

PROJECT LOCATION MAP SCALE: N.T.S.

PROJECT BENCHMARK

SITE TBM #1
SET COTTON SPINDLE W/ WASHER STAMPED "HMT" IN ASPHALT
N: 13793187.60
E: 2194514.34
ELEV: 881.55'

SITE TBM #2
SET 1/2" IRON PIN W/ CAP STAMPED "HMT CONTROL"
N: 13793221.43
E: 2194015.23
ELEV: 878.04'

LEGAL DESCRIPTION

BEING 13.01 ACRES OF LAND SITUATED IN THE MANUAL GALLARDO SURVEY NO. 363, ABSTRACT NO. 163, LOCATED IN COMAL COUNTY, TEXAS, BEING A PORTION OF A CALLED 211.45 ACRE TRACT CONVEYED TO JADE REAL PROPERTIES, LLC, RECORDED IN DOCUMENT NO. 201806047192 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS.

SMITH LEGACY ESTATES

NEW BRAUNFELS, TEXAS

CIVIL SITE CONSTRUCTION PLANS

SMITH LEGACY ENTERPRISES, LLC

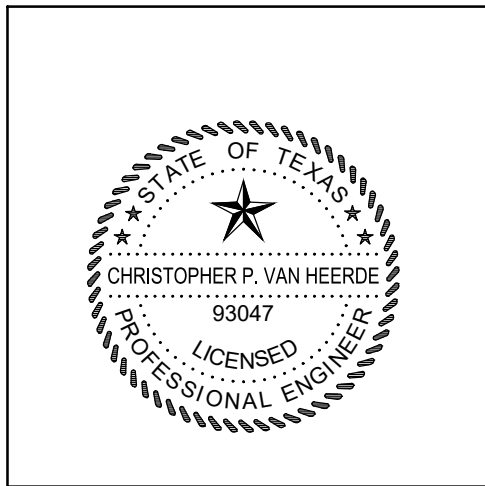
8165 WHISPER OAK

SAN ANTONIO, TX. 78266

REQUIRED PERMITS	NUMBER
1. TCEQ WPAP	# RN111055984
	ID No. 13001162
2. COMAL COUNTY PERMIT	#

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JULY 2020



07/30/2020

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.

Christopher P. Van Heerde, P.E.
Christopher P. Van Heerde
P.E. Registration No. 93047

PREPARED BY:



290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
HMTNB.COM
P(830)625-8555*F(830)625-8556
TBPE FIRM F-10961
TBPLS FIRM 1053600

GENERAL NOTES:

- IF CONSTRUCTION HAS NOT COMMENCED WITHIN TWO YEARS OF TCEQ APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID.
- THE MOST CURRENT EDITIONS OF THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE FOLLOWED FOR ALL CONSTRUCTION EXCEPT AS AMENDED BY COMAL COUNTY STANDARD DETAILS.
- ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, COMAL COUNTY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER IN RECORD.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE OFFSITE IMPACT OF CONSTRUCTION MUST BE COMPLETED AND IN PLACE PRIOR TO ADDING IMPERVIOUS COVER TO THE SITE.
- A PORTION OF THIS LAND IS LOCATED WITHIN THE FLOOD HAZARD AREA (100 YR. FLOOD), AS DEFINED BY THE COMAL COUNTY, TEXAS, FIRM PANEL NUMBER 48091C0420F EFFECTIVE DATE SEPTEMBER 2ND, 2009 AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- THIS PROJECT IS LOCATED WITHIN THE JURISDICTIONAL BOUNDARY OF THE EDWARDS AQUIFER AUTHORITY AND WITHIN THE EDWARDS AQUIFER AUTHORITY RECHARGE ZONE.
- THERE IS NO SANITARY SEWER PROPOSED WITH THIS PROJECT. THE SEPTIC SYSTEM PERMITTING WILL BE PERFORMED BY OTHERS.

NOTE TO CONTRACTOR:

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH OF THE INDIVIDUAL UTILITIES FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.

CITY OF NEW BRAUNFELS CONSTRUCTION NOTES

REVISED 01/2019

CURB CUT DUE TO CONSTRUCTION OF NEW RIGHT-OF-WAY CONSTRUCTION

- (INDICATE THE 2 OPTIONS ON THE CONSTRUCTION PLANS).
- 1.SAWCUT EXISTING STREET AND MATCH TO NEW CONSTRUCTION.
 - 2.SAWCUT EXISTING CURB TO TIE INTO EXISTING CONSTRUCTION.

CONSTRUCTION STABILIZED ENTRANCE

SAWCUT CURB FOR CONSTRUCTION ENTRANCE.

STABILIZED CONSTRUCTION AREA SHALL BE CONSTRUCTED OF 3"x5" ROCK TO BE PLACED A MINIMUM LENGTH OF 25'-FT. AND MAINTAINED SO THAT CONSTRUCTION DEBRIS DOES NOT FALL WITHIN THE CITY RIGHT-OF-WAY. RIGHT- OF-WAY MUST BE CLEARED FROM MUD, ROCKS, ETC. AT ALL TIMES.

(NOTES TO BE PLACED ON ALL WW PLAN & DETAIL SHEETS)

ENSURE ALL DRIVEWAY APPROACHES ARE BUILT IN GENERAL ACCORDANCE WITH A.D.A. SPECIFICATIONS. NO

VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.

SIGNING AND PAVEMENT MARKING PLAN NOTES

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REGULATORY AND WARNING SIGNS, STREETS NAME SIGNS AND SIGN MOUNTS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CITY WILL INSPECT ALL SIGNS AT FINAL INSPECTION.

THE CONTRACTOR SHALL INSTALL ALL PAVEMENT MARKINGS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE INSTALLATION OF ALL SEALER AND FINAL MARKINGS. THE CITY WILL INSPECT ALL MARKINGS AT FINAL APPLICATION.

SEEDING AND ESTABLISHMENT OF VEGETATION WITHIN EARTHEN CHANNELS, STORMWATER BASINS AND DISTURBED AREAS

SEEDING FOR THE PURPOSE OF ESTABLISHING VEGETATION WITHIN CONSTRUCTED EARTHEN CHANNELS, BASINS AND DISTURBED AREAS SHALL BE CONDUCTED IN ACCORDANCE WITH ITEM 164 (SEEDING FOR EROSION CONTROL) OF TXDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES MANUAL. ONLY SEED TYPES AND MIXES SPECIFIED FOR THE SAN ANTONIO DISTRICT (DISTRICT 15) IN TABLES 1 AND 2 UNDER ITEM 164 SHALL BE UTILIZED. DURING THE COOL SEASON (SEPT 1-NOV 30), CEREAL RYE AND SEED SPECIES SPECIFIED FOR THE SAN ANTONIO DISTRICT IN TABLE 3 MAY BE USED. FOR COOL SEASON SEEDING APPLICATIONS, COOL SEASON SEED MIXES SHALL BE USED IN CONJUNCTION WITH SEED MIXES FOR THE SAN ANTONIO DISTRICT AS SPECIFIED IN TABLE 1 AND 2 UNDER ITEM 164.

IT MAY BE DEEMED NECESSARY TO INCORPORATE TOPSOIL AND SOIL AMENDMENTS (I.E. COMPOST/ FERTILIZER) INTO EXISTING SOIL IN ORDER TO FACILITATE VEGETATION GROWTH. TOPSOIL, COMPOST AND FERTILIZER ADDITIONS SHALL BE CONDUCTED ACCORDING TO ITEMS 160, 161 AND 166 OF TXDOT'S STANDARD SPECIFICATIONS MANUAL, RESPECTIVELY.

WATERING MAY ALSO BE NECESSARY TO FACILITATE AND EXPEDITE THE SPROUTING AND GROWTH OF VEGETATION. ITEM 168 OF TXDOT'S STANDARD SPECIFICATIONS MANUAL SHALL BE ADHERED TO FOR VEGETATIVE WATERING.

IF EXTENDED DROUGHT CONDITIONS EXIST THAT HINDER OR PROHIBIT THE GROWTH AND ESTABLISHMENT OF VEGETATION, THE CONTRACT/ DEVELOPER SHALL PROVIDE A PLAN TO THE CITY OF NEW BRAUNFELS DESCRIBING THE MEASURES THAT WILL BE TAKEN TO STABILIZE EARTHEN DRAINAGE INFRASTRUCTURE UNTIL A TIME WHEN GROWING CONDITIONS BECOME MORE FAVORABLE.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
 - THE NAME OF THE APPROVED PROJECT;
 - THE ACTIVITY START DATE; AND
 - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATIONS (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STEAMS, SENSITIVE FEATURES, ETC.
7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARD AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE SITE.
10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
 - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR
 - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
 - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
 - A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
 - B. ANY CHANGE IN NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE IN WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
 - C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

AUSTIN REGIONAL OFFICE 2800 S. IH 35, SUITE 100 AUSTIN, TX 78704-5712 PHONE(512) 339-2929 FAX (512) 339-3795	SAN ANTONIO REGIONAL OFFICE 14250 JUDSON ROAD SAN ANTONIO, TEXAS 78233-4480 PHONE (210) 490-3096 FAX (210) 545-4329
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TCEQ-0592 (REV. JULY 15, 2015)

CITY OF NEW BRAUNFELS AND COMAL COUNTY GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL COMPLY WITH:

A. CURRENT CITY OF NEW BRAUNFELS CONSTRUCTION SPECIFICATIONS AND STANDARDS AS OF THE DATE OF THIS CONTRACT

B. THE MOST CURRENT EDITION OF TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES".

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES," ALONG WITH CURRENT CITY OF NEW BRAUNFELS AND COMAL COUNTY SPECIFICATIONS. ANY DISCREPANCIES BETWEEN SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, FEES, AND TAXES AREA AND GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.

ANY EXISTING OFF-SITE IMPROVEMENTS THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE OWNER OF THE EXISTING IMPROVEMENT AT THE CONTRACTOR'S EXPENSE. (NO SEPARATE PAY ITEM)

WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A WORK ORDER OR CONSENT OF THE OWNER OR ENGINEER WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.

CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100YR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.

BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND SHALL BE LOCATED TO PROVIDE MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT WHILE PROVIDING CONTINUOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL DEVICES DURING CONSTRUCTION.

CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS. THE TERM "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY BOTH HORIZONTAL AND VERTICAL ALIGNMENT.

WHEN MATCHING EXISTING PAVEMENTS, CURBS, DRIVES, AND WALKS, THEY SHALL BE SAW CUT FULL DEPTH AND REMOVED TO ALLOW FOR PROPOSED CONSTRUCTION. IF ANY EXISTING JOINT IS ENCOUNTERED, PRECAUTION SHALL BE TAKEN DURING REMOVAL OF CONCRETE SO AS NOT TO DAMAGE EXISTING DOWELS. ALL EXISTING DOWELS SHALL BE EXPOSED AND CLEANED.

ITEM OF WORK DESIGNATED "BY OTHERS" SHALL NOT BE CONSIDERED PART OF THIS CONTRACT.

ALL "COMPACTED SUBGRADE" SHALL CONSIST OF NATIVE MATERIAL SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES AND COMPACTED TO 95% DENSITY ACCORDING TO DENSITY TEST METHOD TEX-115E OR ACCORDING TO ASTM D-698 AND TESTED BY ASTM D-2922.

ALL "FLEXIBLE BASE" SHALL BE TYPE "A", GRADE 4, ACCORDING TO TXDOT ITEM 247, COMPACTED TO 95% MODIFIED DENSITY AT A MOISTURE CONTENT BETWEEN -2 AND +3 OF OPTIMUM PERCENT MOISTURE ACCORDING TO ASTM D-1557 (MODIFIED PROCTOR) AND TESTED BY ASTM D-2922.

ASPHALT PAVEMENT SHALL BE THE TYPE SPECIFIED ON THE PLANS AND ACCORDING TO TXDOT ITEM 340 "HOT MIX ASPHALT CONCRETE PAVEMENT".

PRIME COAT USING MC-30 AT A RATE OF 0.2 GALLONS PER SQUARE YARD SHALL BE PLACED OVER PREPARED BASE AT LEAST ONE DAY PRIOR TO LAYING ASPHALTIC CONCRETE PAVEMENT. ANY NECESSARY TACK COAT SHALL BE MC-30 AT 0.05 GALLONS PER SQUARE YARD. IT IS REQUIRED THAT BOTH THE PRIME COAT AND THE TACK COAT BE APPLIED AT THE TEMPERATURE SPECIFIED UNDER TXDOT ITEM 300.3.

CONCRETE SHALL BE CLASS "A" ACCORDING TO TXDOT ITEM 421 UNLESS OTHERWISE ON PLANS.

REINFORCING STEEL SHALL BE FROM NEW BILLET AND SHALL CONFORM TO TXDOT ITEM 440. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS EXCEPT WHEN REFERRING TO CLEARANCE.

ALL SAWED JOINTS SHALL BE SAWED WITHIN 24 HOURS OF POURING.

ABSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND REINFORCING BARS SHALL BE ALLOWED WITHOUT THE SPECIFIC APPROVAL OF THE ENGINEER.

ORDINARY COMPACTION CONTROL IS REQUIRED ON THIS PROJECT.

ALL ROLLING FOR COMPACTION OF ASPHALTIC CONCRETE PAVEMENT SHALL BE COMPLETED BEFORE THE MIXTURE TEMPERATURE DROPS BELOW 175 DEG. (F).

ALL FILL MATERIAL SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNERS AND THE ENGINEER AND HIS EMPLOYEES, PARTNERS, OFFICES, DIRECTORS, OR CONSULTANTS, HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FROM LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR ENGINEER, ENGINEER'S DIRECTORS, OFFICERS, EMPLOYEES, OR CONSULTANTS.

ALL CMP (CORRUGATED METAL PIPE) USED ON THIS PROJECT SHALL HAVE A MANNING'S "N" VALUE OF 0.024., UNLESS OTHERWISE SHOWN ON PLANS.

CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTING PER CURRENT CITY OF NEW BRAUNFELS REQUIREMENTS. ALL TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. ENGINEER AND OWNER RESERVE THE RIGHT TO HAVE THE CONTRACTOR REMOVE AND REPLACE ANY MATERIAL THAT WAS NOT TESTED OR FAILED TESTING. ALL COST ASSOCIATED WITH THE REMOVAL, REPLACEMENT AND TESTING SHALL BE PAID BY THE CONTRACTOR.

ALL PVC SLEEVES SHALL BE INSTALLED 3 FEET BELOW FINISHED GRADE AND ENDS SHALL BE MARKED SO THAT LOCATIONS OF SLEEVES CAN BE EASILY IDENTIFIED.

PRE-CONSTRUCTION CONFERENCE IS REQUIRED, ENGINEER WILL ARRANGE SUCH CONFERENCE IN COORDINATION WITH CITY OF NEW BRAUNFELS STREET INSPECTOR & NEW BRAUNFELS UTILITIES INSPECTOR. NO CONSTRUCTION MAY BEGIN PRIOR TO THE PRE-CONSTRUCTION CONFERENCE.

CONTRACTOR SHALL COORDINATE WITH DRY UTILITY INSTALLERS AND SHARED TRENCHING SHALL BE UTILIZED. CUTTING THE STREETS AFTER COMPLETION BY DRY UTILITIES SHALL NOT BE ACCEPTABLE.

AS PER PLATTING ORDINANCE SECTION 118-38M.: WHEN ALL IMPROVEMENTS ARE FOUND TO BE CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND WITH THE CITY'S STANDARDS, AND UPON RECEIPT OF ONE SET OF "RECORD DRAWINGS" PLANS, AND A DIGITAL COPY OF ALL PLANS (AUTOCAD 2000 MINIMUM) THE CITY ENGINEER SHALL ACCEPT SUCH IMPROVEMENTS FOR THE CITY OF NEW BRAUNFELS, SUBJECT TO THE GUARANTY OF MATERIAL AND WORKMANSHIP PROVISIONS IN THIS SECTION.

EROSION / SEDIMENTATION CONTROL

AT A MINIMUM, THESE CONTROLS SHALL CONSIST OF ROCK BERMS AND/OR SILT FENCES CONSTRUCTED PARALLEL TO AND DOWN GRADIENT FROM THE TRENCHES. THE ROCK BERM OR SILT FENCES SHALL BE INSTALLED IN A MANNER SUCH THAT ANY RAINFALL RUNOFF SHALL BE FILTERED. HAY BALES SHALL NOT BE USED FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS.

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CONTROLS WHEN VEGETATION IS ESTABLISHED AND THE CONSTRUCTION AREA IS STABILIZED {31 TAC 313.5 (C)(12)}. ADDITIONAL PROTECTION MAY BE REQUIRED IF EXCESSIVE SOLIDS ARE BEING DISCHARGED FROM THE SITE.

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER/ENGINEER.

PLACEMENT OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PLANS. ACTUAL LOCATIONS MAY VARY SLIGHTLY FROM THE PLANS, BUT WILL BE VERIFIED BY THE ENGINEER/INSPECTOR IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY SIGNIFICANT RAINFALL TO INSURE DISTURBANCE OF THE STRUCTURES HAS NOT OCCURRED. SEDIMENT DEPOSITED AFTER A RAINFALL SHALL BE REMOVED FROM THE SITE OR PLACED IN AN ENGINEER APPROVED DESIGNATED DISPOSAL AREA.

CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT NO EROSION CONTROL MEASURES BLOCK THE DRAINAGE SYSTEM FROM WORKING AS DESIGNED.

UTILITIES

LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION, INCLUDING THOSE NOT SHOWN ON THE DRAWINGS.

ANY EXISTING UTILITIES, ON OR OFF THE SITE, THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE RESPECTIVE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.

CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AT:

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION

NEW BRAUNFELS UTILITIES (WATER AND SEWER) (830) 608-8971

NEW BRAUNFELS UTILITIES (ELECTRIC) (830) 608-8951

TIME WARNER CABLE (830) 625-3408

CENTERPOINT ENERGY (GAS) (830) 643-6434

AT&T (830) 303-1333

TEXAS ONE CALL SYSTEM (800) 245-4545

ENERGY TRANSFER (PETROLEUM PIPELINE) (210) 262-2486

CONTRACTOR SHALL REFERENCE NEW BRAUNFELS UTILITIES PLANS FOR FINAL ELECTRICAL LINE DESIGNS AND LAYOUT.



07/30/2020

GENERAL NOTES

SMITH LEGACY
ESTATES

NO.	REVISION	DESCRIPTION	REVISION DATE

DATE: JULY 2020

DRAWN BY: LB

DESIGNED BY: HLC

REVIEWED BY: CVH

HMT PROJECT NO.:

365.001

SHEET

C0.1

PLAT NOTES:

1. THIS PROPERTY DOES NOT LIE IN THE CITY LIMITS OR EXTRATERRITORIAL JURISDICTION OF ANY CITY.
2. THIS PROPERTY DOES LIE WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.
3. THIS PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA, ZONE "A", THE 100-YEAR FLOOD ZONE, AS DEFINED BY THE FLOOD INSURANCE RATE MAP FOR COMAL COUNTY, TEXAS ON COMMUNITY PANEL NO. 48091G0240F, EFFECTIVE DATE SEPTEMBER 2, 2009 AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
4. THIS PROPERTY IS WITHIN THE COMAL INDEPENDENT SCHOOL DISTRICT.
5. IT IS HEREBY UNDERSTOOD AND AGREED THAT NON-EXCLUSIVE, PERPETUAL EASEMENTS ARE RESERVED FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND ALL NECESSARY APPURTENANCES. WHETHER THESE IMPROVEMENTS ARE INSTALLED UNDERGROUND, OVERHEAD AND/OR ON THE SURFACE OF THE GROUND WITHIN THE PUBLIC UTILITY EASEMENTS DEDICATED ON THIS PLAT, NOTHING SHALL BE PLACED OR PERMITTED TO REMAIN IN THE PUBLIC UTILITY EASEMENT AREA WHICH MAY DAMAGE OR INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SAID PUBLIC UTILITIES. THE PUBLIC UTILITY EASEMENT AREA OF EACH LOT AND ALL IMPROVEMENTS WITHIN IT SHALL BE MAINTAINED BY THE OWNER OF THE LOT, EXCEPT FOR THOSE FACILITIES FOR WHICH AN AUTHORITY OR PUBLIC UTILITY PURVEYOR IS RESPONSIBLE. PUBLIC UTILITY PURVEYORS AND THEIR EMPLOYEES SHALL HAVE THE RIGHTS AND BENEFITS NECESSARY FOR THE FULL ENJOYMENT OF THE RIGHTS HEREIN GRANTED, INCLUDING BUT NOT LIMITED TO INGRESS AND EGRESS FROM PRIVATE ROADS AND EASEMENTS, AND THE RIGHT FROM TIME TO TIME TO CUT ANY AND ALL TREES, UNDERGROWTH, AND OTHER OBSTRUCTIONS THAT MAY CAUSE INTERFERENCE WITH THE OPERATION OF SAID PUBLIC UTILITY FACILITIES.
- THIS PROPERTY LIES WITHIN THE FOLLOWING PUBLIC UTILITY SERVICE AREA(S):
ELECTRIC: CPS ENERGY
TELEPHONE: AT&T AND/OR SPECTRUM
6. LOTS WILL BE SERVED BY INDIVIDUAL ON-SITE WATER WELLS.
7. THIS SUBDIVISION WILL BE SERVED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES.
8. COMAL COUNTY REQUIRES A MINIMUM 25' BUILDING SET-BACK LINE FROM ROAD FRONTAGE.
9. PROPERTY OWNERS ARE ADVISED THAT THEY ARE RESPONSIBLE FOR MAINTENANCE OF DEDICATED EASEMENTS ON THEIR PROPERTY AND MAY NOT UTILIZE THESE EASEMENTS FOR ANY PURPOSE DETRIMENTAL TO THEIR INTENDED USE (I.E. NO STRUCTURES, SEPTIC TANK FIELDS, ETC.). GRANTEEES OF SAID DEDICATED EASEMENTS RESERVE THE RIGHT OF ACCESS TO SUCH EASEMENTS.
10. 3.81 ACRES, 0 LINEAR FEET BEING DEDICATED AS PUBLIC RIGHT-OF-WAY.
11. 2 LOTS BEING 10.30 ACRES.
12. A DRAINAGE STUDY HAS BEEN COMPLETED FOR THIS PLAT AND IS AVAILABLE FOR REVIEW AT THE COMAL COUNTY ENGINEER'S OFFICE. AREAS IDENTIFIED BY THE STUDY AS BEING INUNDATED DURING CERTAIN STORM EVENTS HAVE BEEN PLACED WITHIN BUILDING SET-BACKS. THE CONSTRUCTION OF BUILDINGS WITHIN BUILDING SET-BACKS REQUIRES COMMISSIONERS COURT APPROVAL.
13. A 10-FOOT PUBLIC UTILITY EASEMENT IS HEREBY DEDICATED ALONG ALL SIDE AND REAR LOT LINES.
14. A 20-FOOT PUBLIC UTILITY EASEMENT IS HEREBY DEDICATED ALONG ALL STREET FRONTAGE.
15. NO DISTURBANCE SHALL OCCUR WITHIN THE SENSITIVE FEATURE BUFFER EASEMENT EXCEPT FOR ACTIVITIES APPROVED BY TCQ.
16. A WATER POLLUTION ABATEMENT PLAT (WPAP) HAS BEEN CREATED FOR THIS PLAT. SEE WPAP LETTER(S) OF APPROVAL FROM TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCQ) RECORDED IN **DOCUMENT NO.** _____ COMAL COUNTY OFFICIAL PUBLIC RECORDS. LOT OWNERS SHOULD REFER TO THE WPAP ON FILE AT THE COMAL COUNTY ENGINEER'S OFFICE FOR ADDITIONAL INFORMATION AND RESTRICTIONS.
17. ALL PRIVATE ROADS SHOWN HEREON SMITH RANCH RD AND ALL SECURITY GATES AND DEVICES CONTROLLING ACCESS TO SUCH ROADS SHALL BE OWNED AND MAINTAINED BY THE SMITH LEGACY ESTATES HOMEOWNERS ASSOCIATION, ITS SUCCESSORS AND/OR ASSIGNS OF THIS SUBDIVISION.

STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT
AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE
PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND.

**PRELIMINARY, THIS DOCUMENT SHALL NOT BE
RECORDED FOR ANY PURPOSE.**

DOROTHY J. TAYLOR
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 6295

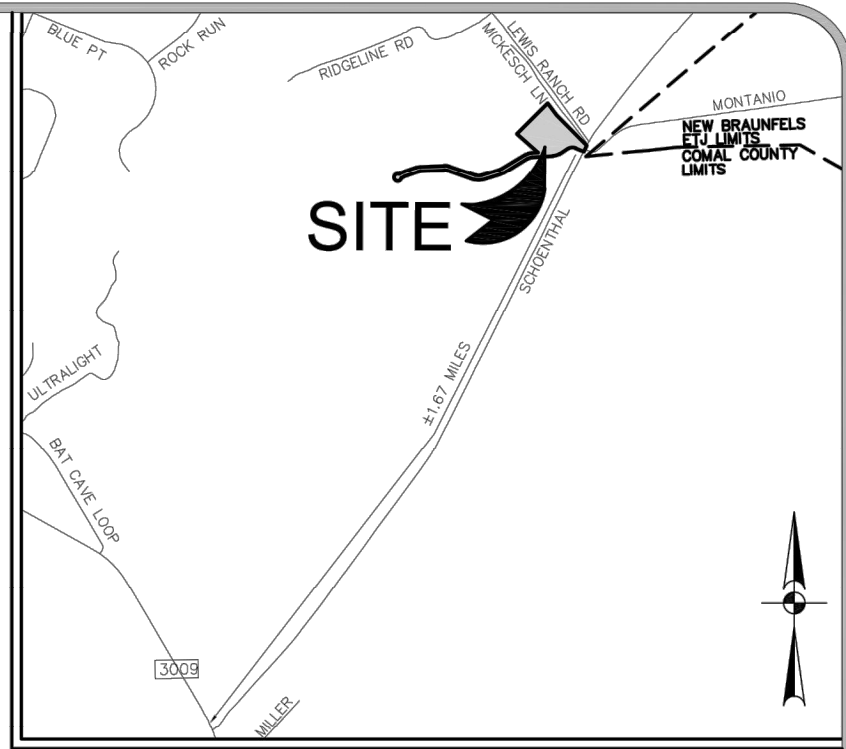
SWORN TO AND SUBSCRIBED BEFORE ME THIS THE ____
DAY OF _____, 20____.

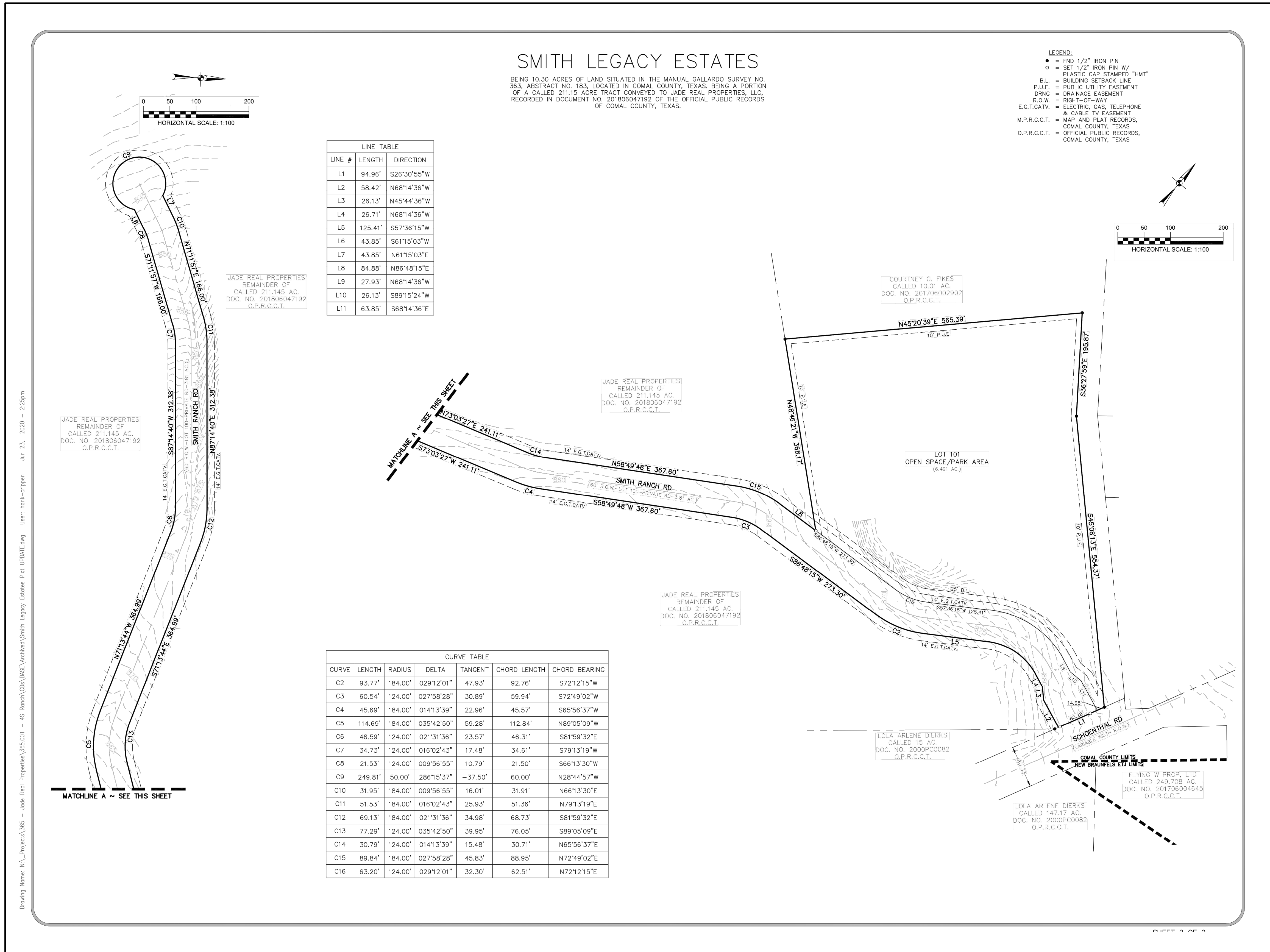
NOTARY PUBLIC, STATE OF TEXAS
PRINT NOTARY'S NAME:

PLAT PREPARED **APRIL 1, 2020**

SMITH LEGACY ESTATES

BEING 10.30 ACRES OF LAND SITUATED IN THE MANUAL GALLARDO SURVEY NO. 365, ABSTRACT NO. 183, LOCATED IN COMAL COUNTY, TEXAS, BEING A PORTION OF A CALLED 211.15 ACRE TRACT CONVEYED TO JADE REAL PROPERTIES, LLC, RECORDED IN DOCUMENT NO. 201806047192 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS.

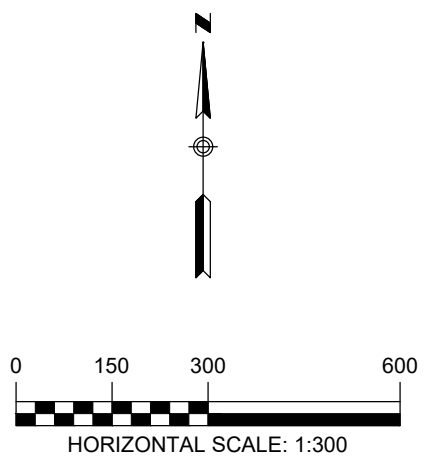




FOR REFERENCE ONLY

Drawing Name: N:_projects\365 - jade real properties\365.001 - 4a ranch\CD\DRAINAGE.dwg User: hmt-crippen Jul 30, 2020 - 3:30pm

Table 1 - Existing Conditions Hydrology Calculations - City of New Braunfels									
Point of Concentration	Description	Drainage Area	Area	T _c	Curve Number	Q ₂ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
EX A1	Offsite Contributing Existing Area A1	EX A1	116.26	21.22	84.00	163.45	380.80	543.53	885.78
EX A2	Property Boundary Existing Area A2	EX A2	211.08	21.80	84.03	296.76	691.37	986.82	1608.21
EX A	Combined Existing Areas A1 and A2	EX A1 + EX A2				460.21	1072.17	1530.35	2493.98



LEGEND

- 700 — EXISTING CONTOURS
- 700 — PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- — — DRAINAGE AREA
- TC — TC — TIME OF CONCENTRATION
- A-1 POINT OF CONCENTRATION
- DRAINAGE FLOW DIRECTION
- DA ACRES DRAINAGE AREA LABEL

- FND 1/2" IRON PIN
- SET 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT"
- B.L. BUILDING SETBACK LINE
- P.U.E. PUBLIC UTILITY EASEMENT
- DRNG DRAINAGE EASEMENT
- R.O.W. RIGHT-OF-WAY
- E.O.T.CATV. ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT
- M.P.R.C.C.T. MAP AND PLAT RECORDS, COMAL COUNTY, TEXAS
- O.P.R.C.C.T. OFFICIAL PUBLIC RECORDS, COMAL COUNTY, TEXAS

290 S. CASTELL AVE., STE. 100
NEW BRAUNFELS, TX 78130
TBPE FIRM F-10961
TBPLS FIRM 1053600

HMT
ENGINEERING & SURVEYING

CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
Chris Van Heerde, P.E.

07/30/2020

**EXISTING DRAINAGE
AREA MAP
SMITH LEGACY
ESTATES**

NO.	REVISION DESCRIPTION	REVISION DATE

DATE: **JULY 2020**

DRAWN BY: **LB**

DESIGNED BY: **HLC**

REVIEWED BY: **CYH**

HMT PROJECT NO.:
365.001

**SHEET
C2.0**

Table 2 - Proposed Conditions Hydrology Calculations - City of New Braunfels									
Point of Concentration	Description	Drainage Area	Area	T _c	Curve Number	Q ₂ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
A1	Offsite Contributing Proposed Area A1	A1	116.26	21.22	84.00	163.45	380.80	543.53	885.78
A2	Property Boundary Proposed Area A2	A2	211.08	27.36	84.20	266.26	619.32	881.81	1433.68
A	Combined Proposed Areas A1 and A2	A1 + A2				424.55	989.69	1410.02	2292.90

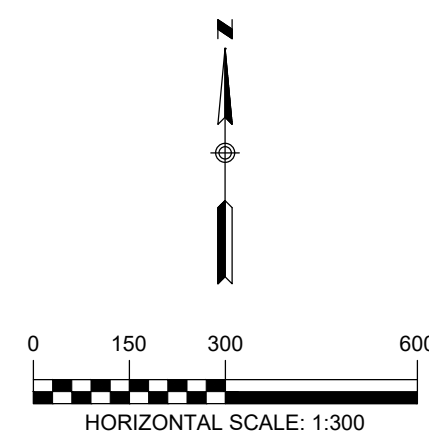
Table 3 - Existing to Proposed Hydology Comparison					
Point of Concentration	Drainage Area	Q ₂ (cfs)	Q ₁₀ (cfs)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
EX A	EX A1 + EX A2	460.21	1072.17	1530.35	2493.98
A	A1 + A2	424.55	989.69	1410.02	2292.90
Proposed is Less Than or Equal to Existing		YES	YES	YES	YES



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- B.L. BUILDING SETBACK LINE
- U.E. UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- DRAINAGE AREA
- TC TIME OF CONCENTRATION
- POINT OF CONCENTRATION
- DRAINAGE FLOW DIRECTION
- DRAINAGE AREA LABEL

- FND 1/2" IRON PIN
- SET 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT"
- B.L. BUILDING SETBACK LINE
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HMT
ENGINEERING & SURVEYING

CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER

07/30/2020

**PROPOSED DRAINAGE
AREA MAP**
SMITH LEGACY
ESTATES

NO.	REVISION	DESCRIPTION	REVISION DATE

DATE: **JULY 2020**

DRAWN BY: **LB**

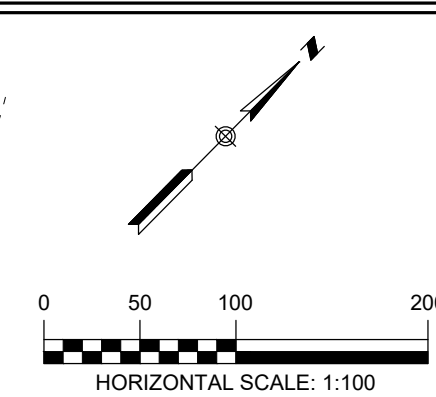
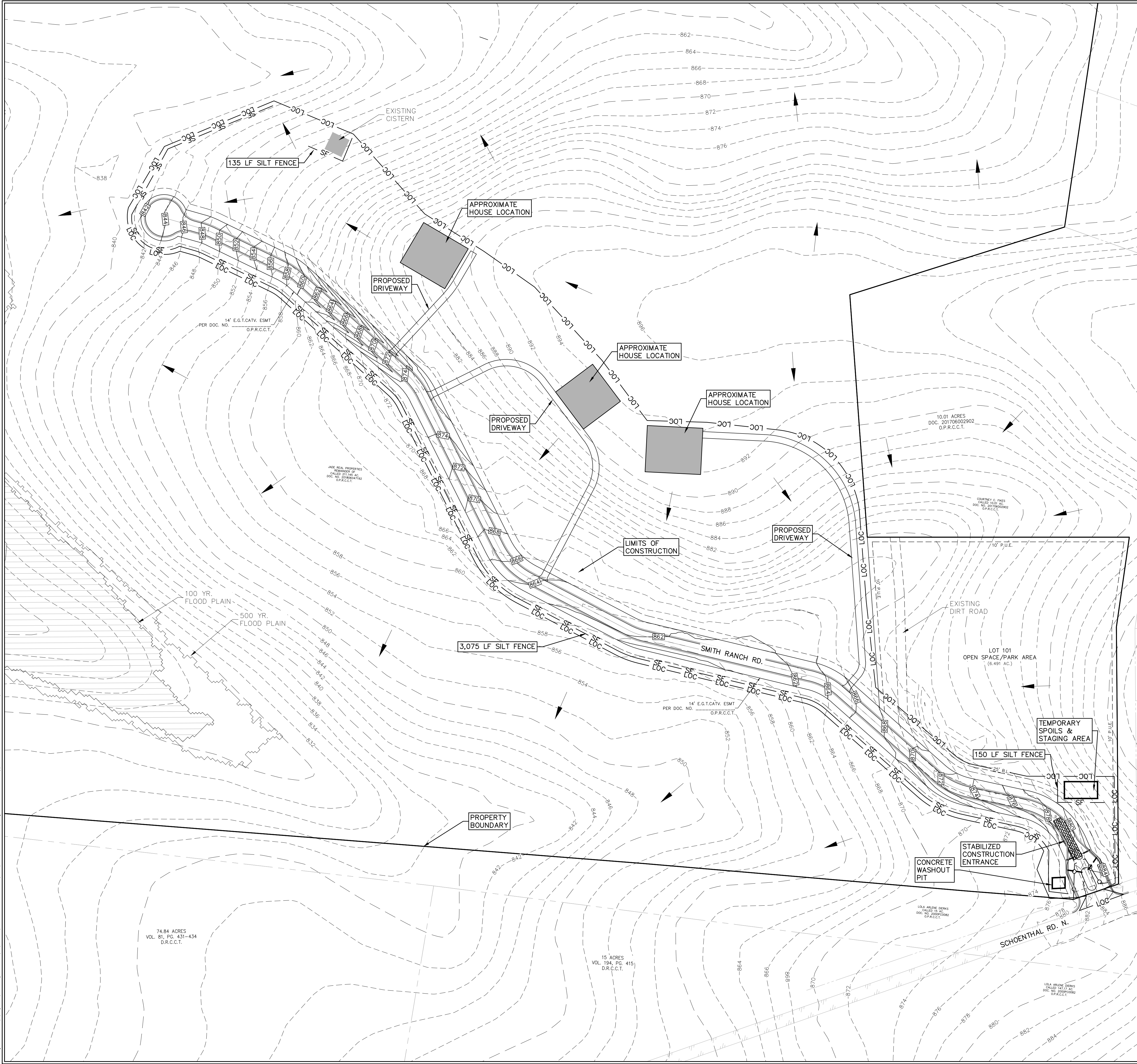
DESIGNED BY: **HLC**

REVIEWED BY: **CWH**

HMT PROJECT NO.:
365.001

SHEET
C2.1

Drawing Name: N:_projects\365 - jode real properties\365.001 - 4e ranch\CD\EROSION CONTROL.dwg Jul 30, 2020 - 3:31pm User: hank-origen



- LEGEND**
- 700 — EXISTING CONTOURS
 - 700 — PROPOSED CONTOURS
 - B.L. — BUILDING SETBACK LINE
 - U.E. — UTILITY EASEMENT
 - D.E. — DRAINAGE EASEMENT
 - > — DRAINAGE FLOW DIRECTION
 - SF — SF — SILT FENCE
 - LOC — LOC — LIMIT OF CONSTRUCTION
 - [Brick Pattern] — STABILIZED CONSTRUCTION ENTRANCE
 - B.L. — BUILDING SETBACK LINE
 - P.U.E. — PUBLIC UTILITY EASEMENT
 - R.O.W. — RIGHT-OF-WAY
 - E.G.T.CATV. — ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT
 - O.P.R.C.C.T. — OFFICIAL PUBLIC RECORDS, COMAL COUNTY, TEXAS

NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) AND SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES IN 21 DAYS, PER TPDES REQUIREMENTS.

SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION CONTROLS PER APPROVED PLAN.
2. TEMPORARY CONTROLS TO BE INSPECTED AND MAINTAINED WEEKLY AND PRIOR TO ANTICIPATED RAINFALL EVENTS, AND AFTER RAINFALL EVENTS, AS NEEDED. CONTRACTOR/OWNER SHALL PROVIDE A CONTACT NAME AND NUMBER FOR EROSION CONTROL ISSUES.
3. CONDUCT DEMOLITION ACTIVITIES, IF APPLICABLE.
4. CONSTRUCT DRAINAGE IMPROVEMENTS, IF APPLICABLE.
5. CONSTRUCT CURB INLET PROTECTION AT THE TIME OF CURB INLET INSTALLATION.
6. CONSTRUCT DEVELOPMENT PER APPROVED PLANS.
7. INSTALL STREETScape AND/OR LANDSCAPING IMPROVEMENTS.
8. CONTRACTOR TO VEGETATE ANY DISTURBED AREAS ONCE FINAL GRADING IS COMPLETE, AND ESTABLISH A MIN OF 80% VEGETATION PRIOR TO COMPLETION. PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.
9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
10. TPDES REQUIREMENTS - DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY WILL BEGIN AGAIN WITHIN 21 DAYS

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

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93047
LICENSED PROFESSIONAL ENGINEER
Chris Van Heerde, P.E.

07/30/2020

EROSION CONTROL PLAN

SMITH LEGACY ESTATES

NO.	REVISION	DESCRIPTION	REVISION DATE

DATE: JULY 2020
DRAWN BY: LB
DESIGNED BY: HLC
REVIEWED BY: CVH

HMT PROJECT NO.: 365.001

SHEET
C3.0

CONCRETE WASHOUT AREAS

THE PURPOSE OF CONCRETE WASHOUT AREAS IS TO PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA, AND TRAINING EMPLOYEES AND SUBCONTRACTORS.

THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:

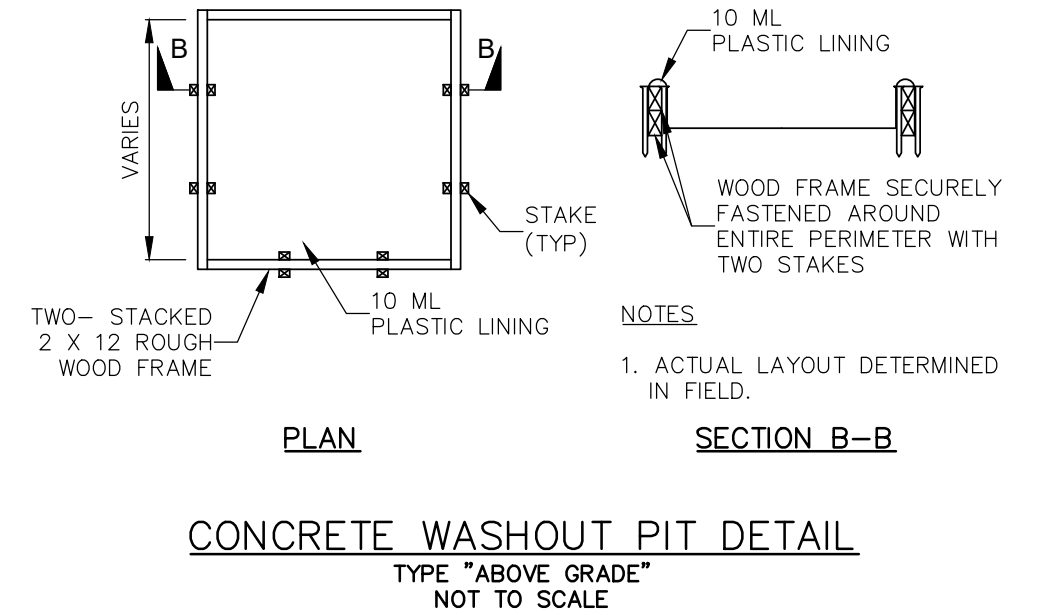
- INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO MATERIAL SUPPLIER AND SUBCONTRACTOR AGREEMENTS.
- AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE.
- PERFORM WASHOUT OF CONCRETE TRUCKS IN DESIGNATED AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.

FOR ONSITE WASHOUT:

- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, OR WATER BODIES. DO NOT ALLOW RUNOFF FROM THIS AREA BY CONSTRUCTING A TEMPORARY PIT OR BERMED AREA LARGE ENOUGH FOR LIQUID AND SOLID WASTE.
- WASH OUT WASTES INTO THE TEMPORARY PIT WHERE THE CONCRETE CAN SET, BE BROKEN UP, AND THEN DISPOSED PROPERLY.

BELOW GRADE CONCRETE WASHOUT FACILITIES ARE TYPICAL. THESE CONSIST OF A LINED EXCAVATION SUFFICIENTLY LARGE TO HOLD EXPECTED VOLUME OF WASHOUT MATERIAL. ABOVE GRADE FACILITIES ARE USED IF EXCAVATION IS NOT PRACTICAL. TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS AT THE END OF THIS SECTION, WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.



SILT FENCE

MATERIALS:

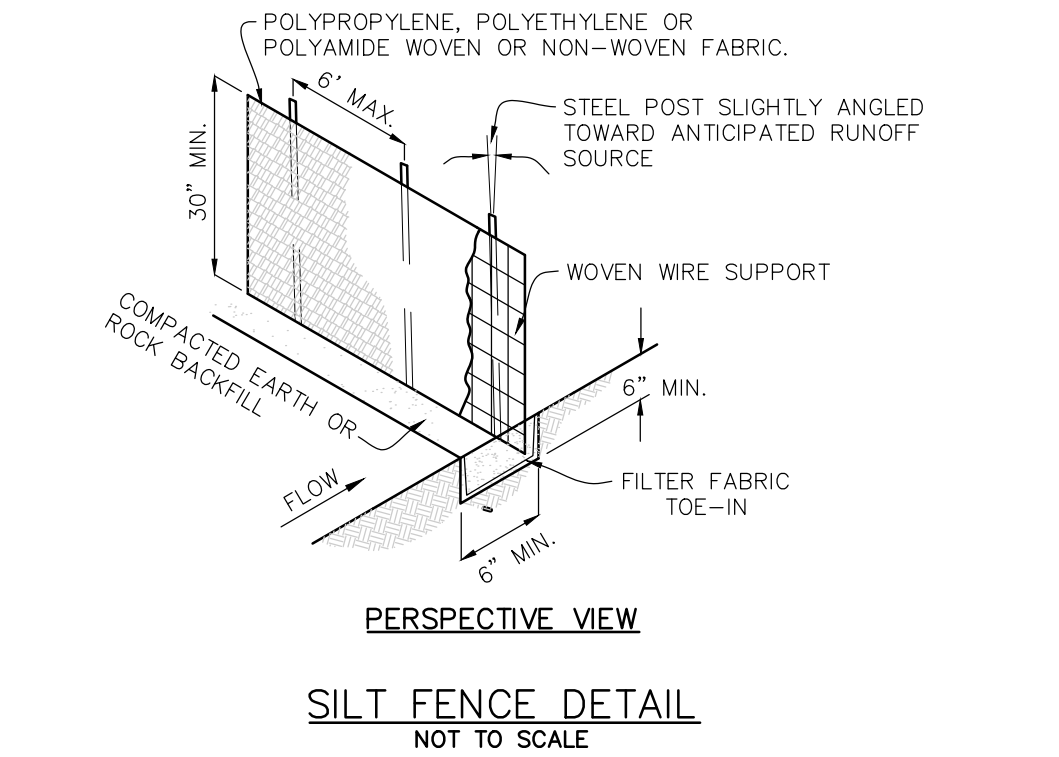
1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN², ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR YBAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT², AND BRINELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

INSTALLATION:

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
2. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
3. THE TOE OF THE SILT FENCE SHOULD 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 OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES:

1. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.



STABILIZED CONSTRUCTION ENTRANCE / EXIT

MATERIALS:

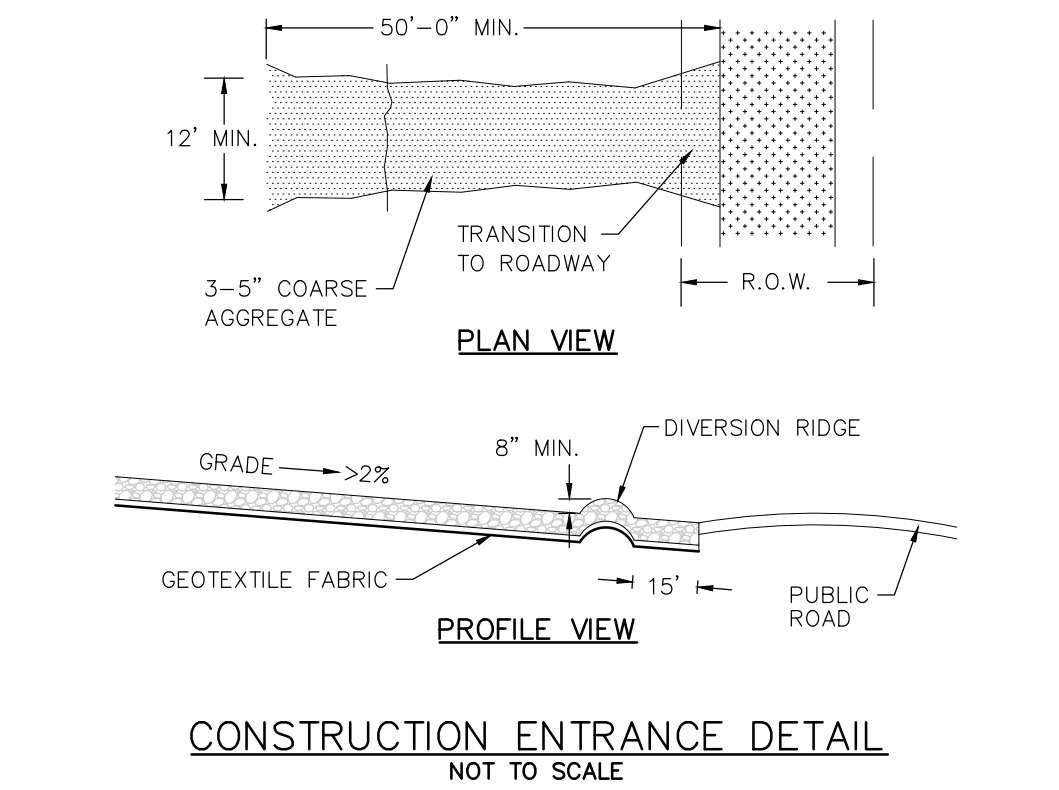
1. THE AGGREGATE SHOULD CONSIST OF 3 TO 5 INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD², A MULLEN BURST RATING OF 140 LB/IN², AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4 INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.

INSTALLATION:

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES:

1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR LOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.



THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

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NEW BRAUNFELS, TX 78130
TBPE FIRM F-10961
TBPLS FIRM 1053600

07/30/2020

EROSION CONTROL
DETAILS
SMITH LEGACY
ESTATES

REVISION	DESCRIPTION	REVISION DATE
NO.		

DATE: JULY 2020
DRAWN BY: LB
DESIGNED BY: HLC
REVIEWED BY: CVH
HMT PROJECT NO.: 365.001

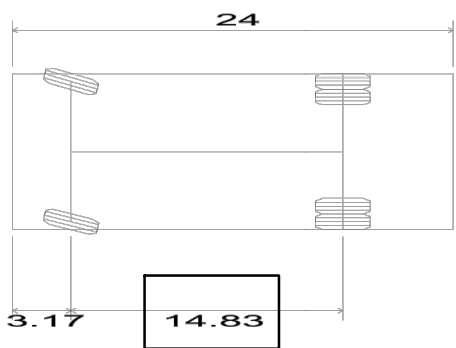
SHEET
C3.1

Vehicle Tracking v19.00 - Pool

Vehicle Tracking Vehicle Details

Ref: 100012

Vehicle Name: FREIGHTLINER MT45
Type: Rigid vehicle
Category: Autodesk
Classification: Autodesk
Source:
Description: TYPICAL PARCEL DELIVERY TRUCK
Notes:
Unit 1 Name: FREIGHTLINER MT45 Tractor



FREIGHTLINER MT45
Overall Length 24.000ft
Overall Width 8.500ft
Overall Body Height 11.968ft
Min Body Ground Clearance 1.455ft
Track Width 8.500ft
Lock-to-lock time 4.00s
Max Wheel Angle 50.00°

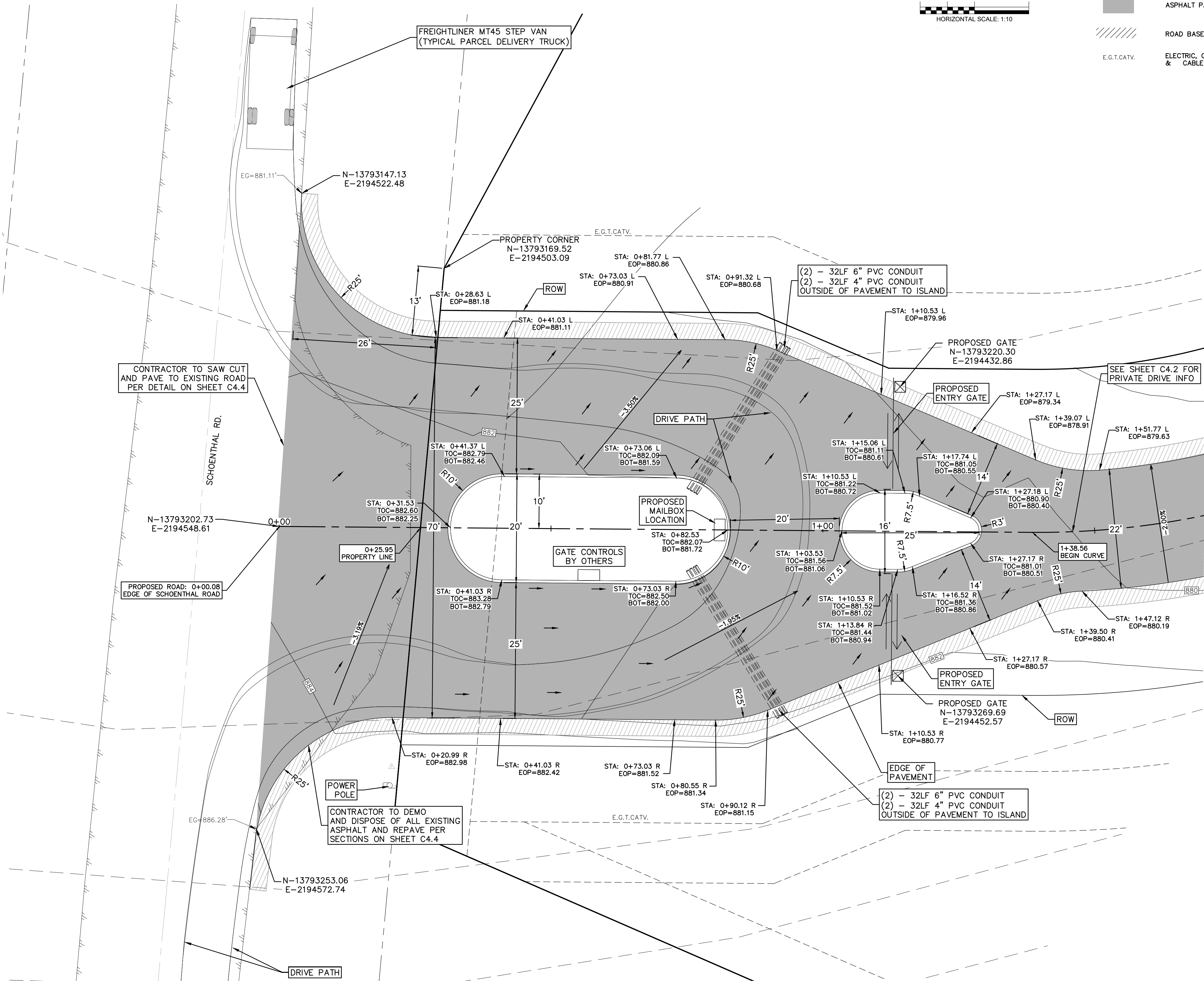
Every Effort Has Been Made To Ensure The Accuracy Of This Information
Please Check Data From Your Own Sources

STANDARD FEATURES AND OPTIONS MT-45 SERIES
Payload and Cargo Capacity to Spare

MT-45 SR SERIES CHASSIS	
Vehicle Weight Ratings	14,140 lb. (single rear wheel), 14,990 lb. to 19,500 lb. (dual rear wheel)
Engine	200 hp Cummins® 6.7L ISB10 EGR 6-cylinder diesel with 520 lb./ft. torque @ 1,600 rpm
Optional engines	220 hp Cummins® 6.7L ISB10 EGR with 520 lb./ft. torque @ 1,600 rpm 240 hp Cummins® 6.7L ISB10 EGR with 560 lb./ft. torque @ 1,600 rpm
Cooling system	680 sq. in. downflow, front-mounted radiator; pre-mixed 50/50 ethylene glycol antifreeze to -35° F; ADC electric on/off fan clutch
Engine equipment	Forward-mounted oil check; frontal air intake with Fan® ECO BIC air cleaner mounted on rail; Denso® 12-volt starter; Delco Remy® 160-amp, 24SI alternator; 2 batteries 1300 CCA
Cooling system	Denso 130-amp alternator or Leace-Neville® 200- and 270-amp alternator or Delco Remy® 200-amp alternator; Phillips® 1,000-watt block heater
Transmission	Allison® 1000 HS automatic with park pawl
Optional transmission	Allison 1000 RDS/EVS automatic transmission with PTO with park pawl
Exhaust	Single horizontal inboard ATD, outboard SCR with tailpipe exiting forward of rear axle, right-hand side
Axles	Front: Detroit Axle AF-8.0-2, 8,000 lb. Rear: Detroit Axle ARS-13.0-2, 13,000 lb.; 3.91, 4.10, 4.30, 4.56 and 4.78 ratio Optional rear axles: Meritor® MS-10-113, 10,000 lb.; single rear wheel; axle ratios: 4.30, 4.56, 13,000 lb. dual rear wheel axle
Suspension, Steering, Brakes	Front: Flat-leaf spring, 5,790 lb.; shock absorbers; front sway bar Optional front suspension: 6,000, 6,200, 7,000 or 7,500 lb. flat-leaf spring Rear: Flat-leaf spring, 9,200 lb.; shock absorbers Optional rear suspension: Heavy-duty flat-leaf spring suspension rated 8,000, 10,000, 12,000 or 13,000 lb.; rear sway bar
Steering	TRW® steering column and Sheppard MDS3 steering gear; 50-degree wheel cut; (wheel cut will vary based on optional equipment)
Brakes	4-wheel 2.6" dual-piston hydraulic disc pin-slide brakes with ABS
Tires	225/70R 19.5"; 12-ply; 245/70R 19.5"; 14-ply
Wheels	19.5" x 6"; 19.5" x 6.75" white steel disc wheels, 6-hole ball seat
Frame	8.0" x 3.0" x .25"; 50,000 psi, 7.35 section modulus
Wheelbase	158"
Optional wheelbase	138", 178", 190", 208"
Fuel Tank	40-gal. rectangular, aluminum steel fuel tank mounted between the frame rails; left-hand or right-hand fuel fill Optional fuel tanks: 30-gal. rectangular, aluminum steel fuel tank mounted between the frame rails (optional aluminum) 40-gal. rectangular, aluminum fuel tank mounted between the frame rails; left-hand or right-hand fuel fill 60-gal. aluminum steel fuel tank mounted between the frame rails; left-hand or right-hand fuel fill
DEF Tank	10-gal. plastic tank mounted on the right-hand side forward of the rear axle (138" wheelbase mounted rear of the axle)
Cab and Equipment	Operator station; single electric horn; TRW straight, fixed steering column; four-spoke 18" charcoal steering wheel Optional cab equipment: Cab AC (prop. kit)
Instrumentation	Multiple wiring instrument cluster; gauges include electronic fuel and DEF level, electronic engine coolant temperature, electronic engine-oil pressure, with information display, electronic speedometer with odometer, voltmeter

Call Freightliner Custom Chassis Corporation at (800) 545-8831, or visit us on the Web at freightlinerchassis.com.

10/15 FCC/MC-8-395. Specifications are subject to change without notice. Freightliner Custom Chassis Corporation is registered to ISO 9001:2008 and ISO 14001:2004. Copyright ©2005 Daimler Trucks North America LLC. All rights reserved. Freightliner Custom Chassis Corporation is a subsidiary of Daimler Trucks North America LLC, a Daimler company.



THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

290 S. CASTELL AVE., STE. 100
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07/30/2020

SMITH RANCH ROAD ENTRANCE

SMITH LEGACY ESTATES

NO.	REVISION	DESCRIPTION	DATE

DATE: JULY 2020

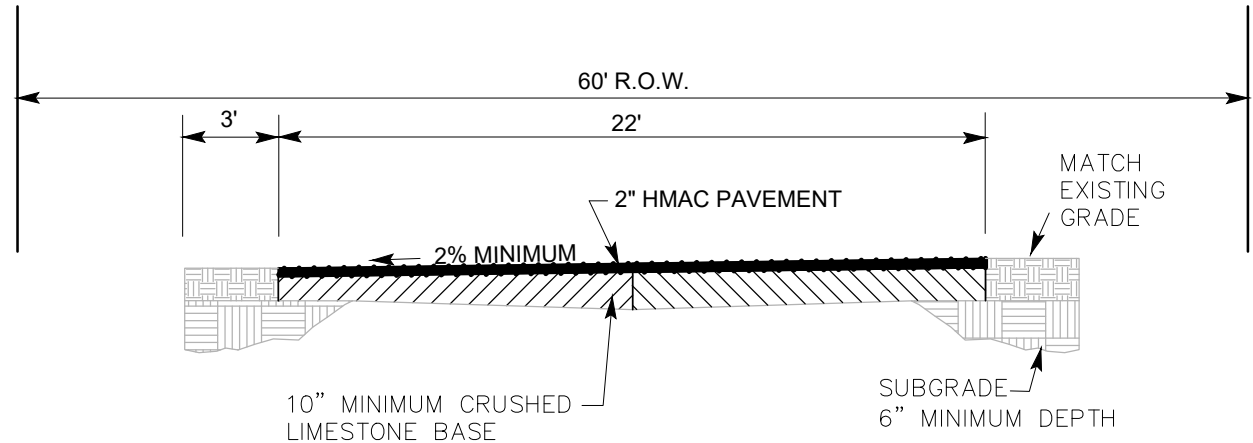
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REVIEWED BY: CVH

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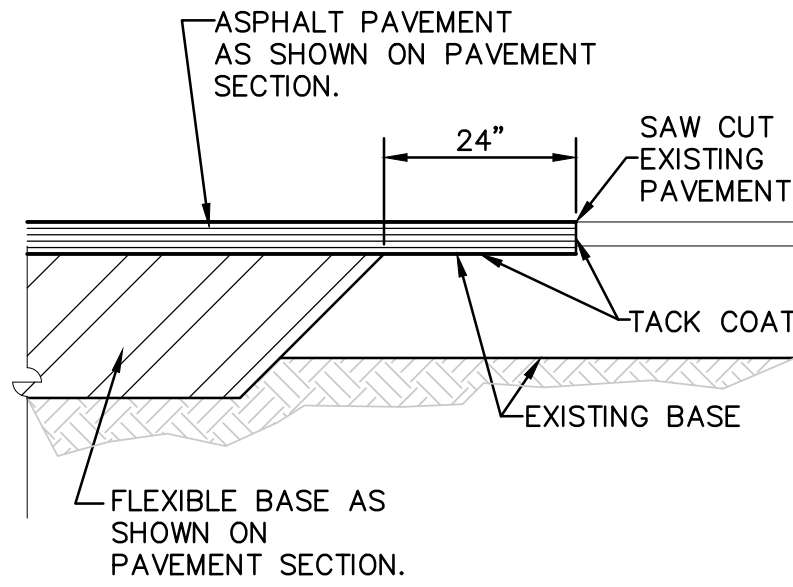


① ROAD SECTION
N.T.S.

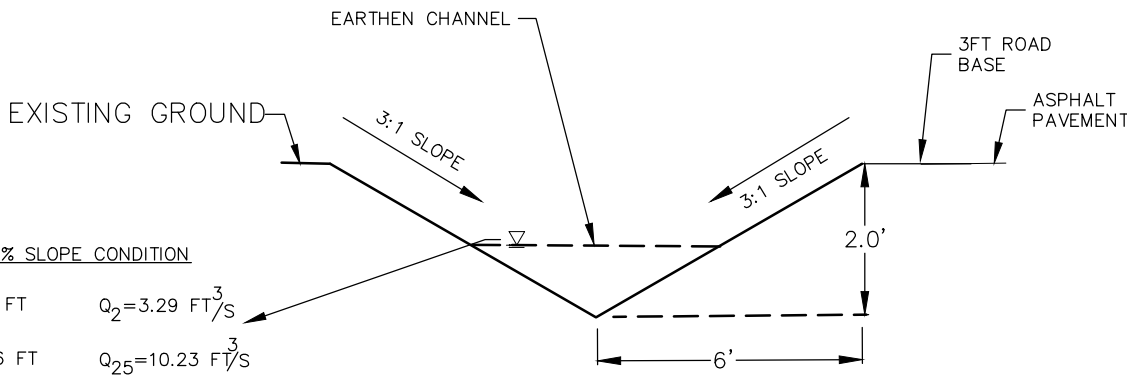
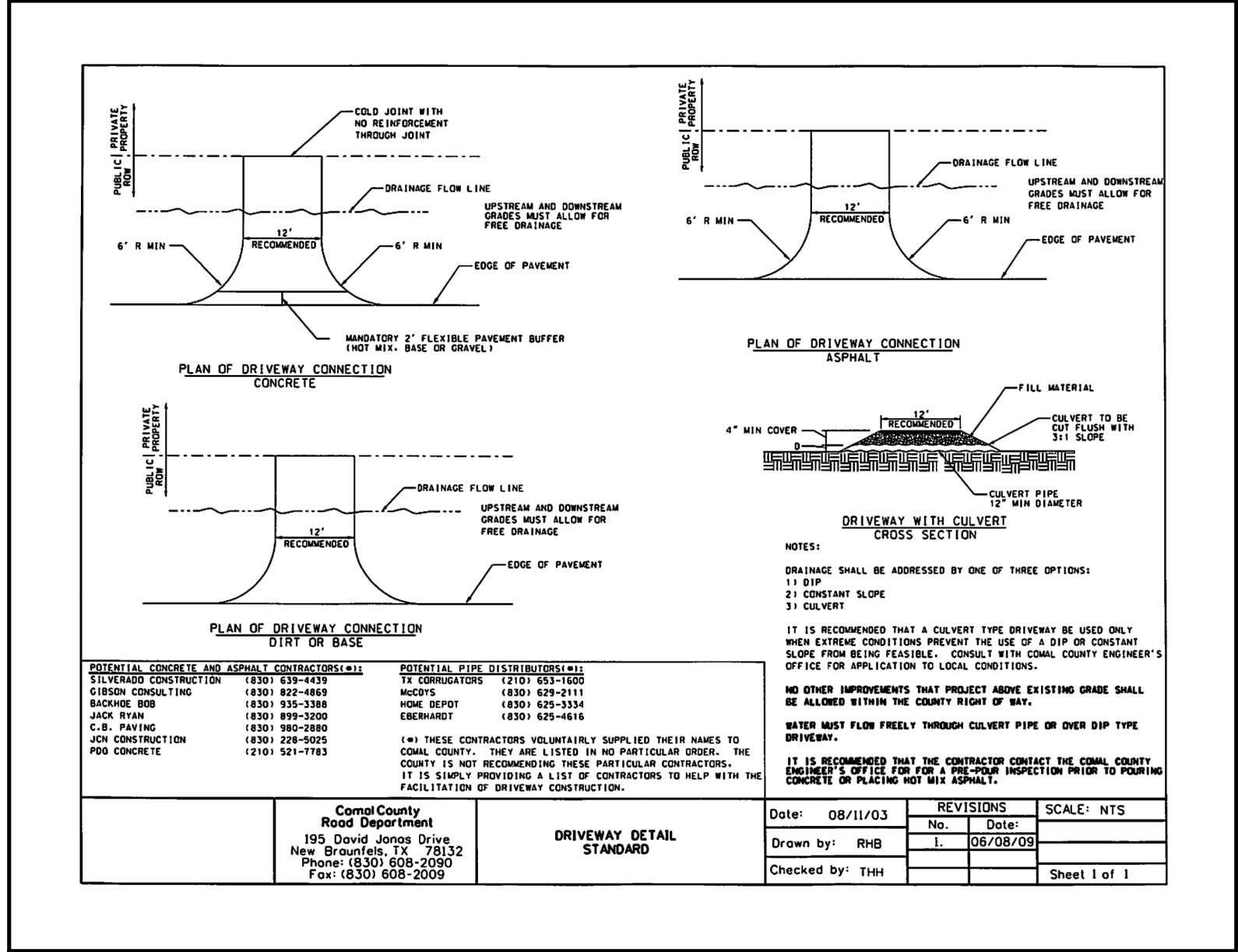
NOTE:

- ALL PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE TO THE "SUBSURFACE EXPLORATION AND PAVEMENT ANALYSIS, PROPOSED SCENTHAL RD, BY ROCK ENGINEERING & TESTING LABORATORY INC. DATED JANUARY 7, 2020.
- ALL PAVEMENT SECTIONS SHOWN ON THE ABOVE TABLE SHALL SUPERCEDE ANY STANDARD DETAILS WITH RESPECT TO DEPTH OF MATERIALS ASSOCIATED WITH THIS PROJECT.
- THE SUBGRADE SHOULD BE STABILIZED USING LIME IN ACCORDANCE WITH THE GEOTECHNICAL REPORT IN ORDER TO ACHIEVE THE FOLLOWING:
 - PLASTICITY INDEX OF 32 OR LESS
 - PH OF 12.4 OR GREATER
- THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF THE LIME OR CEMENT.
- CONTRACTOR SHALL COORDINATE WITH GEOTECHNICAL ENGINEER FOR EXACT LOCATION OF GEOGRID.

FLEXIBLE PAVEMENTS			
PAVEMENT MATERIAL	①	②	③
TYPE "D" HMAC	2"	2"	2"
CRUSHED LESTONE FLEXIBLE BASE, IN.	10"	7.5"	
COMPACTED SUBGRADE			
LIME SUBGRADE	6"	6"	
TENSAR GEOGRID			BX-1200

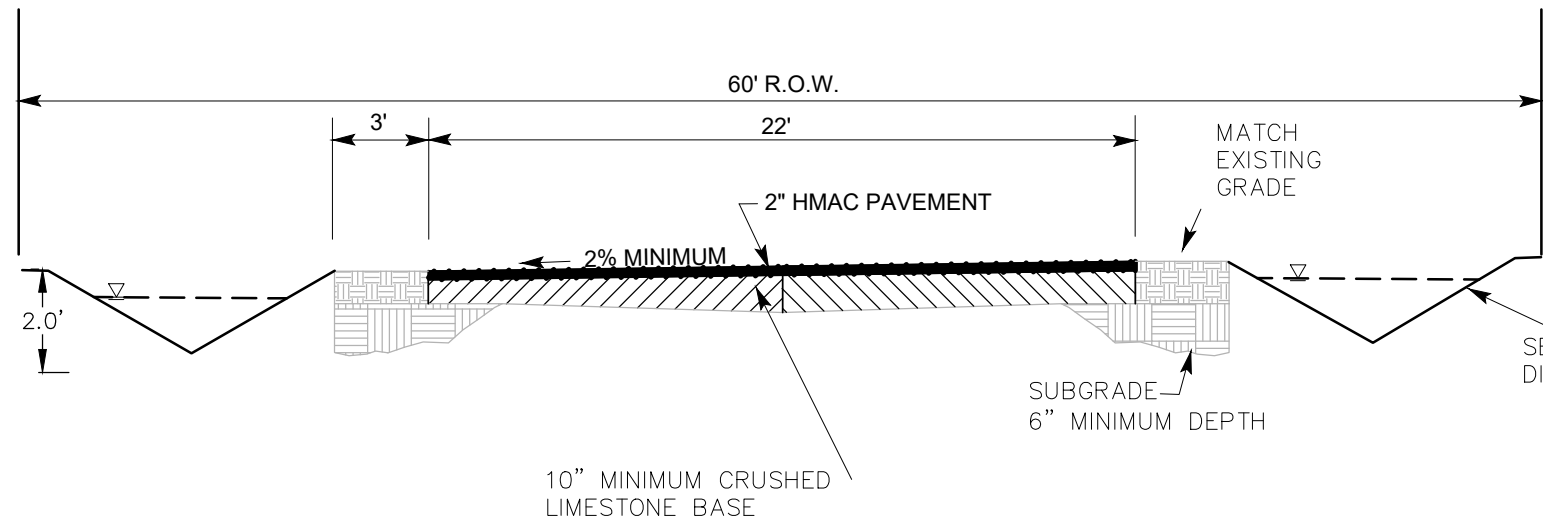


NEW PAVEMENT TO EXISTING
NOT TO SCALE

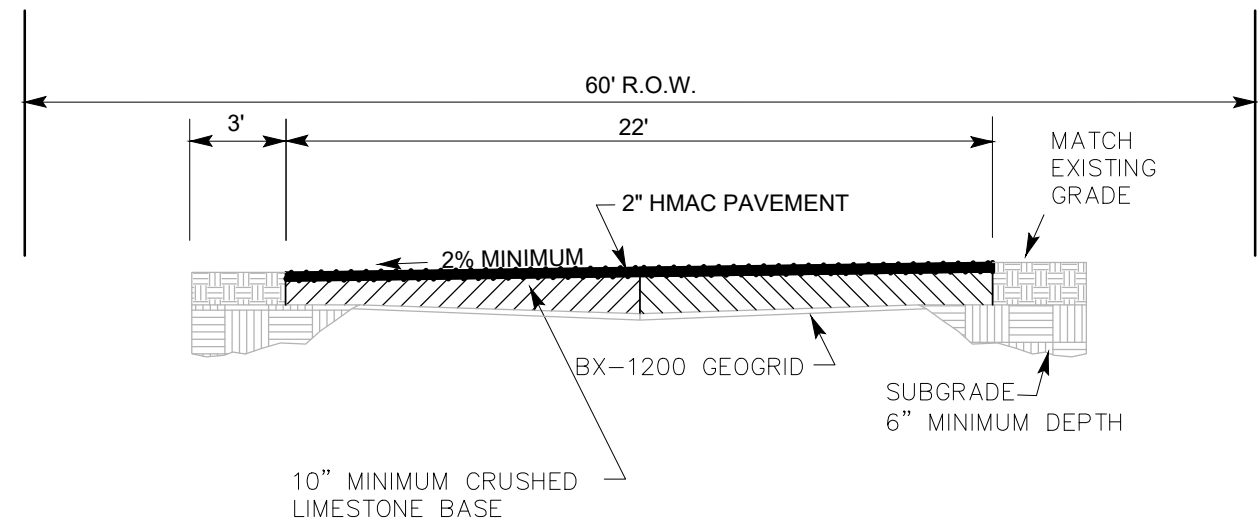


SCALE CALCULATION 1% SLOPE CONDITION			
$V_2 = 2.77 \text{ FTS}$	$HQ_2 = 0.63 \text{ FT}$	$Q_2 = 3.29 \text{ FTS}$	
$V_{25} = 3.67 \text{ FTS}$	$HQ_{25} = 0.96 \text{ FT}$	$Q_{25} = 10.23 \text{ FTS}$	
$V_{100} = 4.13 \text{ FTS}$	$HQ_{100} = 1.15 \text{ FT}$	$Q_{100} = 16.39 \text{ FTS}$	

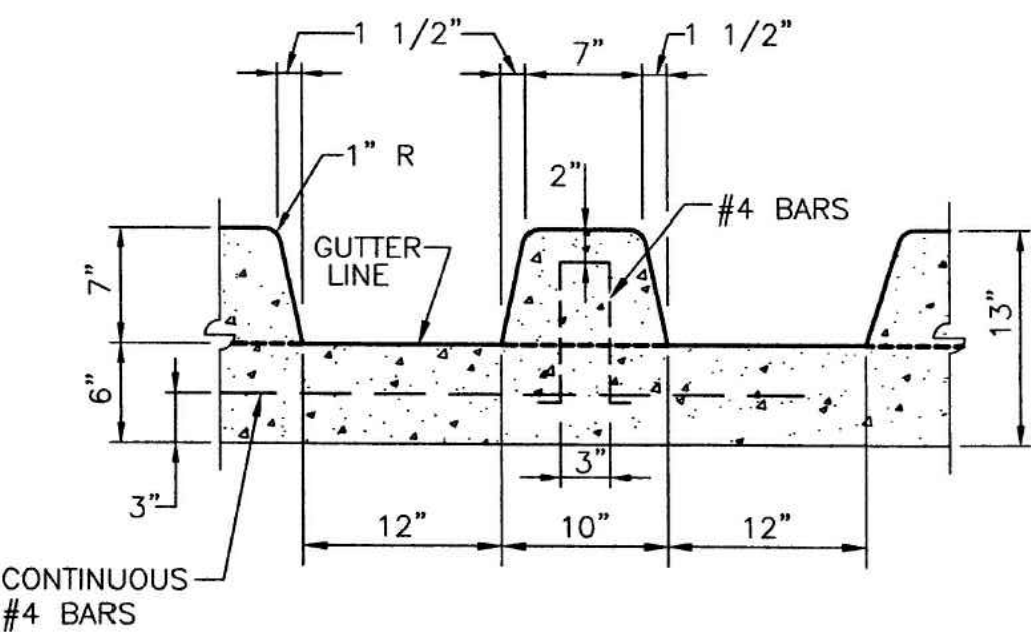
BAR DITCH SECTION
NOT TO SCALE



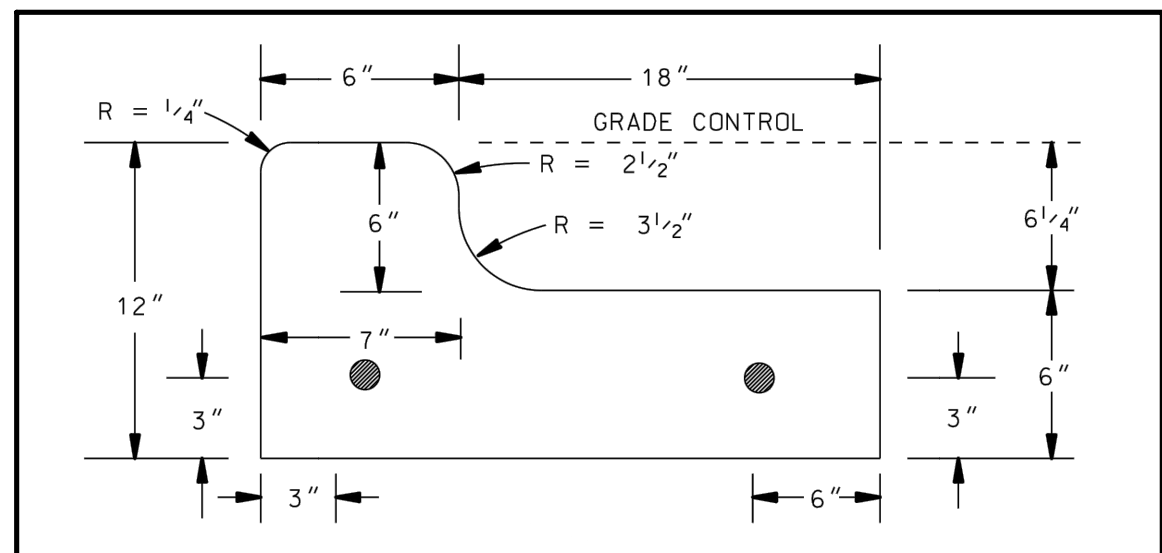
② BAR DITCH STA: 19+98.54 TO 22+62.63
N.T.S.



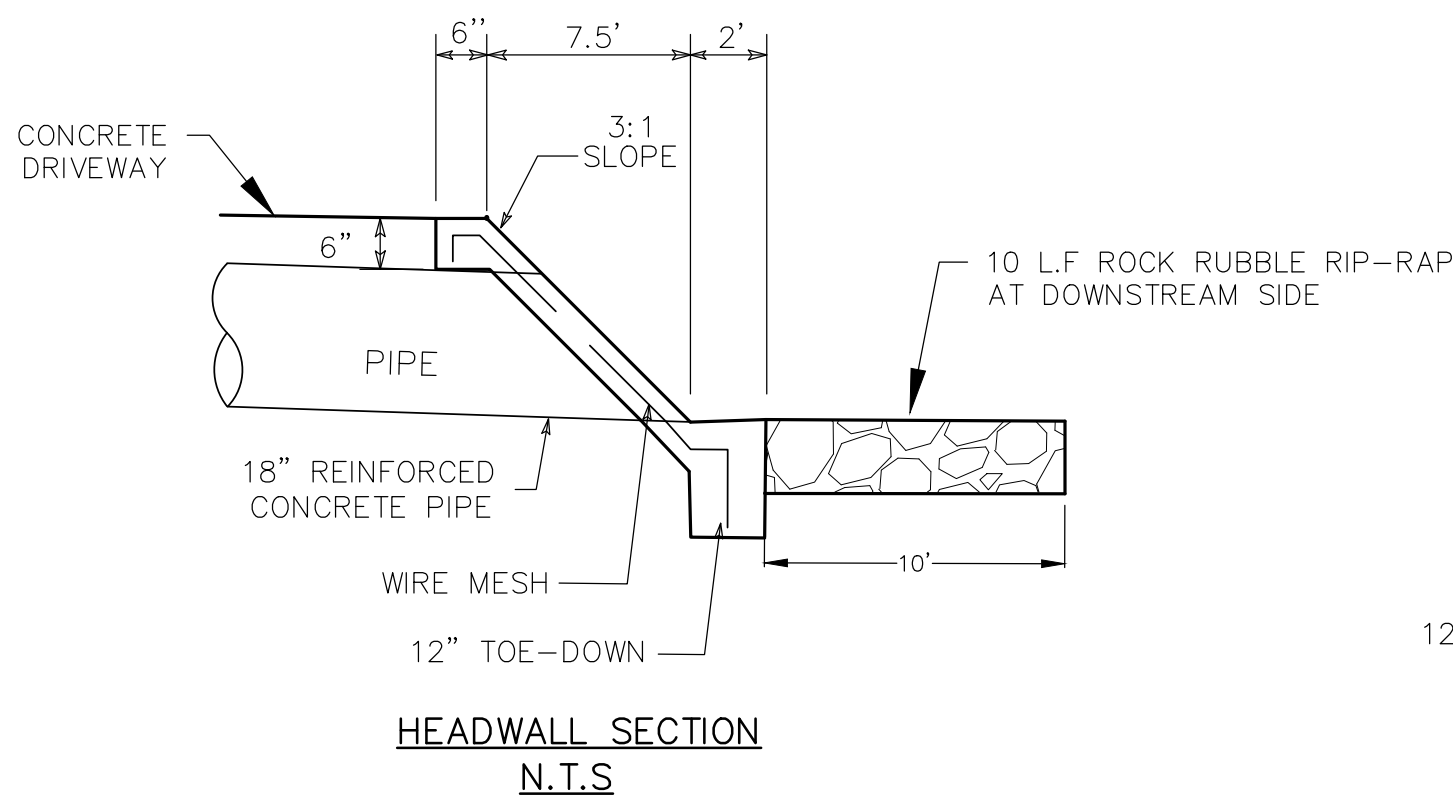
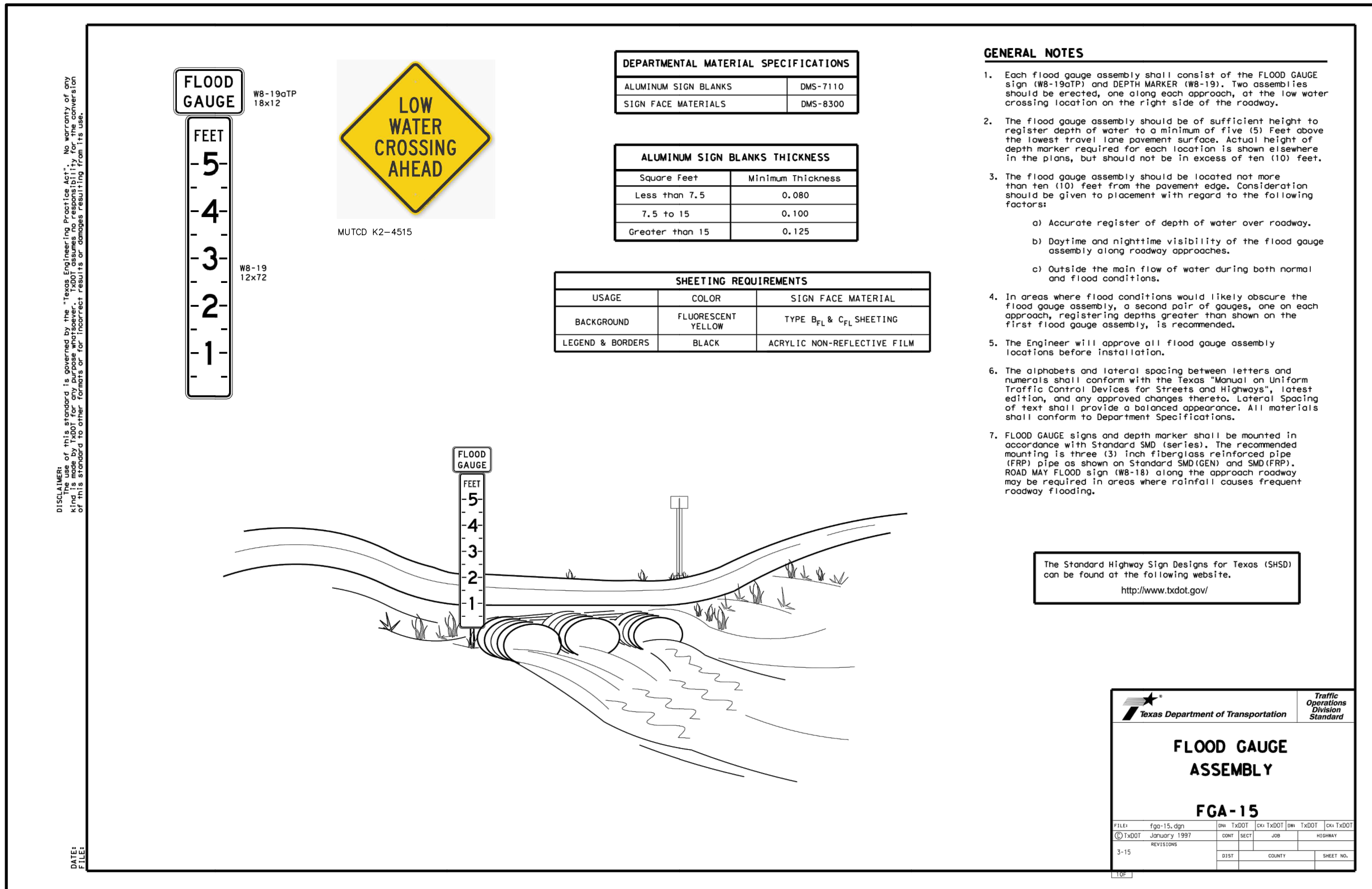
③ BX-1200 GEOGRID APPROX. STA: 23+50.00 TO END
N.T.S.



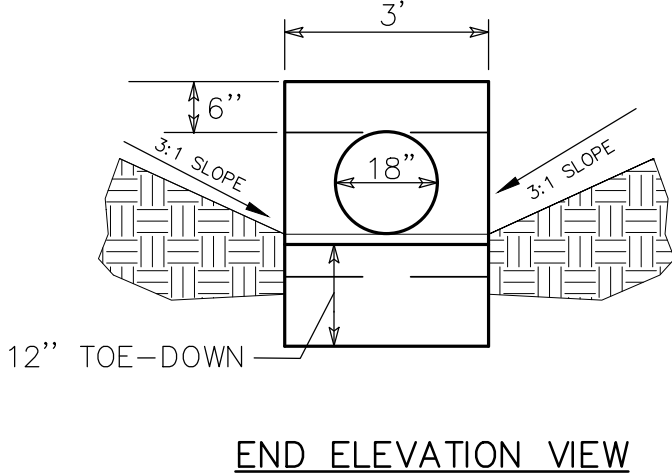
SAW TOOTH CURB
NOT TO SCALE



SAWTOOTH CURB SECTION
NOT TO SCALE



DRIVEWAY CULVERT DETAIL
NOT TO SCALE



END ELEVATION VIEW

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07/30/2020

SITE DETAILS

SMITH LEGACY
ESTATES

REVISION DATE

REVISION DESCRIPTION

NO.

DATE: JULY 2020

DRAWN BY: LB

DESIGNED BY: HLC

REVIEWED BY: CVH

HMT PROJECT NO.:

365.001

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C4.4



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

POSTED SPEED * S	FORMULA	MINIMUM DESIRABLE TAPER LENGTHS * **			SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES		MINIMUM SIGN SPACING "A" DISTANCE	SUGGESTED LONGITUDINAL BUFFER SPACE "B"
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT		
30	L= WS ² / 60	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* CONVENTIONAL ROADS ONLY
** TAPER LENGTHS HAVE BEEN ROUNDED OFF.
L=LENGTH OF TAPER(FT) W=WIDTH OF OFFSET(FT) S=POSTED SPEED(MPH)

- GENERAL NOTES
1. FLAGS ATTACHED TO SIGNS WHERE SHOWN, ARE REQUIRED.
 2. ALL TRAFFIC CONTROL DEVICES ILLUSTRATED ARE REQUIRED, EXCEPT THOSE DENOTED WITH THE TRIANGLE SYMBOL MAY BE OMITTED WHEN STATED ELSEWHERE IN THE PLANS, OR FOR ROUTINE MAINTENANCE WORK, WHEN APPROVED BY THE ENGINEER.
 3. THE DOWNSTREAM TAPER IS OPTIONAL. WHEN USED, IT SHOULD BE 100 FEET MINIMUM LENGTH PER LANE.
 4. FOR SHORT TERM APPLICATIONS, WHEN POST MOUNTED SIGNS ARE NOT USED, THE DISTANCE LEGEND MAY BE SHOWN ON THE SIGN FACE RATHER THAN ON A CW16-3AP SUPPLEMENTAL PLAQUE.
 5. A SHADOW VEHICLE WITH A TMA SHOULD BE USED ANYTIME IT CAN BE POSITIONED 30 TO 100 FEET IN ADVANCE OF THE AREA OF CREW EXPOSURE WITHOUT ADVERSELY AFFECTING THE PERFORMANCE OR QUALITY OF THE WORK. IF WORKERS ARE NO LONGER PRESENT BUT ROAD OR WORK CONDITIONS REQUIRE THE TRAFFIC CONTROL TO REMAIN IN PLACE, TYPE 3 BARRICADES OR OTHER CHANNELIZING DEVICES MAY BE SUBSTITUTED FOR THE SHADOW VEHICLE AND TMA.
 6. ADDITIONAL SHADOW VEHICLES WITH TMAS MAY BE POSITIONED IN EACH CLOSED LANE, ON THE SHOULDER OR OFF THE PAVED SURFACE, NEXT TO THOSE SHOWN IN ORDER TO PROTECT A WIDER WORK SPACE.
 7. ADVANCED WARNING SIGNS WILL REMAIN IN PLACE DURING THE DURATION OF THE DEVELOPMENT CONSTRUCTION FOR ADDITIONAL CONSTRUCTION VEHICLE TRAFFIC ENTERING AND EXITING THE DEVELOPMENT SITE.

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HMT
ENGINEERING & SURVEYING

OF TEXAS
CHRISTOPHER P. VAN HEERDE
93047
LICENSED
PROFESSIONAL ENGINEER
Chris Van Heerde, P.E.

07/30/2020

SHOULDER WORK
TRAFFIC CONTROL PLAN
SMITH LEGACY
ESTATES

NO.	REVISION DESCRIPTION	REVISION DATE

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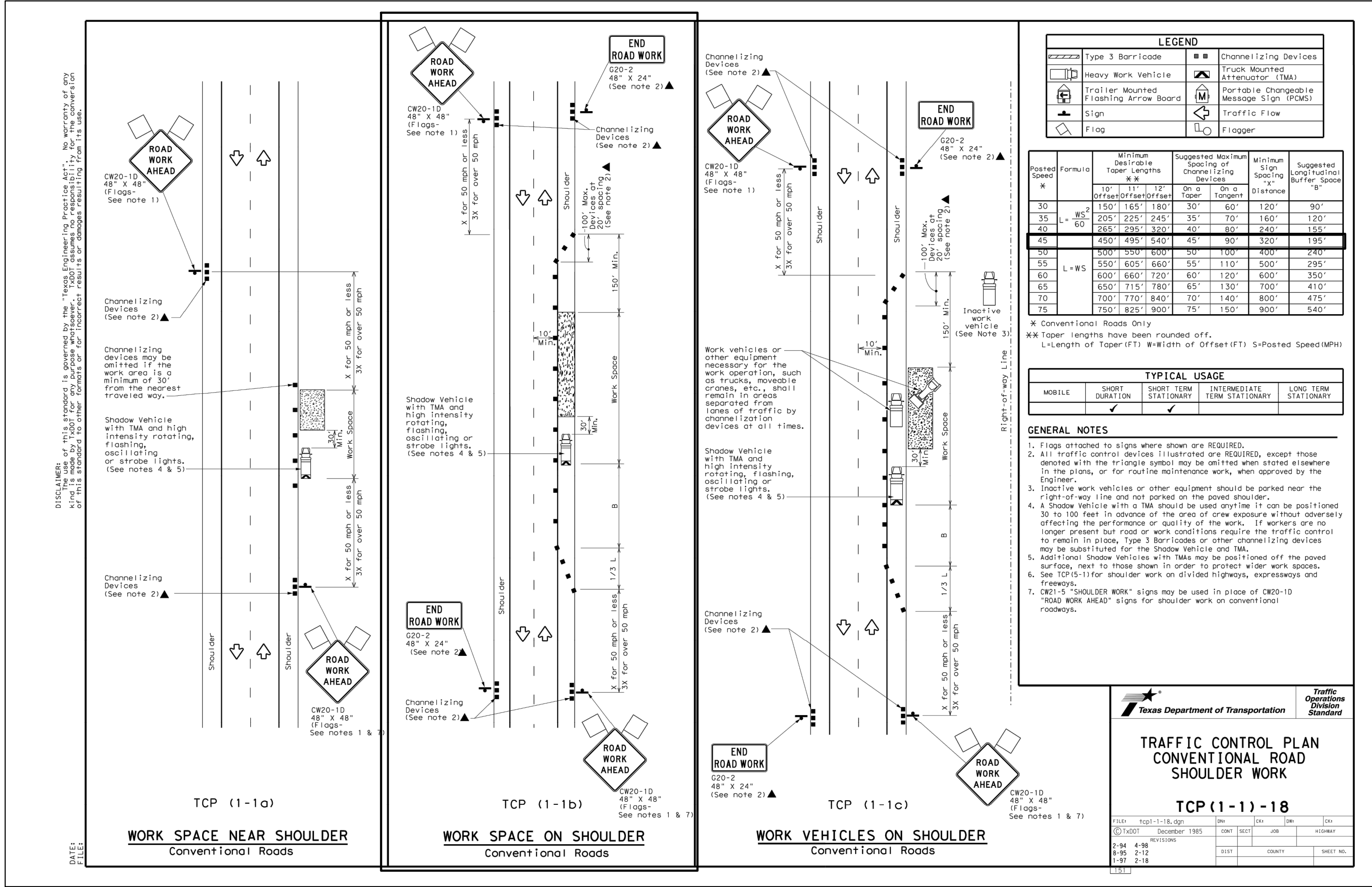
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**HMT**
ENGINEERING & SURVEYING


CHRISTOPHER P. VAN HEERDE
93047
LICENSED PROFESSIONAL ENGINEER
Chris Van Heerde, P.E.

07/30/2020

TRAFFIC CONTROL PLAN
STANDARD DETAIL
SMITH LEGACY
ESTATES

NO.	REVISION	DESCRIPTION	DATE

DATE: JULY 2020

DRAWN BY: LB

DESIGNED BY: HLC

REVIEWED BY: CWH

HMT PROJECT NO.: 365.001

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