minutes			C.
e (Tc) alue	0.90				C value	0.90				1-2
		in/hr			I-10yr	6.36	in/nr			Q
r	13.33		Developed	Runoff	Q10yr	14.77	cfs	Daveloped	Runoff	
										Ru
off per	Storm Ever	nt - Develo	ped		Runoff per S	Storm Ever	ıt - Develo	ped	Runoff	Tir
				Runoff	T (1-)	40 - 0 4	( )		(cfs)	
e (min.)		Ç Are		(cfs)	Time (min.)	6.36		2.58	14.77	
10	5.74	0.90	2.58	13.33	10 15	5.46	0.90	2.58	12.68	
15	4.92	0.90	2.58	11.42	30	4.10	0.90	2.58	9.52	
30 60	3.66 2.35	0.90	2.58 2.58	8.50 5.46	60	2.69	0.90	2.58	6.25	
120	1.50	0.90	2.58	3.48	120	1.73	0.90	2.58	4.02	
180	1.10	0.90	2.58	2.55	180	1.30	0.90	2.58	3.02	
360	0.66	0.90	2.58	1.53	360	0.78	0.90	2.58	1.81	Inf
										ını
w per s	torm Even	Inflow			Inflow per S	torm Event	t			Sto
m Event	Runoff	(ft^3)					Inflow			
10	13.33	7,997			Storm Event	Runoff	(ft^3)			
15	11.42	10,282			10	14.77	8,861			
30	8.50	15,297			15	12.68	11,410			
60	5.46	19,644			30	9.52	17,136			
120	3.48	25,078			60	6.25	22,486			
180	2.55	27,585			120	4.02	28,923			
360	1.53	33,102			180	3.02	32,601			
Allowa	ble Outflow	per Storm	Event		360	1.81	39,121			Ma
A10111	DIC 00111011	per otorn	Outflow		Max Allowab	wolltuQ eld	per Storm			
torm	Time Re	lease	(ñ^3)		120			Outflow		
10	20	5.35	3,212		Storm	Time Re		(ft^3)		
15	25	5.35	4,015		10	20	5.93	3,556		
30	40	5.35	6,424		15	25	5.93	4,446		
	70	5.35	11,241		30	40	5.93	7,113		
60		5.35	20,876		60	70	5.93	12,448		
120	130									
120 180	190	5.35	30,512		120 180	130 190	5.93	23,117		
120 180 360					120 180 360	130 190 370	5.93 5.93 5.93	23,117 33,787 65,795		

olume Required

Storage
Inflow Outflow (A\*3)
8,861 3,358 5,304
11,410 4,446 6,995
17,136 7,113 10,023
22,488 12,448 10,039
22,923 23,117 5,806
32,013 3,787 (1,186)
39,121 65,795 (26,674)

Storage (acre-ft) 0.122 0.160 0.230 0.230 0.133 -0.027 -0.612

Storage (acre-ft) 0.110 0.144 0.204 0.193 0.096 -0.067 -0.604

	Rational N	on Calcu lethod		
Required S	torage Vol	ıme		cubic-feet
Provided S	torage Volu	me	12,232	cubic-feet   acre-feet
Existing Co	nditions			
Area		acres		
Time (Tc)		minutes		
C value	0.35			
-25vr	. 7.29			
225yr			Existing Fi	low
225yr		cfs	Areas Byn	assing Pond (Areas C
225vr		cfs	Allowable	Release Rate
225yr (T)		cfs		letained Release Rate
	Flow to Po			
Area		acres		
Time (Tc)		minutes		
value	0.90			
25yr		in/hr		
225yr	16.93	cis	Developed	кипоп
Runoff per	Storm Ever	t - Develo	ped	Runoff
ime (min.)	-25yr C Are	a (ac)		(cfs)
			2.58 2.58	
'ime (min.) 10	7.29 6.26 4.74	a (ac) 0.90 0.90 0.90	2.58 2.58 2.58	(cfs) 16.93 14.54 11.01
"ime (min.) 10 15 30 60	7.29 6.26 4.74 3.17	a (ac) 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36
"ime (min.) 10 15 30 60 120	7.29 6.26 4.74 3.17 2.09	a (ac) 0.90 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85
ime (min.) 10 15 30 60 120 180	7.29 6.26 4.74 3.17 2.09 1.52	a (ac) 0.90 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
"ime (min.) 10 15 30 60 120	7.29 6.26 4.74 3.17 2.09	a (ac) 0.90 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85
ime (min.) 10 15 30 60 120 180 360	7.29 6.26 4.74 3.17 2.09 1.52	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.)  10  15  30  60  120  180  360	1-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.)  10  15  30  60  120  180  360  Iffow per Storm Event	1-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.)  10  15  30  60  120  180  360  afflow per S  storm Event	7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Event	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 15 30 60 120 180 360  Iffow per S Idorm Event 10 15	7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Eveni 16.93 14.54	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 10 15 30 60 120 180 360 160 m Event 10 15 30 15 30 15 30 15 30 15 30 15 30 15 30 15 30 16 30	7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Evani 16.93 14.54	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 10 15 30 60 120 180 360 16 10 10 10 10 10 10 10 10 10 10 10 10 10	7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Eveni 16.93 14.54 11.01 7.36	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 10,156 13,082 19,811 126,499	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 10 15 30 60 120 180 360 16 15 30 15 30 15 30 15 30 15 30 15 30 120 120	7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Evani 16.93 14.54 11.01 7.36 4.85	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 10 15 30 60 120 180 360 17 15 30 60 17 15 30 60 17 15 30 60 120 180 180 180	7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Evani 16.93 14.54 11.01 7.36 4.85 3.53	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 10.156 10.156 13.052 19.811 26.499 34.941 38.118	2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.)   10   10   10   10   10   10   10   1	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Event 16.93 14.54 11.01 7.36 4.85 3.53 2.14	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.)   10   10   10   10   10   10   10   1	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Eveni 16.93 14.54 11.01 7.36 4.85 3.53 2.14	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 15 30 60 120 180 360 170 180 360 180 180 190 180 360 180 360	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Evani Runoff 16.93 14.54 11.01 7.36 4.85 3.53 2.14	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.56	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
ime (min.)   10 15 30 60 120 180 360 180 360 iffow per S itorm Event 10 15 30 60 120 180 360	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Eveni 18.93 14.54 11.01 7.38 4.85 3.53 2.14 bile Outflow	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.) 10 15 30 60 120 180 380 180 190 190 190 180 360 190 190 180 360 18	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92 storm Eveni Runoff 16.93 14.54 11.01 7.36 4.85 3.53 2.14 ble Outflow Time Re 20 25	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.56 2.68 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.7	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
ime (min.) i 10 15 30 60 120 180 360 180 360 16ow per S 16orm Event 10 15 30 60 120 180 360 120 180 360 Storm at	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
Time (min.): 10 15 30 60 120 180 360 360 360 360 16 17 10 15 30 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360 120 180 360	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92 chorm Evani 18.93 14.54 11.01 7.36 4.85 3.53 2.14  Die Outflow Time Re 20 70	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.56 2.56 2.66 2.66 2.66 2.66 2.66 2.66	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53
ime (min.) i 10 15 30 60 120 180 360 180 360 16ow per S 16orm Event 10 15 30 60 120 180 360 120 180 360 Storm at	-25yr C Are 7.29 6.26 4.74 3.17 2.09 1.52 0.92	a (ac) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	2.58 2.58 2.58 2.58 2.58 2.58 2.58 2.58	(cfs) 16.93 14.54 11.01 7.36 4.85 3.53

rotume Required

Storage
Inflow Outflow (ff\*3)
10,156 4,076 6,080
12,082 5,095 7,997
18,811 8,153 1,659
18,814 2,87 12,232
34,941 2,849 6,445
34,113 83,724
46,143 75,411 (29,268)

Storage (acre-ft) 0.140 0.183 0.268 0.281 0.194 -0.014 -0.672

	on Calcu lethod	lations (2	5 YEAR EVENT)	Drainage . Modified R			ulations (5	0 YEAR EVENT)
je Valu	ıme		cubic-feet 1 acre-feet	Required St	orage Vol	ume		cubic-feet acre-feet
e Volu	ime		cubic-feet 1 acre-feet	Provided St	orage Volu	tme		cubic-feet acre-feet
опз				Existing Co.	nditions			
3.08	acres			Area		acres		
	minutes			Time (Tc)		minutes		
0.35				C value	0.35			
. 7.29				I-50yr		in/hr		
7.86		Existing F		Q50vr	8.63		Existing F	ew.
7.55			assing Pond (Areas C) Release Rate	Q50yr	0.34			assing Pond (Areas C)
6.79			release nate letained Release Rate	Q50yr	8.29			Release Rate
0.70	CIO	1079 04811	regalied Kelenso Kato	Q50yr (T)	7.47			letained Release Rate
to Pai	nd							
	acres			Developed F				
	minutes			Area		acres		
7.29				Time (Tc)		minutes		
16.93		Developed	Runoff	C value	0.90			
10.55		Developed	- realign	I-50yr Q50yr	18.60	in/hr	Developed	Puno#
				•			•	
1 Evor	t - Develo	ped						
C Are	a (ac)		Runoff (cfs)	Runaff per S	torm Ever	nt - Develo	ped	
.29	0.90	2.58	16.93					Runoff
.26	0.90	2.58	14.54	Time (min.) I-	50yr C Are	a (ac)		(cfs)
.74	0.90	2.58	11.01	10	8.01	0.90	2.58	18.60
.17	0.90	2.58	7.36	15	6.89	0.90	2.58	16.00
.09	0.90	2.58	4.85	30	5.25	0.90	2.58	12.19
.52	0.90	2.58	3.53	60 120	3.54 2.36	0.90	2.58 2.58	8.22 5.48
.92	0.90	2.58	2.14	120	1.72	0.90	2.58	3.99
				360	1.05	0.90	2.58	2.44
Event	1			000		0.50	2.00	
	Inflow							
off	(ft^3)			Inflow per St	orm Even	t		
.93	10,156					inflow		
1.54	13,082			Storm Event	Runoff	(ft^3)		
.01	19,811			10	18.60	11,160		
.36	26,499			15	16.00	14.399		

15	15.00	14,399	
30	12.19	21,943	
60	8.22	29,592	
120	5.48	39,455	
180	3.99	43,133	
360	2.44	52,663	
Max Allow	able Outflow	per Storm	Event
			Outflow
Storm	Time Re	dease	(ft^3)
10	20	7.47	4,479
15	25	7.47	5,599
			0.000
30	40	7.47	0,900
30 60	40 70	7.47	
			8,958 15,677 29,115
60	70	7.47	15,677

		Storage	Storage
Storm	Inflow Outflow	(f!^3)	(acre-ft)
10	11,160 4,479	6,580	0.153
15	14,399 5,599	8,800	0.202
30	21,943 8,958 12,9	85	0.298
60	29,592 15,677 13	914	0.319
120	39,455 29,115 10	341	0.237
180	43,133 42,552	581	0.013
360	52,663 82,865 (30	(202)	-0.693

# Drainage / Detention Calculations (100 YEAR EVENT) Modified Rational Method

Required Storage Volume	15,577 cubic-feet 0.358 acre-feet
Provided Storage Volume	15,577 cubic-feet 0.358 acre-feet

**Existing Conditions** 

Area	3.08 acres	
Time (Tc)	10 minutes	
C value	0.35	
I-100yr	8.74 in/hr	
Q100yr	9.42 cfs	Existing Flow
Q100yr	0.37 cfs	Areas Bypassing Pond (Areas C
Q100yr	9.05 cfs	Allowable Release Rate
Q100yr (T)	8.15 cfs	10% Overdetained Release Rate

Q100yr	0.37 cfs	Areas Bypassing Pond (Areas
Q100yr	9.05 cfs	Allowable Release Rate
Q100yr (T)	8.15 cfs	10% Overdetained Release Ra
Developed Fig	ow to Pond	
Area	2.58 acres	
Time (Tc)	10 minutes	
Cushia	0.00	

Time (Tc)	10 minutes	
C value	0.90	
I-100yr	8.74 in/hr	
Q100yr	20.29 cfs	Developed Runoff

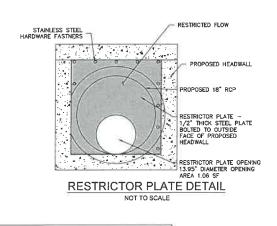
				Runofi
Time (min.)	I-100yr C Ai	ea (ac)		(cfs)
10	8.74	0.90	2.58	20.29
15	7.52	0.90	2.58	17.46
30	5.75	0.90	2.58	13.35
60	3.91	0.90	2.58	9.08
120	2.52	0.90	2.58	5.85
180	1.91	0.90	2.58	4,44
360	1.15	0.00	2.58	2 67

500	1.15	0.30
iflow per S	torm Event	
	D#	wollni
torm Event	RUNOIT	(ft^3)
10	20.29	12,177
15	17.46	15,715
30	13.35	24,033
60	9.08	32,684
120	5.85	42,130
180	4.44	47,898
360	2.67	57,678

			Outflow
Storm	Time Re	elease	(ft^3)
10	20	8.15	4,888
15	25	8.15	6,110
30	40	8.15	9,776
60	70	8.15	17,108
120	130	8.15	31,772
180	190	8.15	45,435

360	370	8.15	90,427		
ention V	olume Req	ulred			
			Storage	Storage	
Storm	Inflow Or	utflow	(ft^3)	(acre-ft)	
10	12,177 4	1,888	7,289	0.157	
15	15,715 6	3,110	9,605	0.221	
30	24,033 9	7,776 14,25	57	0.327	
60	32,684	17,108 15,5	77	0.358	
120	42,130	31,772 10,3	359	0.238	
180	47,898 4	6,435	1,463	0.034	
360	57.678 9	0.427 (32.	748)	-0.752	

100 YEAR OF	RIFICE C	ALCULATION
Q:	C*A(2gh	) <sup>0.5</sup>
	PIPE 1	
C=	0.85	
Dia Orifice =	13.95	in
Open Area	1.06	ft²
g =	32.2	ft/s <sup>2</sup>
Fl_18" =	635.17	
WSE =	637.02	
h=	1.27	
Q=	8.15	cfs

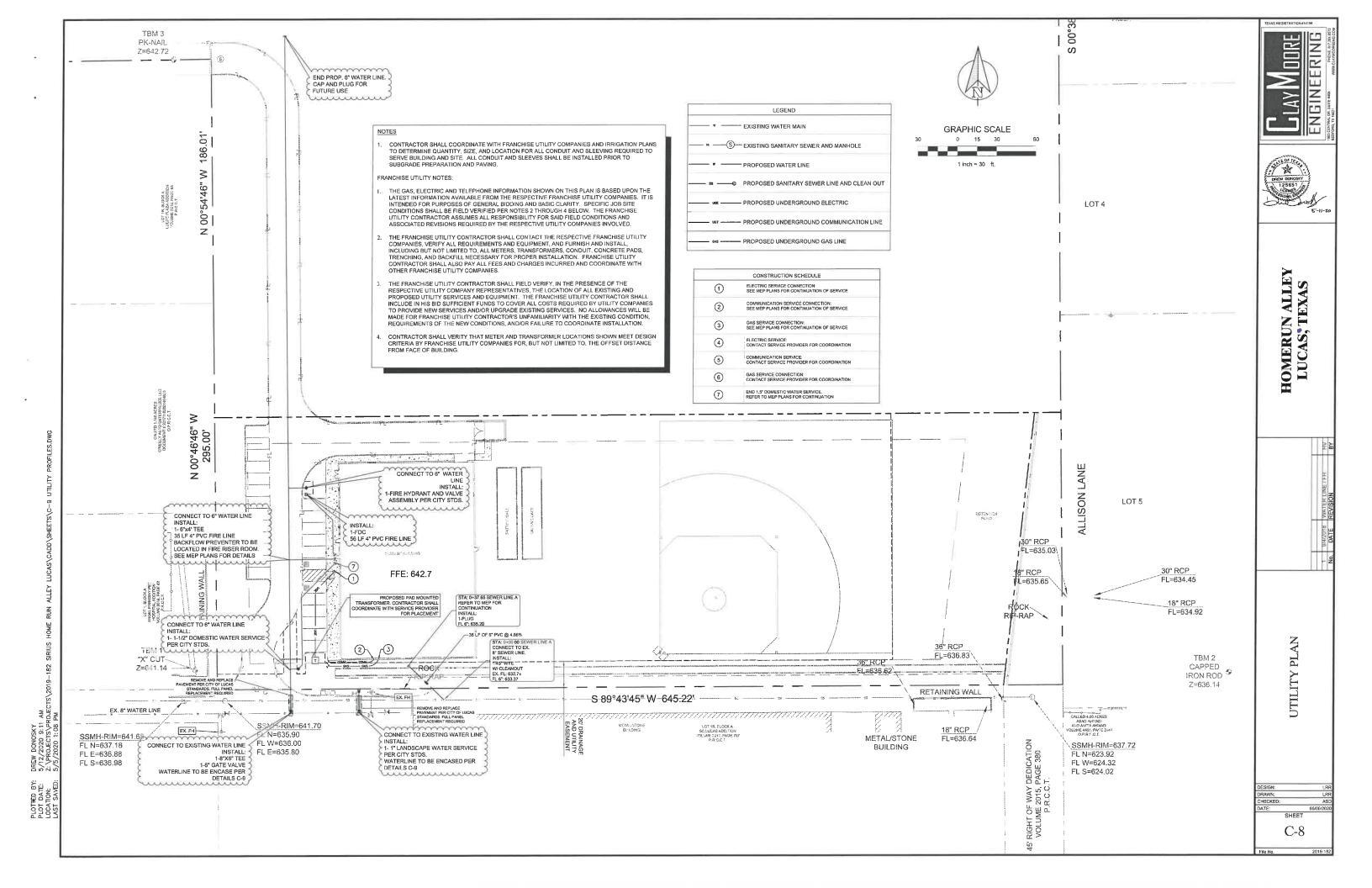


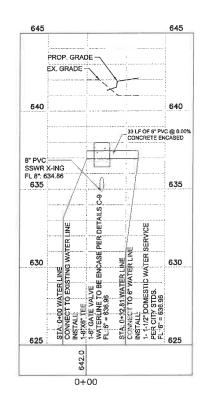
	Proposed Detention Pond Evaluation														
	Elevation	Area (sf)	Αc	Elevation Difference	Incremental Volume (ft <sup>3</sup> )	Cumulative Volume (ft <sup>3</sup> )	.Cumulative Volume (ac-ft								
	635.17	0	0.00												
				0.33	567	567	0.013								
	635.50	3435	0.08												
				0.50	3495	4062	0.093								
	636.00	10544	0.24												
5 YR WSE	635.44			0.50	5457	9519	0.219								
	636.50	11284	0.26												
25 YR WSE	636.73			0.50	5832	15351	0.352								
	637.00	12045	0.28												
100 YR WSE	637.02			0.50	6221	21572	0.495								
	637.50	12838	0.29												
				0.50	6630	28201	0.647								
	638.00	13681	0.31												
				0.10	1377	29578	0.679								
TOP OF POND	638.10	13860	0.32												

	1												100 YR 5	STORM	DRAIN CAL	CULATION	5															H	GL		VERT
LINE.	STA.		INCREMENTAL	CUMULATIVE	RUNOFF	INCREMENTAL	CUMULATIVE	INLETTIME	FLOW TIME	TIME OF	INTENSITY	DIST	TOTAL					ROU	JGH-	PIPE	PIPE						F	RICTION				INCOMING		INCOMING	OUTGOIN
	-		AREA	AREA	COEFFICIENT	CA	CA		IN PIPE	CONCENTRATION			FLOW					NE	S5 5	SLOPE	CAPACITY					Flow		SLOPE		Kj	H	PIPE	PIPE	PIPE	PIPE
										L listings	100		Q <sub>100</sub>	DIA. S	PAN RISE	NUMBE	A	R	п	50	Q <sub>cap</sub>	Vdesign	V <sub>full</sub> Q/	OFFILE AV	full d/O	Jepth V	partial	51	HV		(MH:0.1)				
			ACRES	ACRES						MN	IN/HR	FT	CFS	IN	FT FT		Sq FT		=	%	CFS	Qdesign/A	FPS			FT	FPS	FT/FT \	Vdesign*2/2g		FT.	FT	FT	FT	FT
LINE A	0+00.00	HEADWALL								20.23	-	_		-	_			_	-					_	$\rightarrow$		_					639.23		636,97	
	1			12.22			5.78		0.23			85.73	50.52		5 3	1	15.00 0	.938 0.0	013	0.30%	89,96	3.37	6.00 0.	562 1.	0.53	1.59	5.14	0.09%	0.18						
	0+85.73	HEADWALL	12.22		0.47	5.78		20.00		20.00	8.74								_					_						1.25	0.22	639.53	639.31		637.23
LINEB	0+00.00	HEADWALL								22.58				_											$\rightarrow$							637.02		636.03	
	1 11111			0.35			0.35		2.58			503.73	3.06	24		1	3,14 0	.500 0.0	013	0.31%	12.49	0.97	3.98 0.	245 0.	32 0.33	0.00	3.25	0.02%	0.01						
	5+03.73	CURB INLET	0.35		0.90	0.35		20.00		20.00	8.74																			1.25	0.10	637.21	637.11		637.57

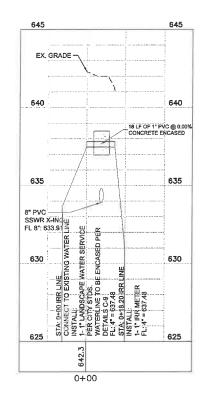
HOMERUN ALLEY LUCAS, TEXAS DRAINAGE CALCULATIONS DESIGN: DRAWN: CHECKED: DATE: SHEET C-7

LIAY MODRE ENGINEERING





WATER LINE PROFILE AT SANITARY SEWER CROSSING H 30':1" V 3':1"



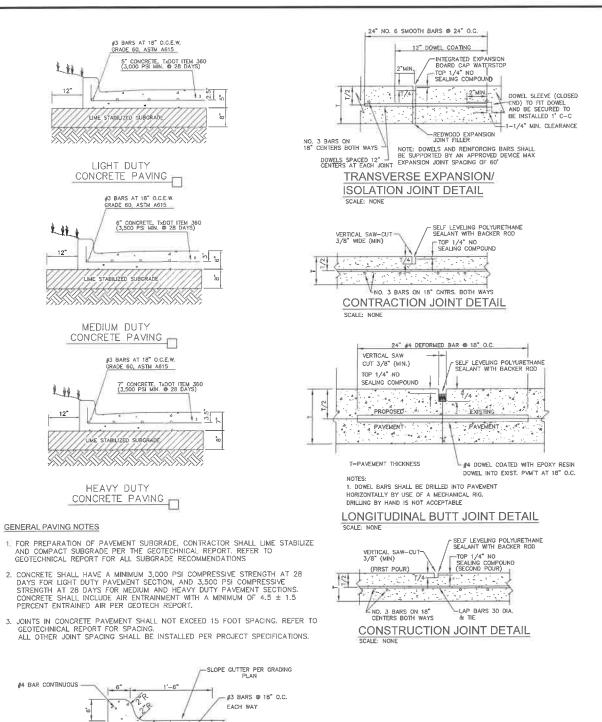
IRRIGATION LINE PROFILE AT SANITARY SEWER CROSSING
H 30':1"
V 3':1" GRAPHIC SCALE 0 15 30

HOMERUN ALLEY LUCAS, TEXAS

UTILITY PROFILES

C-9

DREW DONOSKY 5/12/2020 9:11 AM Z:\PROJECTS\PROJECTS\2019-182 SIRIUS HOME RUN ALLEY LUCAS\CADD\SHETS\C-9 UTILITY PROFILES.DWG



REFERENCE GEOTECHNICAL

ENCASE 10'O.C. IN CEMENT-STABILIZED SAND ACCORDING TO

PARAGRAPH (7)(B) OF CHAPTER 217 IN THE TCEQ

CONCRETE CURB AND GUTTER DETAIL

PROPOSED STORM

1-451

BEND

CONTRACTOR TO

MAINTAIN MINIMUM

SEPARATION OF 2' FROM

OUTSIDE TO OUTSIDE OF

DRAIN LINE

1. EXTEND CURB THROUGH THE BASE PER GEOTECH REPORT.

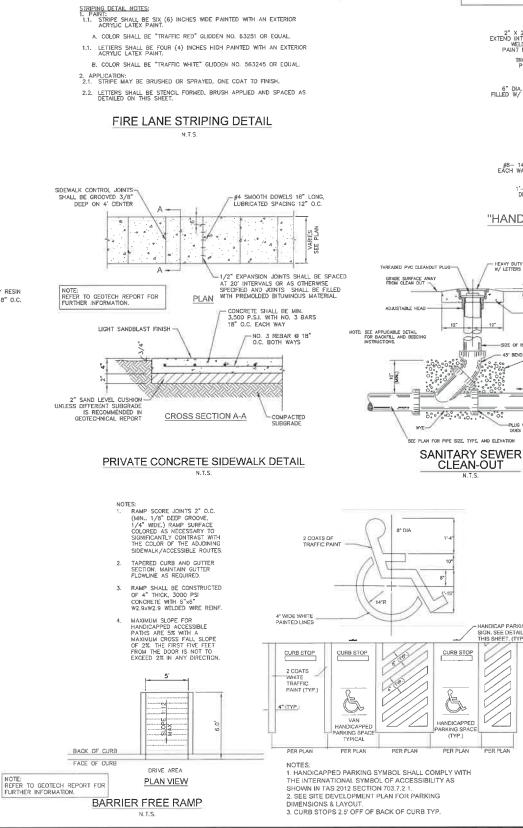
WATER LINE

WATER CROSSING DETAIL

FINISHED:

GRADE

1-45\*-

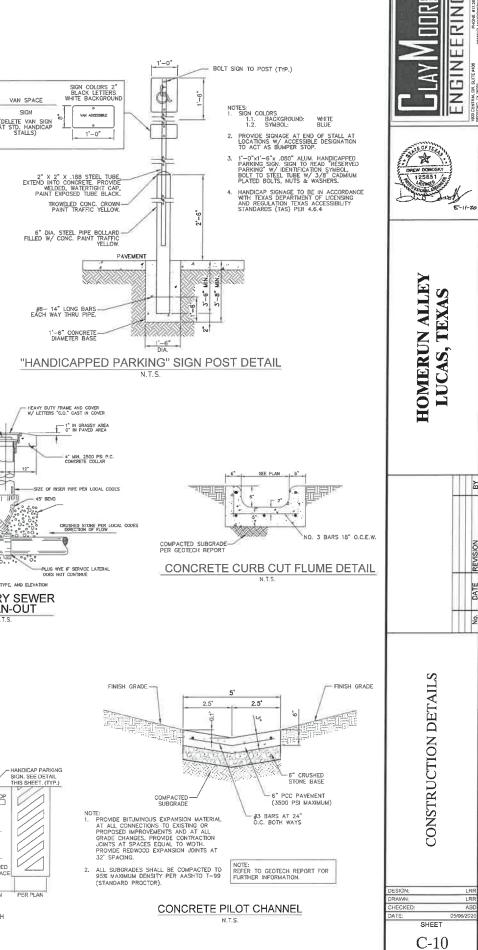


FIRE LANE - NO PARKING

FIRE LANE - NO PARKIN

20' SPACINGS (TYP.)

GENERAL NOTE:
1. STRIPING TO BE DONE IN ACCORDANCE WITH CITY STANDARDS.



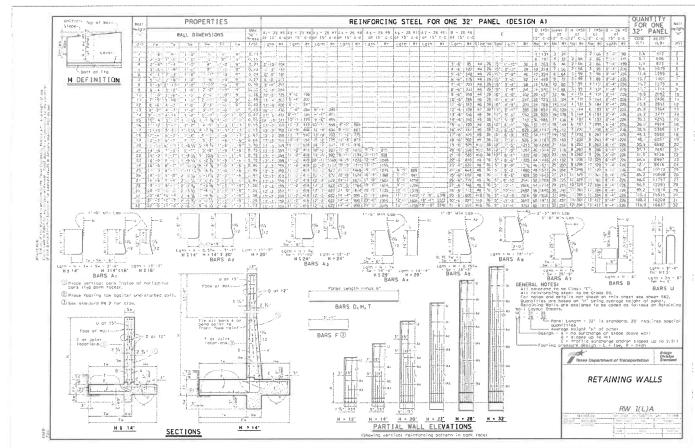
~

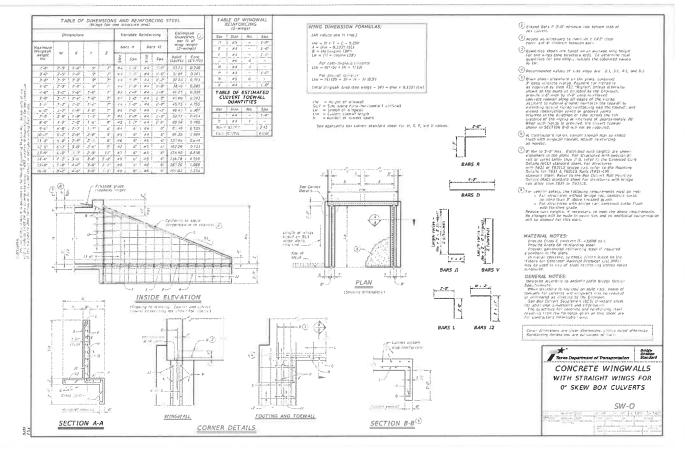
PED BY: DATE: TION:

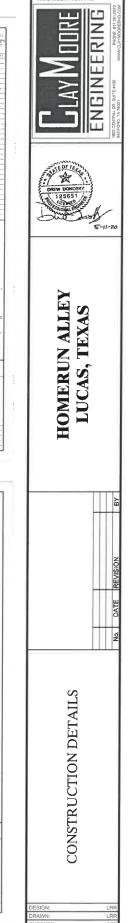
tion TO 1 or 18115. Let r yields with, the failuration occurrances uses on met. • For strongley midtal, analyse  $r_{ij}$ , conserved curs is on more than T whose  $r_{ij}$  and  $r_{$ Gars R - Top and (2)
Rollin N Start F2 - Sers Bars D - Cop slab Bars D - Col. x slab (b) P-IP system, 7-3" alson or Rail Anthonogy Cyro (RAE) standar sheet to net reced to elementary in the plan. To experience and residue burs 8. C. D. S. F. F. F. A. F. Indicat of any deformation and interest of professional public and one or discussion in public and one processes of APPA APPA. The application of TYPICAL SECTION CONSTRUCTION NOTES:
Do not not personnel founds
Construct to be determined in the tag slab 2" at the informat,
Placemost, characteristical plans cover at that four many is a maximum of 6". If
the separate is large, they is many in the all plans are the separate is large. This option is Lieux, these in earlier of the d(x) is, then C(x) is d(x) by the events MATERIAN, MOTHER of the ST of th Britanis or qualitative - 40 m / - 0 m m
 GENERAL DOTES
 Bostoped according to Auditative LIFED traige Design Specifications for the range of
 Designed according to Auditative LIFED traige Design Specifications for the range of
 Best feet Sinds to Clarest Centuri-Fridace Viscotile-costs Debail SSC-10<sup>15</sup> Standard
 State Life Auditative State LIFED to Science Auditative State Life according participation to science dende, and controlled state life according to the science of the science according to the science according HL93 LOADING SHEET 1 OF 2 Trace Department of Transportation Standard SINGLE BOX CULVERTS CAST-IN-PLACE 0' TO 30' FILL

> SCC-5 & 6

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.444 800 0.5 51 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2007   2007
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Section   Sect	0,000   0,00
$ \begin{bmatrix} e^{-i\phi} & F^{-i\phi} & ige & ge & ge & ge & ge & ge & ge & g$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0.465   1.09.0   0.5   6.3   1.99   0.551   1.01.0   2.5   6.9   2.5   0.484   9.6.6   0.5   6.2   1.99   0.588   1.71.6   0.5   0.7   1.6   0.601   1.64   0.5   0.7   1.6   0.507   1.71.7   0.5   0.7   2.7.6   0.507   1.72.7   0.5   0.7   2.7.6   0.559   1.72.7   0.5   0.7   2.7.6   0.610   1.72.4   0.5   0.7   2.7.7   0.610   1.72.4   0.5   0.7   2.7.7   0.610   1.72.4   0.5   0.7   2.7.7   0.610   1.72.7   0.5   0.7   2.7.7   0.617   1.71.7   0.5   0.7   2.7.7   0.617   1.71.7   0.5   0.7   0.7   2.7.7   0.617   1.71.7   0.5   0.7   0.7   0.7   0.657   1.71.0   0.5   0.7   0.5   0.657   1.71.0   0.5   0.7   0.5   0.557   1.71.0   0.5   0.7   0.5   0.557   0.5   0.5   0.7   0.5   0.557   0.5   0.5   0.7   0.5   0.5   0.5   0.5   0.7   0.5   0.5   0.5   0.7   0.5   0.7   0.5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-9	0.571 123.7 0.3 03 23.4 0.550 124.0 0.5 69 26.5 0.570 108.5 0.5 63 25.3 0.614 122.4 0.3 63 25.1 0.700 132.3 0.3 09 78.5 0.613 115.9 0.5 63 25.0 0.613 141.0 0.5 63 25.0 0.657 141.0 0.5 63 25.0
6-0 6-0 6 7 7 27 108 46 9 6 7 1,122 108 1 6 6 7 6 7 1,122 108 1 6 6 7 6 7 1 1,122 108 1 6 6 7 6 7 1 1,122 102 1 6 7 6 7 1 1,122 102 1 6 7 6 7 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 6 7 1 1 1,124 102 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	** # 8   # 7   # 7   # 7   # 7   # 7   # 7   # 8   # 5   # 7	****   ***	0,613 115.9 0.5 63 25.0 0.657 141.0 0.5 63 26.8
The state of the s	Drur duest scrifts strikers (i.d. noger and solect the dysale with the new in	e 7 fet. In large two equived the 1428. An electric	
		SINGL	OADING SHEET 2 C

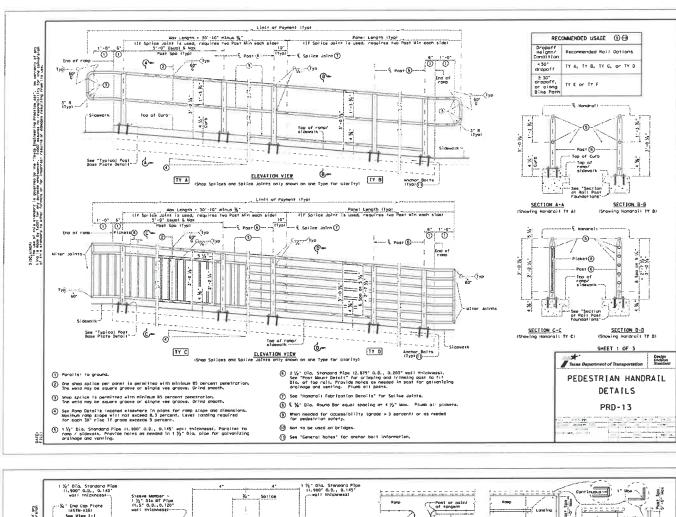


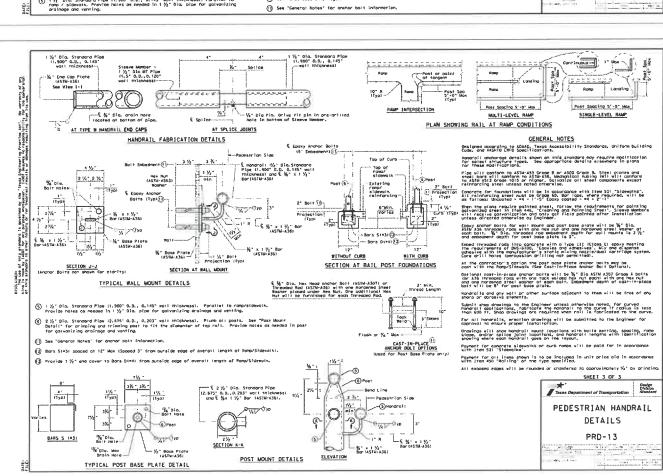


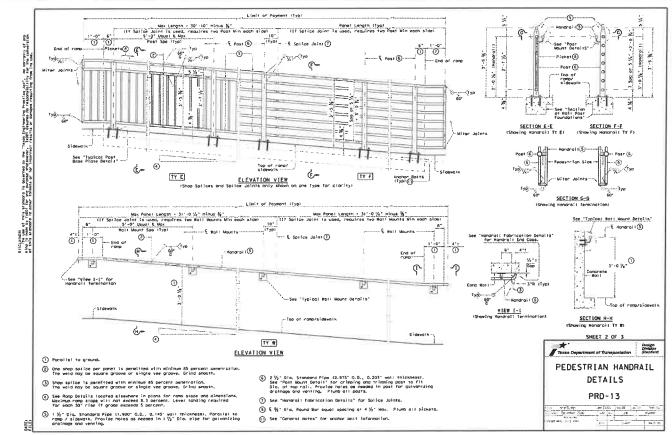


SHEET C-11





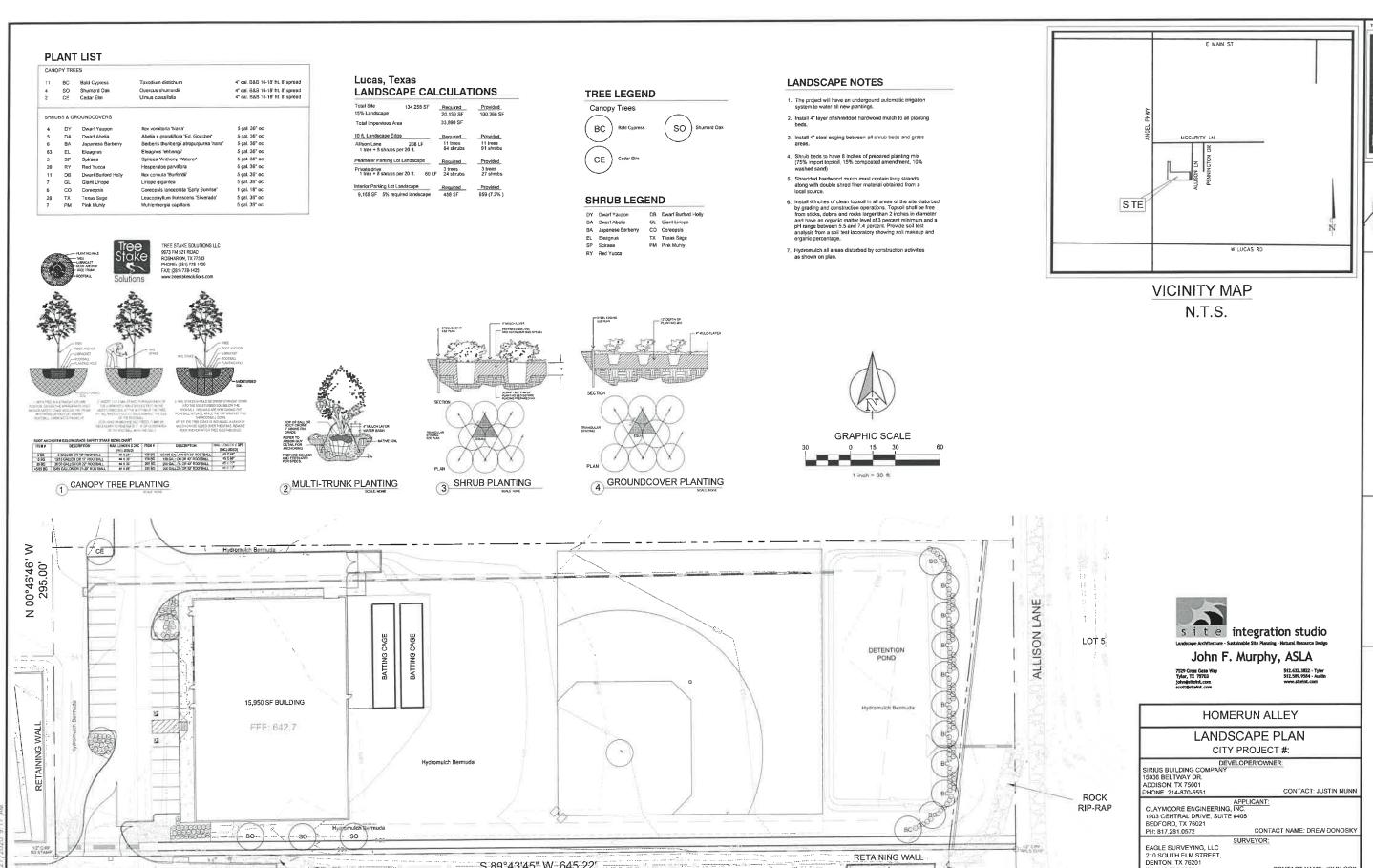






C-12

DOR



S 89°43'45" W 645.22'

ROCK

RIP-RAP

RETAINING WALL

METAL/STONE

BUILDING

LANDSCAPE

**PLAN** 

DORE

HOMERUN ALLEY LUCAS, TEXAS

ENGINEERING

SHEET L-1

GROSS: 3.0248 ACRES, (131,760.9 SF) TEXAS LUCAS ABSTRACT NO. COLLIN WILLIAM SNIDER SURVEY

A PORTION OF PENNINGTON PARTNERS, LTD. DOCUMENT # 20020606000809110

CONTACT NAME: JOHN COX

TED BY: DATE: TION