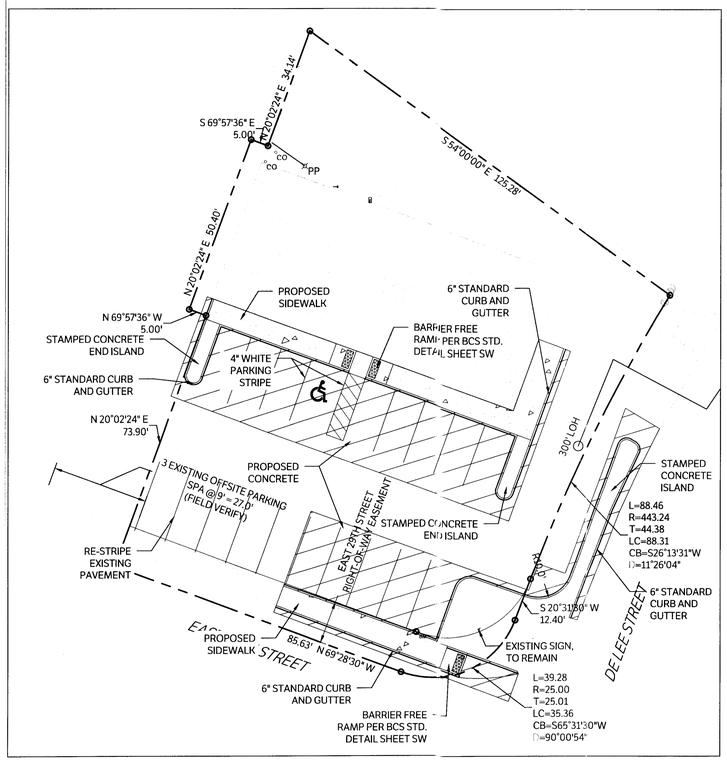
N

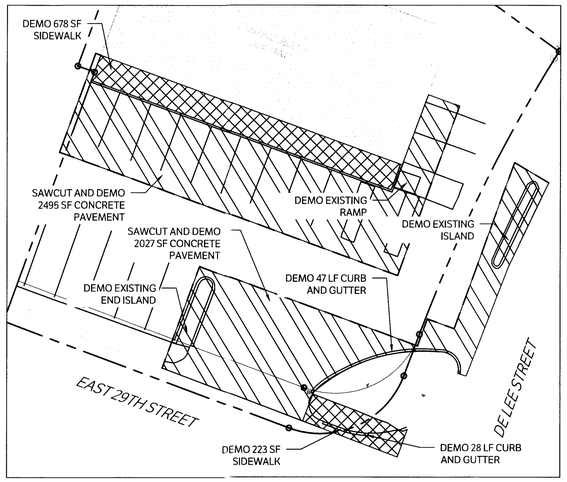
0 20 40 60
SCALE: 1"= 20'

CAUTION: CONTACT THE TEXAS EXCAVATION SAFETY SYSTEM (DIG-TESS) AT 1-800-344-8377 TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

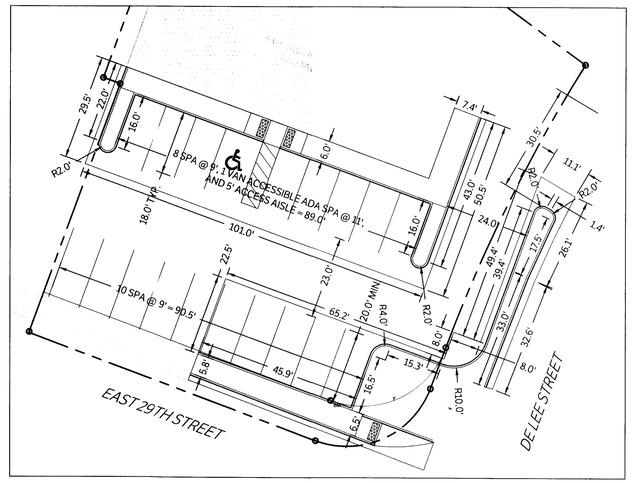
PROJECT BENCHMARK:
SQUARE CHISELED IN CONCRETE CURB
ELEV = 102.16



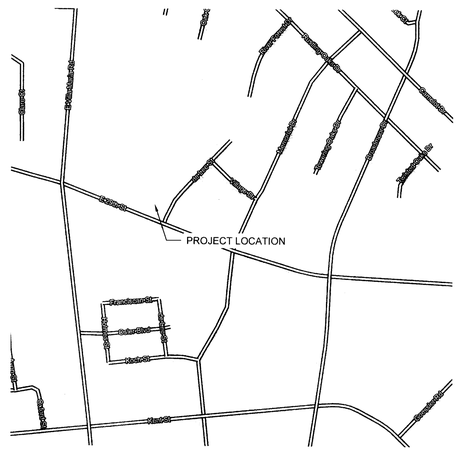
OVERALL SITE



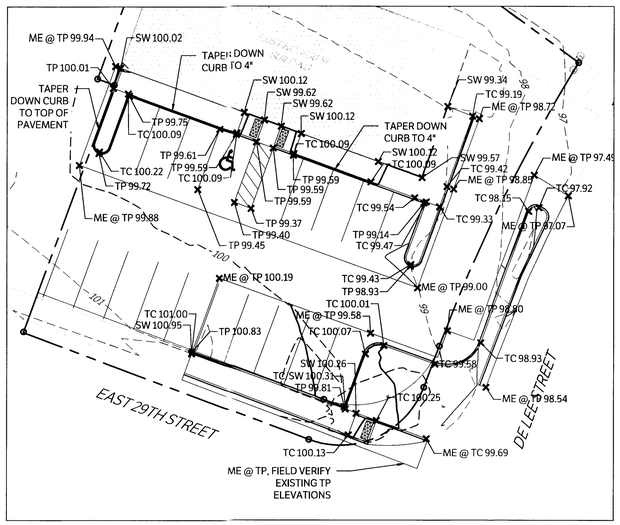
DEMOLITION PLAN



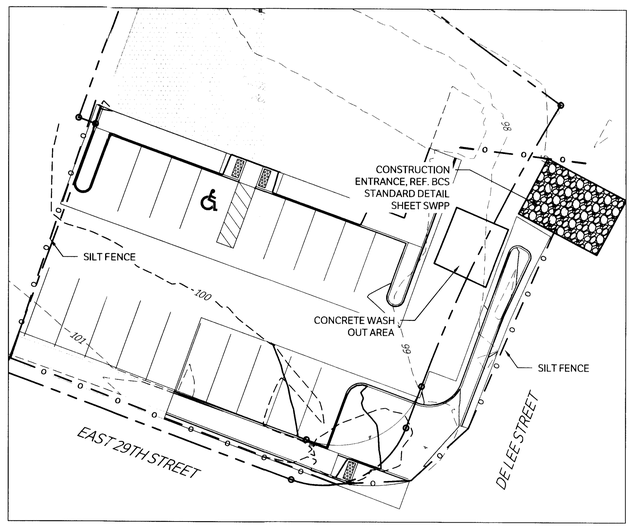
DIMENSION CONTROL PLAN



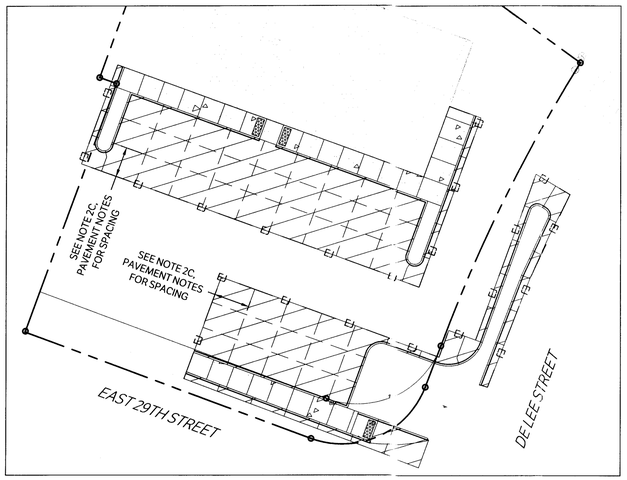
LOCATION MAP
NTS



GRADING PLAN



EROSION CONTROL PLAN



PAVING AND JOINT PLAN

LEGEND

- PROPOSED 5" CONCRETE PAVEMENT
- PROPOSED 4" CONCRETE SIDEWALK
- CONSTRUCTION ENTRANCE
- PROPERTY LINE
- EXISTING PAVEMENT EDGE
- 340 EXISTING MAJOR CONTOURS
- 341 EXISTING MINOR CONTOURS
- 340 PROPOSED MAJOR CONTOURS
- 341 PROPOSED MINOR CONTOURS
- SILT FENCE
- PAVEMENT CONTRACTION JOINT
- EJ EXPANSION JOINT

BUILDING DATA SUMMARY	
EXISTING USE:	COMMERCIAL
PROPOSED USE:	COMMERCIAL
NO. OF STORIES:	1
FIRM MAP NO:	48041C0215E (Not located in 100 year floodplain or floodway)

PARKING TABULATION	
PARKING REQUIREMENT:	RETAIL: 1/250 SF
TOTAL SF REQUIREMENT:	**3630 SF/ 250 = 15 SPACES**
TOTAL PARKING REQUIRED:	**15 SPACES**
EXISTING PARKING SPACES:	**17 SPACES**
TOTAL PROPOSED SPACES:	**19 SPACES (18 STD, 1 HC)**

SITE PLAN FOR:

SITE IMPROVEMENTS

2611 E 29TH STREET
BRYAN, TEXAS

0.3441 ACRES
LOT 1, BLOCK 1 REPLAT,
MEMORIAL VILLAGE
ZONING: C-2 RETAIL

OWNER:
MIKE GARRATT
5300 CASCADES COURT
COLLEGE STATION, TEXAS 77845-4641
TELEPHONE: 979-820-4224
CONTACT: MIKE GARRATT
EMAIL: LAYNESOFCS@YAHOO.COM

Development
MAR 19 2014
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MARCH 19, 2014
SHEET 1 OF 2

PREPARED BY:

GESSNER ENGINEERING
Corporate Office
2501 Ashford Drive
Suite 102
College Station, Texas 77840
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FIRM REGISTRATION NUMBER:
TBPE F-7451, TBPLS F-10193910

COLLEGE STATION 979.680.8840
BRENHAM 979.836.6855
FORT WORTH 817.405.0774
SAN ANTONIO 210.556.4124

GENERAL NOTES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SUBMITTALS OF PROPOSED CONSTRUCTION MATERIALS FOR APPROVAL BY THE DESIGN ENGINEER A MINIMUM OF 14 DAYS PRIOR TO REQUIRED USE.
2. THE DESIGN ENGINEER SHALL BE CONTACTED SHOULD A PRECONSTRUCTION MEETING BE HELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WITH THE ATTENDANCE OF THE DEVELOPER, DESIGN ENGINEER, THE CONTRACTOR AND SUBCONTRACTORS, AND ALL FRANCHISE UTILITY COMPANIES.
3. CUT SHEETS CERTIFIED BY A LICENSED SURVEYOR SHALL BE PROVIDED AS THEY BECOME AVAILABLE PRIOR TO CONSTRUCTION OF THE WORK COVERED BY THE CUT SHEETS.
4. THE CONTRACTOR SHALL NOTIFY THE TEXAS EXCAVATION SAFETY SYSTEM, OTHERWISE KNOWN AS DIG TESS, AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITY AT (800) 344-8377 OR (800) DIG-TESS. THE CONTRACTOR SHALL ALSO NOTIFY APPLICABLE UTILITY COMPANIES THAT HAVE UTILITY LINES ON OR IN THE GENERAL VICINITY OF THIS PROJECT SITE AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE STANDARDS AND SPECIFICATIONS. WHERE CONSTRUCTION DOCUMENTS CONFLICT WITH THOSE GUIDELINES, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

SITE PLAN NOTES:

1. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ONSITE FIELD CONDITIONS OR SPECIFICATIONS OF OTHER DISCIPLINES
2. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS, AS WELL AS INSPECTION APPROVALS.
3. A COPY OF APPROVED CONSTRUCTION PLANS SHALL BE KEPT ON SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS TO RECORD AS-BUILT CONDITIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTAINMENT AND PROPER DISPOSAL OF ALL LIQUID AND SOLID WASTE ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT THE OCCURRENCE OF WIND BLOWN LITTER FROM THE PROJECT SITE.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN AN ORDERLY PROJECT SITE. THE CONTRACTOR SHALL CLEAN AND REMOVE ANY SURPLUS OR DISCARDED MATERIALS, TEMPORARY STRUCTURES, AND DEBRIS FROM THE PROJECT SITE.
6. THE CONTRACTOR IS RESPONSIBLE FOR STORAGE AND SAFE-GUARDING OF ALL MATERIALS AND EQUIPMENT AT THE PROJECT SITE TO MAINTAIN A SAFE AND SECURE PROJECT.
7. THE CONTRACTOR SHALL COORDINATE SITE STORAGE WITH THE OWNER TO NOT OBSTRUCT DRIVES, ACCESS, OR OTHER OPERATIONAL REQUIREMENTS.
8. ANY ADJACENT RIGHT-OF-WAY (R.O.W.) OR PROPERTY AFFECTED DURING CONSTRUCTION, SHALL BE RETURNED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION, BENCHMARKS, AND MARKERS DURING CONSTRUCTION.
10. THE CONTRACTOR MUST PROVIDE CONSTRUCTION STAKING SERVICES BASED ON THE INFORMATION PROVIDED IN THE PLANS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES OR SERVICE LINES DURING THE CONSTRUCTION PROCESS. WHERE EXISTING UTILITIES OR SERVICE LINES ARE DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE UTILITY OR SERVICE LINE WITH THE SAME TYPE OF MATERIAL AND CONSTRUCTION, OR BETTER. ALL MATERIAL AND LABOR SHALL BE AT THE CONTRACTOR'S EXPENSE.
12. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND FEDERAL REGULATIONS REGARDING CONSTRUCTION ACTIVITIES NEAR ENERGIZED OVERHEAD ELECTRIC LINES.
13. THE CONTRACTOR ACKNOWLEDGES THAT THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES SHOWN ON THE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, CITY MAPS AND, WHEN POSSIBLE, FIELD MEASUREMENTS. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE.
14. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY 48 HOURS PRIOR TO EXCAVATION, AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS.

DEMOLITION NOTES:

1. AREAS BENEATH REMOVED PAVEMENT SHALL BE CLEARED OF ALL LOOSE OR DISTURBED MATERIAL OR WATER. THE AREA SHALL BE MANUALLY COMPACTED AND REPLACED WITH SIMILAR MATERIALS PRIOR TO NEW CONCRETE PLACEMENT.
2. CONTRACTOR TO PROTECT ALL EXISTING TREES TO REMAIN DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.

DIMENSION CONTROL NOTES:

1. THE CONTRACTOR MAY OBTAIN AN ELECTRONIC COPY OF PROJECT PLANS FOR CONSTRUCTION PURPOSES, WITH THE PERMISSION OF THE OWNER. THE ELECTRONIC FILE AND INFORMATION GENERATED, BY GESSNER ENGINEERING, FOR THIS PROJECT IS CONSIDERED BY GESSNER ENGINEERING, TO BE CONFIDENTIAL. WHEN ISSUED, IT'S USE IS INTENDED SOLELY FOR THE INDIVIDIUAL OR ENTITY TO WHICH IT IS ADDRESSED. THE MATERIAL IS INTENDED FOR USE BY THE RECIPIENT NAMED, ONLY, AND PERMISSION IS NOT GRANTED TO THE RECIPIENT FOR DISTRIBUTION OF THIS DOCUMENTS IN ANY FORM OR FASHION. THE RECIPIENT UNDERSTANDS THAT THIS DATA IS AUTHORIZED "AS IS" WITHOUT ANY WARRANTY AS TO ITS PERFORMANCE, ACCURACY, FREEDOM FROM ERROR, OR AS TO ANY RESULTS GENERATED THROUGHOUT ITS USE. THE RECIPIENT ALSO UNDERSTANDS AND AGREES THAT GESSNER ENGINEERING, UPON RELEASE OF SUCH DATA, IS NOT LONGER RESPONSIBLE FOR THEIR USE OR MODIFICATION. THE USER AND RECIPIENT OF THE ELECTRONIC DATA ACCEPTS FULL RESPONSIBILITY AND LIABILITY FOR ANY CONSEQUENCES ARISING OUT OF THEIR USE.
2. ALL DIMENSIONS SHOWN ARE TO BE USED IN CONJUNCTION WITH THE PLANS FOR LOCATING ALL IMPROVEMENTS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR FOR WORKABILITY PRIOR TO CONSTRUCTION OF THE IMPROVEMENTS.
3. UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BACK OF CURB.

GRADING NOTES:

1. ALL UNPAVED AREAS SHALL BE ADEQUATELY GRADED TO DRAIN AT A MINIMUM OF 2.0% SLOPE, UNLESS OTHERWISE NOTED, SO THAT NO PONDING OCCURS.
2. WHEN TOP OF CURB ELEVATIONS ARE SHOWN, THE CURB IS A STANDARD 6" CURB, UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE GRADING PLANS. MINOR ADJUSTMENTS TO THE ACTUAL ELEVATIONS SHOWN ON THE GRADING PLAN MAY BE REQUIRED TO MATCH EXISTING GROUND ELEVATIONS AND STRUCTURES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO ANY MODIFICATIONS.
4. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
5. THE APPROVAL OF THE PLANS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECT PROPERTY OWNER(S). ANY ADJACENT PROPERTY OR RIGHT-OF-WAY DISTURBED DURING CONSTRUCTION WILL BE RETURNED TO EXISTING CONDITIONS OR BETTER.
6. UNLESS OTHERWISE DETERMINED BY APPLICABLE GEOTECHNICAL REPORT, UNDER PROPOSED STREETS, PAVEMENT, AND STRUCTURES (INCLUDING SIDEWALKS), BACKFILL SHALL BE FINELY DIVIDED SOIL OR LIME TREATED SOIL AND SHALL BE COMPACTED IN LIFTS NO GREATER THAN 8" LOOSE THICKNESS TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698) WITH A MOISTURE CONTENT OF +/- 2% OF OPTIMUM.
7. TREATMENT SHALL BE ACCOMPLISHED SUCH THAT A UNIFORM SUBGRADE MIX IS OBTAINED. PRIOR TO THE APPLICATION OF LIME TO THE SUBGRADE, THE OPTIMUM PERCENTAGE TO BE ADDED SHOULD BE DETERMINED BASED ON TEX-121-E LABORATORY TESTS CONDUCTED ON MIXTURES OF THE SUBGRADE SOILS WITH VARYING PERCENTAGES. SUBGRADE SOIL SAMPLES SHOULD BE OBTAINED FROM THE PAVEMENT AREA AT THE PROPOSED FINAL SUBGRADE ELEVATION. THE LIME SHOULD INITIALLY BE BLENDED WITH A MIXING DEVICE SUCH AS PULVERMIXER AND SUFFICIENT WATER ADDED.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. WITHIN THE AREA OF CONSTRUCTION. THEY MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PAVEMENT AND GRADING.
9. SIDEWALKS SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS SLOPE NOT GREATER THAN 2%, UNLESS OTHERWISE NOTED.
10. HANDICAP ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS.
11. ALL SPOTS ARE TOP OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.
12. CONTRACTOR SHALL CONTACT GESSNER ENGINEERING IF DISCREPANCIES EXIST AT EXISTING GRADE TIE-INS.

EROSION CONTROL NOTES:

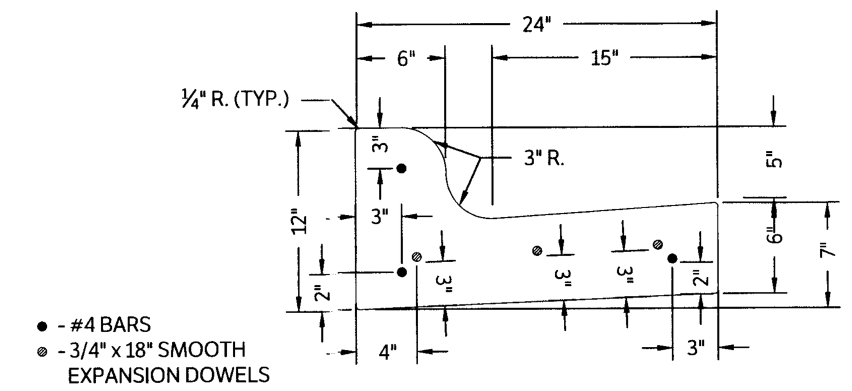
1. THE CONTRACTOR SHALL PROVIDE EROSION PROTECTION AT ALL LOCATIONS OF CONSTRUCTION.
2. THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
3. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
4. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING SEDIMENTS AND EROSION CONTROL.
5. A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.
6. ALL FINISHED GRADES ARE TO BE HYDRO-MULCHED, SPOT SODDED OR SEEDED AND WATERED UNTIL GROWTH IS ESTABLISHED.

PAVEMENT NOTES:

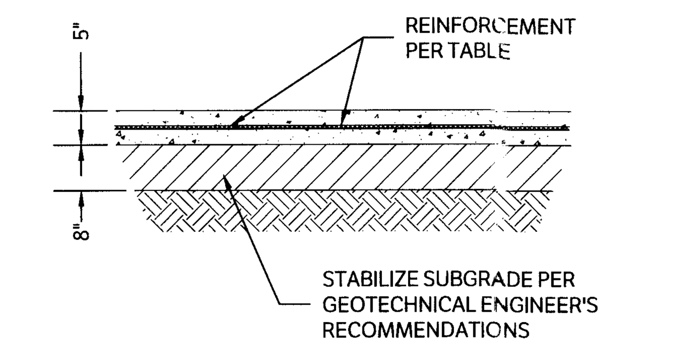
1) SUBGRADE:
   A. EXISTING TREES, STUMPS, AND ROOTS SHALL BE GRUBBED AND REMOVED. VEGETATION SHALL BE REMOVED AND THE TOP 6" OF TOPSOIL AND SUBGRADE STRIPPED FROM THE AREAS TO BE COVERED BY PROPOSED IMPROVEMENTS.
   B. PAVING AREAS SHALL BE PROOFROLLED WITH A 15 TON COMPACTOR AND, IF REQUIRED AT THE TIME OF CONSTRUCTION , THE CONTRACTOR SHALL STABILIZE WEAK AREAS BY OVER EXCAVATING AND BACKFILLING.
   C. FILL MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS, MAXIMUM, WITH EACH LIFT AT A MOISTURE CONTENT OF +/- 2% OF OPTIMUM, AND COMPACTED TO A UNIFORM DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698).
   D. COMPACTION TEST SHALL BE CONDUCTED FOR EVERY 4,000 SF OF FILL PLACED, WITH A MINIMUM OF ONE TEST PER LIFT.
2) CONCRETE PAVEMENT:
   A. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
   B. ALL CONCRETE SHALL BE VIBRATED WHEN PLACED.
   C. PAVEMENT CONTRACTION JOINTS SHALL BE INSTALLED PER DETAIL SHEET , WITH A MAXIMUM SPACING OF 10' FOR 5" THICK PAVEMENT, 8' FOR 4" THICK SIDEWALKS OR MATCHING THE WIDTH OF THE SIDEWALK WHERE IT IS LESS THAN 8' WIDE. CONTRACTION JOINTS SHALL BE INSTALLED BETWEEN 2 AND 6 HOURS OF CONCRETE PLACEMENT AS CONCRETE CURING ALLOWS. AN EARLY ENTRY SAW IS PREFERRED.
   D. PAVEMENT EXPANSION JOINTS SHALL BE SPACED AS SHOWN ON THE PLANS AND INSTALLED PER DETAIL. CONSTRUCTION SHALL BE STOPPED AT EXPANSION JOINTS. IF CONDITIONS REQUIRE, CONSTRUCTION TO BE STOPPED AT OTHER LOCATIONS, A COLD JOINT SHALL BE CONSTRUCTED.
   E. ISOLATION JOINTS SHALL BE PLACED AT ALL IN-PAVEMENT OBJECTS INCLUDING INLETS, LIGHT POLE FOOTINGS AND CLEANOUTS.
   F. ALL JOINTS SHALL BE SEALED PER DETAIL.
   G. REFERENCE C7.0 FOR PAVEMENT AND SIDEWALK CONSTRUCTION DETAILS.
   H. TRANSPORTATION AND PLACEMENT OF THE CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301. A TEST SET CONSISTING OF 3 CYLINDERS SHALL BE TAKEN EVERY 75 CUBIC YARDS OF CONCRETE.

5) REINFORCING STEEL:
   A. ALL REINFORCEMENT SHALL BE ASTM A-615, GRADE 60. THE PAVEMENT REINFORCEMENT SHALL BE #4 BARS, 16" OCEW, AND THE SIDEWALK SHALL BE REINFORCED WITH #4 BARS, 16" OCEW OR #3 BARS, 12" OCEW.
   B. LAPS AND SPLICES IN REINFORCING BARS SHALL BE A MINIMUM OF 30 BAR DIAMETERS IN LENGTH. BARS SHALL BE SECURED AT EVERY OTHER INTERSECTION.

NOTE:
TYPE "G" EXPANSION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, P.T.S, AND P.C.S. TYPE "B" CONTRACTION JOINTS IN CURB & GUTTER SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.

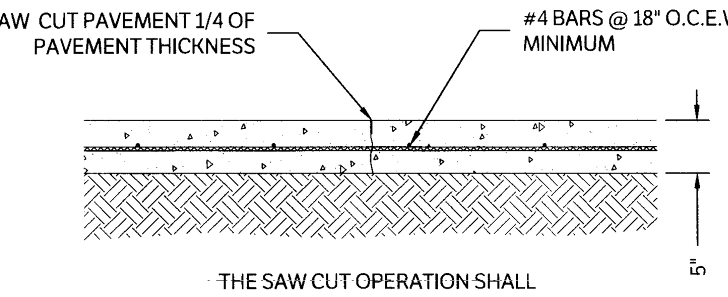


CURB & GUTTER SECTION
NTS



NOTES:
1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI

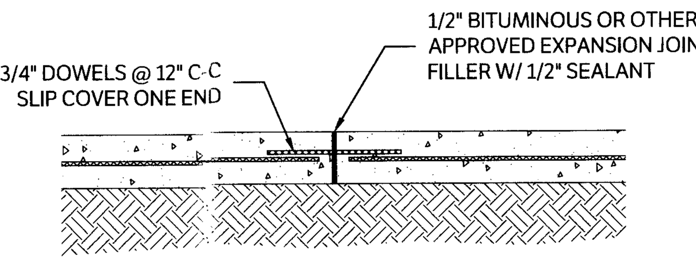
CONCRETE PAVEMENT
NTS



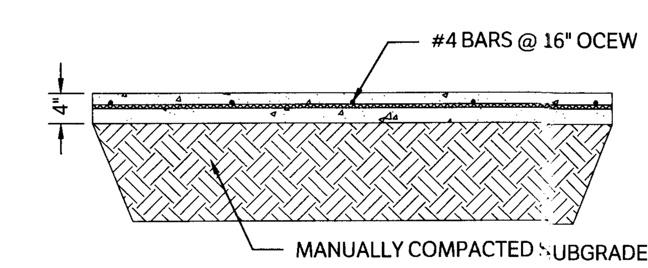
THE SAW CUT OPERATION SHALL BEGIN WITHIN 2 TO 6 HRS OF CONCRETE PLACEMENT

NOTES:
1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI
2. ISOLATION JOINTS SHALL BE PLACED AS SHOWN ON THE JOINT PLAN
   a. AT INTERSECTIONS
   b. AT SMALL IN-PAVEMENT OBJECTS
3. BOX OUT INLETS AND MANHOLES

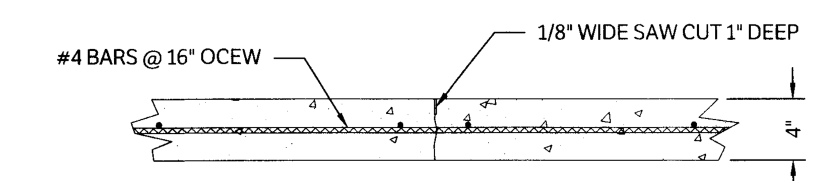
CONTROL JOINT
NTS



EXPANSION JOINT
NTS

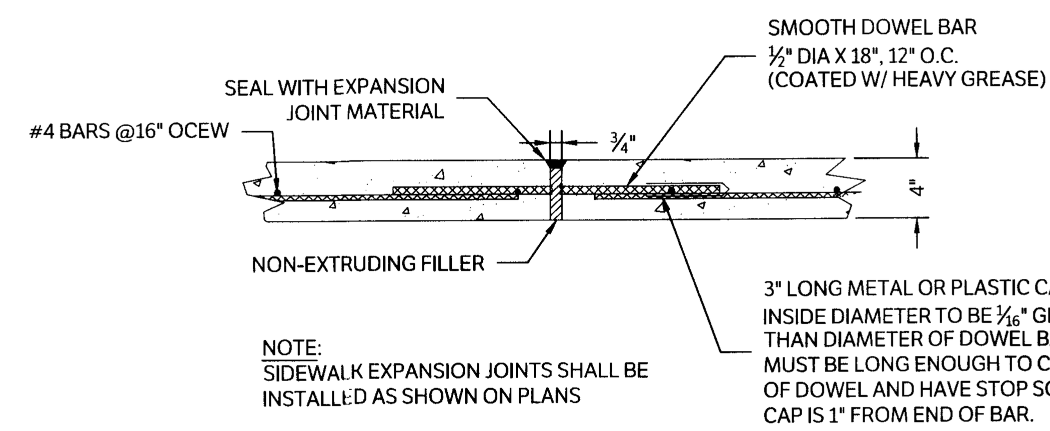


SIDEWALK SECTION
NTS



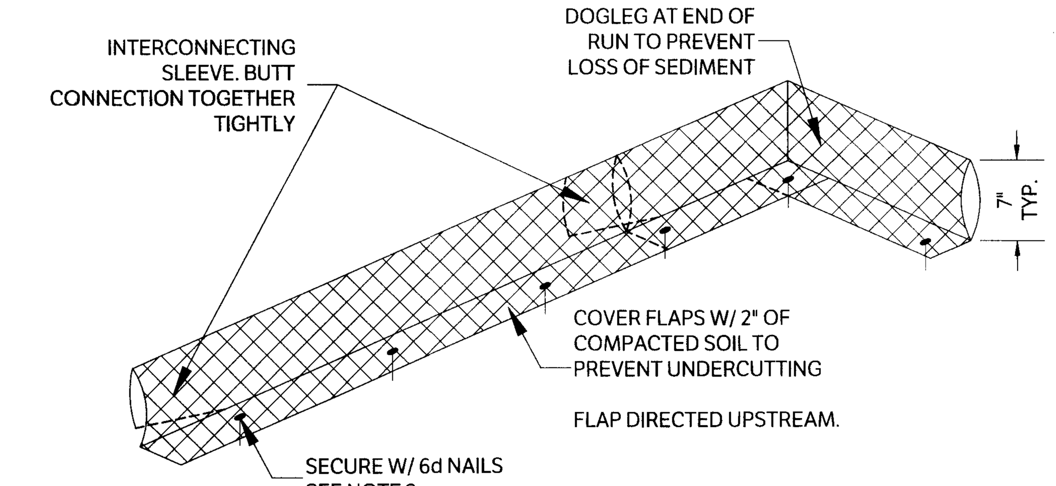
NOTE: SIDEWALK CONTRACTION JOINT SPACING SHALL BE EQUAL TO SIDEWALK WIDTH.

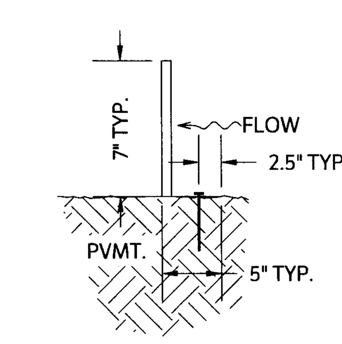
SIDEWALK CONTRACTION JOINT
NTS



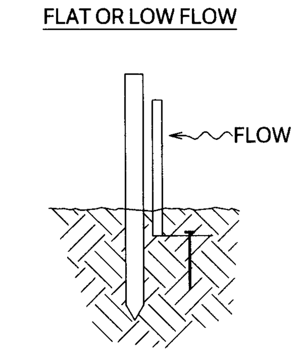
NOTE:
SIDEWALK EXPANSION JOINTS SHALL BE INSTALLED AS SHOWN ON PLANS

SIDEWALK EXPANSION JOINT
NTS

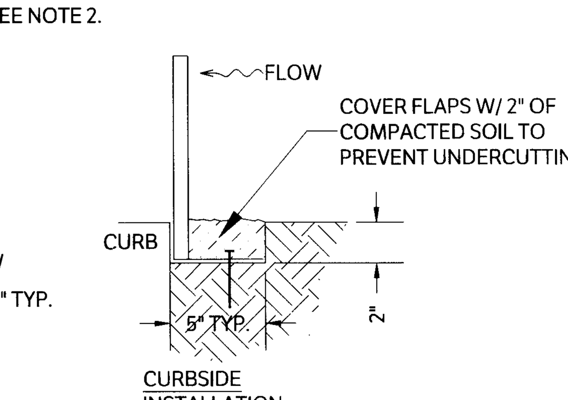




FLAT OR LOW FLOW



SLOPE OR HIGH FLOW



CURBSIDE INSTALLATION

NOTES:
1. INSTALL NAILS FLUSH WITH NETTING SO NETTING IS IN TIGHT CONTACT WITH SOIL.
2. USE 6" NAILS (6d BRIGHT COMMON). INSTALL 3 NAILS PER 7 FT. SEGMENT. DO NOT INSTALL NAIL IN THE OVERLAP BETWEEN SECTIONS.
3. COVER FLAP WITH 2" OF COMPACTED SOIL TO PREVENT UNDERCUTTING.
4. ON A SLOPE, CHANNEL, OR HIGH FLOW AREA, INSTALL ONE WOODEN STAKE EVERY 5 FT. ON THE DOWNSLOPE SIDE.
5. IN A CURBSIDE INSTALLATION WITH HEAVY VEHICULAR TRAFFIC, INSTALL AGAINST THE CURB WITH THE FLAP DIRECTED UPSTREAM. TRENCH AND ANCHOR WITH NAILS AS INDICATED ABOVE.
6. ADDITIONAL INFORMATION FOR PERIMETER GUARD SCF MANUFACTURED BY ERTEC ENVIRONMENTAL SYSTEMS AVAILABLE ON THE MANUFACTURER'S WEBSITE (EQUIVALENT PRODUCTS APPROVED BY THE CITY OF COOLEGE STATION ARE ALLOWED).

'PERIMETER GUARD' SEDIMENT CONTROL SILT FENCE DETAIL
NTS

SITE PLAN FOR:

SITE IMPROVEMENTS

2611 E 29TH STREET
BRYAN, TEXAS

0.3441 ACRES
LOT 1, BLOCK 1 REPLAT,
MEMORIAL VILLAGE
ZONING: C-2 RETAIL

OWNER:
MIKE GARRATT
5300 CASCADES COURT
COLLEGE STATION, TEXAS 77845-4641
TELEPHONE: 979-820-4224
CONTACT: MIKE GARRATT
EMAIL: LAYNESOFCS@YAHOO.COM

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SAN ANTONIO 210.556.4124

STATE OF TEXAS
MELISSA P. THOMAS
98398
LICENSED PROFESSIONAL ENGINEER

PRELIMINARY FOR REVIEW ONLY

MARCH 19, 2014
SHEET 2 OF 2

NOTE:
TEMPORARY DEVICES AROUND STORMS DRAINS ARE USED TO DETAIN AND/OR FILTER SEDIMENT-LADEN RUNOFF. THE PROTECTION ALLOWS SEDIMENT TO SETTLE PRIOR TO DISCHARGE INTO A STORM DRAIN INLET OR CATCH BASIN.

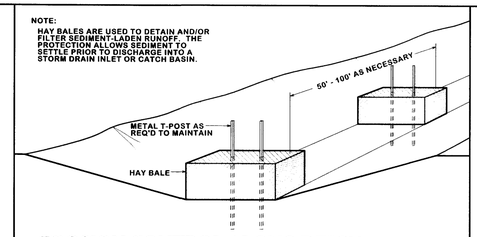
SAND BAGS SHALL BE UV RESISTANT AND MUST NOT DEGRADE DUE TO ATMOSPHERIC CONDITIONS.

SAND BAGS SHALL BE REPLACED UPON FIRST SIGN OF DETERIORATION.

STORM DRAIN INLET PROTECTION

SWPP1-00

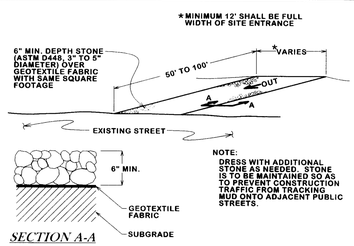
NOTE:
HAY BALES ARE USED TO DETAIN AND/OR FILTER SEDIMENT-LADEN RUNOFF. THE PROTECTION ALLOWS SEDIMENT TO SETTLE PRIOR TO DISCHARGE INTO A STORM DRAIN INLET OR CATCH BASIN.



EROSION CONTROL ALONG DITCH

SWPP1-01

* MINIMUM 12' SHALL BE FULL WIDTH OF SITE ENTRANCE

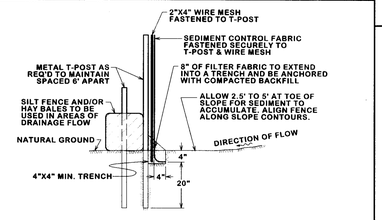


NOTE:
DRESS WITH ADDITIONAL STONE AS NEEDED. STONE IS TO BE MAINTAINED SO AS TO PREVENT CONSTRUCTION TRAFFIC FROM TRACKING MUD ONTO ADJACENT PUBLIC STREETS.

SECTION A-A

CONSTRUCTION EXIT SILT CONTROL

SWPP1-02



SILT FENCE ASSEMBLY

SWPP1-03

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 CALENDAR DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

BRYAN - COLLEGE STATION STANDARD STORM WATER POLLUTION PREVENTION DETAILS

REVISIONS:

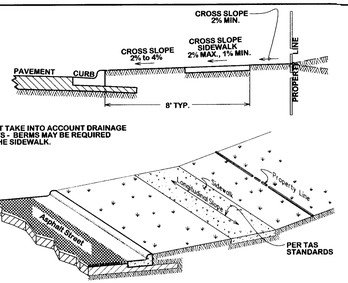
CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: C.L.M.
DATE: 08-01-12
SCALE: N T S
APPROVED: W. P. K.

FIGURE:
SWPP

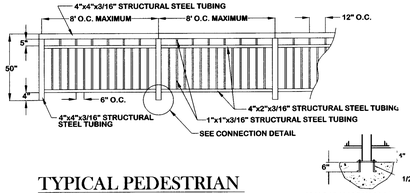
SHEET 1 OF 1



NOTE:
THIS DOES NOT TAKE INTO ACCOUNT DRAINAGE REQUIREMENTS - BERMS MAY BE REQUIRED OUTSIDE OF THE SIDEWALK.

SIDEWALK SLOPE REQUIREMENTS

SW1-00



TYPICAL PEDESTRIAN GUARDRAIL

CONNECTION DETAIL

SW1-01

GENERAL NOTES:

ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY SLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED. BARED AREAS SHALL BE SEEDED OR SODDED WITHIN 14 DAYS OF LAST DISTURBANCE.

APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

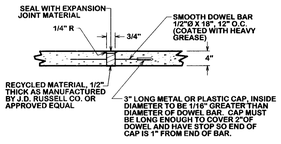
ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.

ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAVEMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TXDOT STANDARDS

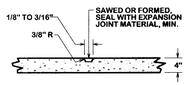
REFER TO SPEC 31 17 23.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.

NOTES:

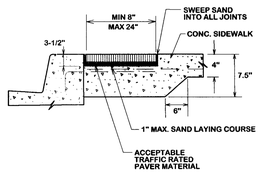
1. SIDEWALK PLACEMENT SHALL BE IN ACCORDANCE WITH B/CS UNIFIED DESIGN GUIDELINES.
2. FINISH: LIGHT BROOM FINISH. JOINTS TO BE TOOLED 1" DEEP AT AN INTERVAL EQUAL TO THE SIDEWALK WIDTH. EXPANSION JOINTS @ 40' O.C.,CONTRACTION JOINTS @ 4' O.C.
3. DOWEL IN AND TIE TO ANY CONCRETE STRUCTURE ADJACENT TO SIDEWALK (DRIVEWAY, INLET BOX, CURB, JUNCTION BOX, ETC.) WITH #3 x 12" BARS @ 12" O.C. OR #4 x 12" BARS @ 18" O.C.
4. COMPACTION: COMPACTED SUBGRADE MATERIAL COMPACTED TO A DENSITY AT LEAST 98% OF MAXIMUM DRY DENSITY AS DETERMINED BY PROCTOR COMPACTION TEST ASTM D698 (STANDARD) AND SHALL BE 0-4% WET OF THE OPTIMUM MOISTURE CONTENT
5. A MINIMUM CLEAR PEDESTRIAN WIDTH AS DEFINED BY TAS AND ADA SHALL BE PROVIDED FOR ENTIRE LENGTH OF SIDEWALK.



SIDEWALK EXPANSION & CONSTRUCTION JOINT

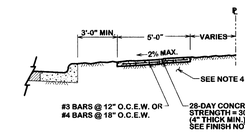


SIDEWALK CONTRACTION JOINT

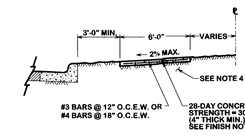


SIDEWALK PAVER SECTION

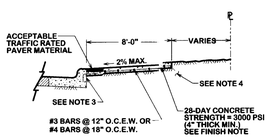
CONCRETE SIDEWALK



ALONG LOCAL STREETS

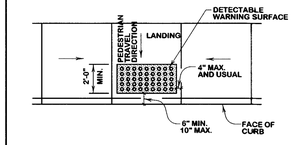


ALONG MINOR COLLECTORS AND LARGER



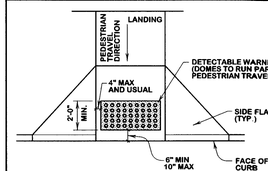
ALONG MINOR COLLECTORS AND LARGER

SW1-02



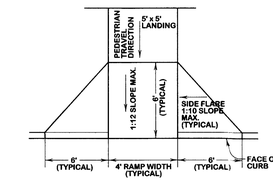
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE

SW2-00



TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN

SW2-01



TYPICAL AMBULATORY RAMP W/ FLARED WINGS

SW2-02

CROSSWALKS:

CROSSWALK MARKINGS ARE IMPORTANT TRAFFIC CONTROL DEVICES AT CONTROLLED INTERSECTIONS. THESE DEVICES IDENTIFY THE APPROPRIATE LOCATION FOR PEDESTRIANS TO CROSS THE INTERSECTION AS WELL AS INFORMING DRIVERS WHERE PEDESTRIANS MAYBE PRESENT. NOT ALL LOCATIONS NEED THE CROSSWALKS MARKED; HOWEVER, TYPICALLY COLLECTOR AND ARTERIAL STREETS DO. AS STATED IN THE TMUTCD, AN ENGINEERING STUDY SHOULD BE PERFORMED BEFORE CROSSWALKS ARE INSTALLED AT LOCATIONS OTHER THAN CONTROLLED INTERSECTIONS.

THE CITY OF BRYAN'S PREFERENCE FOR MARKING CROSSWALKS IS THE LONGITUDINAL OR "LADDER" STYLE. ON COLLECTOR STREETS OR HIGHER, THE PREFERENCE IS THE TYPICAL "TRANSVERSE" STYLE; HOWEVER, IN THE NORTHGATE AREA, ADJACENT TO SCHOOL OR SCHOOL ZONES, AND OTHER HIGH PEDESTRIAN CROSSINGS, THE LONGITUDINAL OR "LADDER" STYLE IS PREFERRED. DEVIATION FROM THESE PREFERENCES WILL BE ALLOWED ONLY WITH THE APPROVAL OF THE CITY ENGINEER.

THE LONGITUDINAL STYLE MARKING SHALL BE 24" WIDE AND 8 FEET IN LENGTH, SPACED 48-INCHES APART. THE TRANSVERSE MARKINGS SHALL CONSIST OF TWO 12-INCH WIDE LINES SEPARATED BY 6 FEET OF UNMARKED PAVEMENT. ALL CROSSWALK PAVEMENT MARKINGS SHALL ALWAYS MEET TXDOT'S SPECIFICATION FOR TYPE I MARKINGS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

ADDITIONAL INFORMATION ABOUT CROSSWALK MARKINGS CAN BE FOUND IN THE TMUTCD.

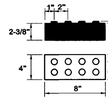
CROSSWALKS WITH BRICK PAVERS, STAMPED ASPHALT, STAMPED CONCRETE, ETC., SHALL ALSO REQUIRE RETRO-REFLECTIVE, THERMOPLASTIC TRANSVERSE STRIPING.

DETECTABLE WARNINGS GENERAL NOTES:

1. CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES COMPLYING WITH SECTION 4.29 OF THE TEXAS ACCESSIBILITY STANDARDS (TAS). THE SURFACE MUST CONTRAST VISUALLY WITH ADJOINING SURFACES, INCLUDING SIDE FLARES. FURNISH DARK BROWN OR DARK RED DETECTABLE WARNING SURFACE ADJACENT TO UNCOLORED CONCRETE, UNLESS SPECIFIED ELSEWHERE IN THE PLANS.
2. DETECTABLE WARNING SURFACES MUST BE SLIP RESISTANT AND NOT ALLOW WATER TO ACCUMULATE.
3. ALIGN TRUNCATED DOMES IN THE DIRECTION OF PEDESTRIAN TRAVEL WHEN ENTERING THE STREET.
4. SHADED AREAS ON SHEETS 3 AND 4 INDICATE THE APPROXIMATE LOCATION FOR THE DETECABLE WARNING SURFACE FOR EACH CURB RAMP TYPE.
5. DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL, AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING WHERE THE PEDESTRIAN ACCESS ROUTE ENTERS THE STREET.
6. DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS A MINIMUM OF 6" AND A MAXIMUM OF 10" FROM THE EXTENSION OF THE FACE OF CURB. DETECTABLE WARNING SURFACES MAY BE CURVED ALONG THE CORNER RADIUS.
7. ACCEPTABLE PAVER MATERIAL SHALL BE CLAY, VITRIFIED POLYMER COMPOSITE, PRECAST POLYMER CONCRETE, AND CONCRETE.

PEDESTRIAN FACILITIES GENERAL NOTES:

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. ADJUST CURB RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS AS DIRECTED.
2. LANDINGS SHALL BE A 5' X 5' MINIMUM WITH A MAXIMUM 2% SLOPE IN ANY DIRECTION.
3. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 4' X 4', WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
4. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND CURB RAMP IS 2%.
5. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, EITHER BECAUSE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR BECAUSE THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED. OTHERWISE, PROVIDE FLARED SIDES.
6. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT RELECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND 16 TAC §8.102.
7. TO SERVE AS A PEDESTRIAN REFUGE AREA, THE MEDIAN SHOULD BE A MINIMUM OF 5' WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
8. CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, CURB RAMPS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
9. EXISTING FEATURES THAT COMPLY WITH TAS MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
10. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. PROVIDE CURB RAMPS WHEREVER ON ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
11. SEPARATE CURB RAMP AND LANDINGS FROM ADJACENT SIDEWALK AND ANY OTHER ELEMENTS WITH PREMOLD OR BOARD JOINT OF 3/4" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. PROVIDE A SMOOTH TRANSITION WHERE THE CURB RAMPS CONNECT TO THE STREET.
13. FLARE SLOPE SHALL NOT EXCEED 10% MEASURED ALONG CURB LINE.

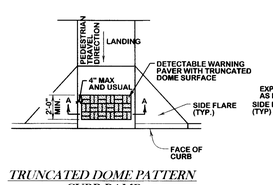


DETECTABLE WARNING PAVER

GENERAL NOTES (PAVERS)

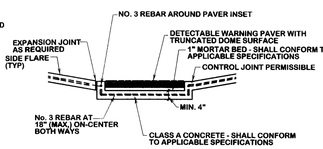
FURNISH DETECTABLE WARNING PAVER UNITS MEETING ALL REQUIREMENTS OF ASTM C-936, C-33. LAY IN A TWO BY TWO UNIT BASKET WEAVE PATTERN OR AS DIRECTED.

LAY FULL-SIZE UNITS FIRST FOLLOWED BY CLOSURE UNITS CONSISTING OF AT LEAST 25 PERCENT OF A FULL UNIT. CUT DETECTABLE WARNING PAVER UNITS USING A POWER SAW.



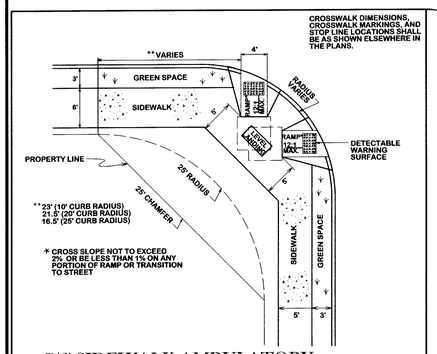
TRUNCATED DOME PATTERN CURB RAMP

DETECTABLE WARNING PAVER



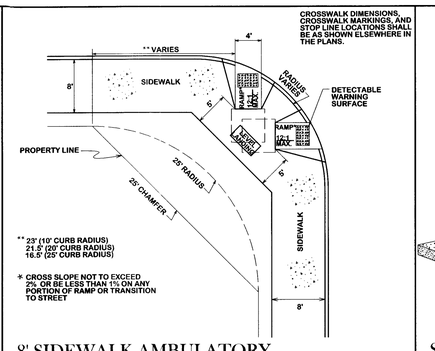
SECTION A-A

SW2-03



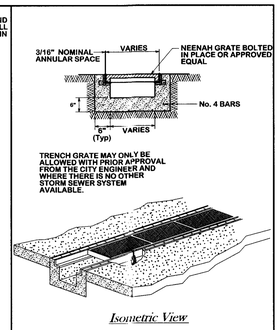
5'/6' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION

SW3-00



8' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION

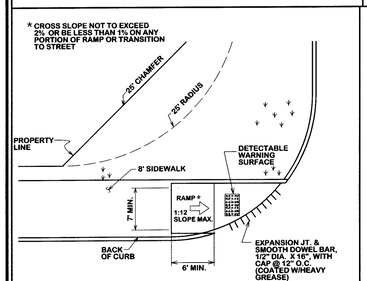
SW3-01



Isometric View

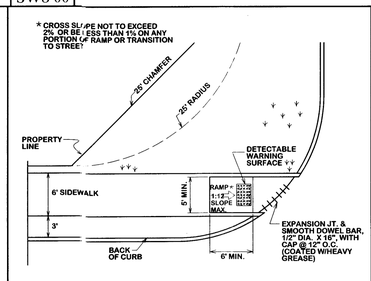
SIDEWALK DRAINAGE TRENCH GRATE

SW3-02



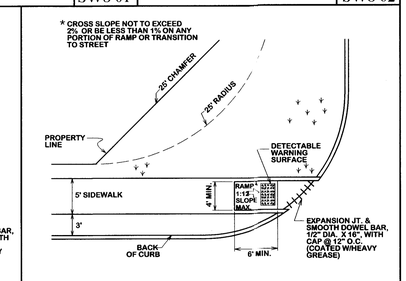
8' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES

SW3-03



6' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES

SW3-04



5' SIDEWALK AMBULATORY RAMP AT STREET INTERSECTION & DRIVES

SW3-05

REVISIONS:

BRYAN - COLLEGE STATION STANDARD SIDEWALK DETAILS

CITY OF COLLEGE STATION

CITY OF BRYAN
The Good Life, Texas Style.

DRAWN BY: C.L.M.
DATE: 08-01-12
SCALE: N T S
APPROVED: W. P. K.
FIGURE:
SW
SHEET 1 OF 1