

NOTES:

1. EXISTING CURB AND GUTTER TO BE SAW CUT, REMOVED AND REPLACED. DOWEL STEEL FOR MINMUM REINFORCING OVERLAP OF 10 INCHES (10") DOWELS SHALL BE EIGHTEEN INCHES (18") LONG AND EPOXIED A MINIMUM OF (8") EIGHT INCHES INTO EXISTING PAVEMMENT.
2. IF SIDEWALKS ARE NEITHER EXISTING NOR PROPOSED WHERE CURB RAMP ACCESS IS REQUIRED, CONCRETE SIDEWALKS SURFACE 4 1/2" THICK SHALL BE INSTALLED TO PROVIDE ACCESS TO THE PEDESTRIAN PUSH BUTTONS.
3. DETECTABLE WARNINGS REQUIRED BY T.A.S. SECTIONS 4.1 AND 4.7 SHALL COMPLY WITH T.A.S. SECTION 4.29
4. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACE SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE.
5. DETECTABLE WARNING SURFACE SHALL COVER THE ENTIRE WIDTH AND DEPTH OF RAMP.
6. DETECTABLE WARNINGS SHALL BE INSTALLED WITH PAVERS IN ACCORDANCE WITH MANUFACTURE'S REQUIREMENTS.
7. CONCRETE PAVER UNITS SHALL MEET ALL REQUIREMENTS OF ASTM C-935, C-33, AND SHALL BE PLACE IN A TWO BY TWO UNIT BASKET WEAVE PATTERN, UNLESS SHOWN OTHERWISE IN THE PLANS.
8. CONCRETE PAVER UNITS SHALL HAVE A TRUNCATED DOME TOP SURFACE FOR DETECTABLE WARNING TO PEDESTRIANS. DOMES SHALL BE ALIGNED IN THE DIRECTION OF PEDESTRIAN TRAVEL.
9. CONCRETE PAVER UNIT COLOR FOR THE RAMP SHALL BE A CONTRASTING COLOR THAT PROVIDES A LIGHT REFLECTIVE THAT SIGNIFICANTLY CONTRASTS WITH THE ADJACENT SURFACES. ADJACENT SURFACES INCLUDE SIDE FLARES. COLORS OTHER THAN RED-BROWN REQUIRE COT APPROVAL.
10. CONCRETE PAVER UNITS SHALL BE SAW CUT ONLY, AND ANY CUT UNIT SHALL NOT BE LESS THAN 25% OF A FULL UNIT.

CONSTRUCTION NOTES:

1. THE MAXIMUM WIDTH BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 20'-0"
2. EXPANSION JOINT IS TO BE 1/2" THICK CLEAR HEART REDWOOD WITH DOWELS.
3. SCORED CONTRACTION JOINTS SHALL BE EVERY 4' OR EQUAL TO WIDTH OF SIDEWALK.
4. ALL ADJACENT EARTHEN AREAS ARE TO BE SODDED UNLESS SHOWN OTHERWISE ON DRAWINGS AND APPROVED BY CITY ENGINEER.
5. 6 INCH, 5 SACK CEMENT PER CUBIC YARD CONCRETE, 3000 PSI. REINFORCED CONCRETE WITH #3 BARS, 18 INCHES O.C.E.W., FOR SIDEWALKS, #4 BARS 18' O.C.E.W. FOR CURB RAMPS IS THE MINIMUM ACCEPTED. MINIMUM 3 LONGITUDINAL BARS.
6. USE RADIUS TOOL ON ALL EXPOSED EDGES.
7. MEMBRANE CURING COMPOUND IS REQUIRED AS DESCRIBED IN COT STANDARD SPECIFICATION 02775.
8. REFER TO GENERAL NOTES AND CONCRETE/PAVING NOTES.
9. SIDEWALK EXPANSION JOINTS SHALL CONFORM TO STREET EXPANSION JOINT STANDARDS.

NOT TO SCALE

CITY OF TOMBALL
ENGINEERING & PLANNING DEPARTMENT

**CURB RAMP
& SIDEWALK
CONSTRUCTION NOTES**

APPROVED BY COT:

ENGINEERING & PLANNING DEPARTMENT
EFFECTIVE JULY 1, 2010

SHEET 001 OF 001

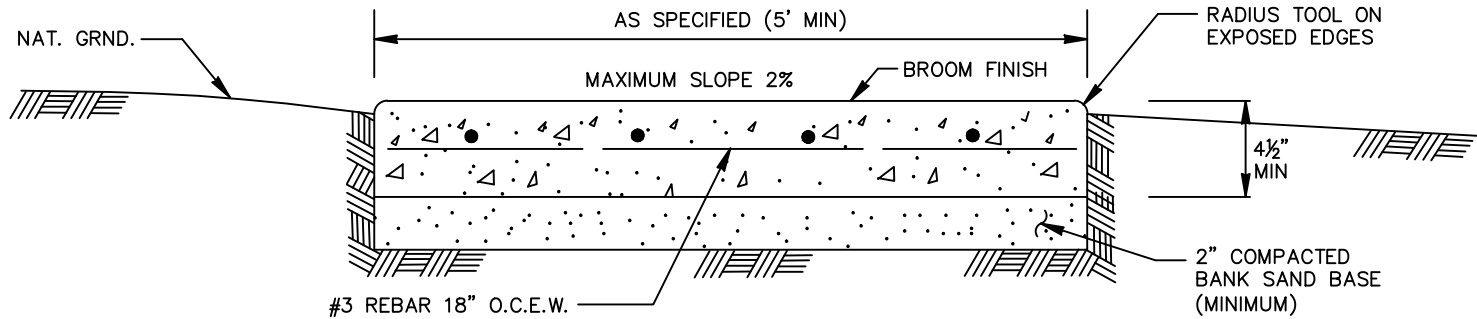
DWG NO: COT SW-01

NOTES:

1. ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS MAY BE ADJUSTED AS DIRECTED.
2. THE LANDING SHALL BE 5' x 5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND RAMP SURFACES IS 2%. USUAL SIDEWALK CROSS SLOPE EQUALS 1.5%. CHANGES IN LEVEL GREATER THAN 1/4" (IN.) ARE NOT PERMITTED.
3. MANEUVERING SPACE AT THE BOTTOM OF CURB RAMPS SHALL BE A MINIMUM OF 5' x 5' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
4. ANY PART OF THE ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP. IF A RAMP HAS A RISE GREATER THAN 6" (IN.) OR A HORIZONTAL PROJECTION GREATER THAN 72 INCHES, THEN IT SHALL HAVE HANDRAILS ON BOTH SIDES, WITH THE FOLLOWING EXCEPTIONS:
 - A.) HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. CURB RAMPS SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
 - B.) THE LEAST POSSIBLE GRADE SHOULD BE USED TO MAXIMIZE ACCESSIBILITY. WHERE STRUCTURALLY IMPRACTICAL TO ACHIEVE TEXAS ACCESSIBILITY STANDARDS (TAS) COMPLIANCE, THE RUNNING SLOPE OF SIDEWALKS AND CROSSWALKS, WITHIN THE PUBLIC R.O.W., MAY FOLLOW THE GRADE OF THE PARALLEL ROADWAY WITHOUT INVOKING TEXAS ACCESSIBILITY STANDARDS (TAS) VARIANCES FOR LANDINGS OR HANDRAILS. WHERE A CONTINUOUS GRADE GREATER THAN 5% MUST BE PROVIDED, HANDRAILS MAY BE DESIRABLE ON ONE OR BOTH SIDES OF THE SIDEWALK TO IMPROVE ACCESSIBILITY. HANDRAILS MAY ALSO BE NEEDED TO PROTECT PEDESTRIANS FROM POTENTIALLY HAZARDOUS CONDITIONS.
5. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. OTHERWISE, FLARED SIDES SHALL BE PROVIDED. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.
6. RAMP TEXTURES MUST CONSIST OF TRUNCATED DOME SURFACES, IN ACCORDANCE WITH ADA, TAS AND TEXAS DEPARTMENT OF LICENSING AND REGULATIONS (TDLR), TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. TEXTURES ALSO SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED.
7. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).
8. RAISED MEDIANS SEPARATE OPPOSING DIRECTIONS OF TRAFFIC AND PROVIDE A REFUGE AREA FOR PEDESTRIANS UNABLE TO CROSS THE ENTIRE ROADWAY IN THE ALLOTTED SIGNAL PHASE. TO SERVE AS A REFUGE AREA, THE MEDIAN SHALL BE A MINIMUM OF 5' (FT.) WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
9. SMALL CHANNELIZATION ISLANDS, WHICH CAN NOT PROVIDE A MINIMUM 5' x 5' LANDING AT THE TOP RAMPS, SHALL BE CUT THROUGH LEVEL WITH THE SURFACE OF THE STREET.
10. CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, RAMPS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
11. EXISTING FEATURES THAT COMPLY WITH T.A.S. MAY REMAIN IN PLACE UNLESS OTHERWISE SHOWN ON THE PLANS.
12. TRAFFIC SIGNAL OR ILLUMINATION POLES, GROUND BOXES, CONTROLLER BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SHALL BE PLACED SO NOT TO OBSTRUCT THE ACCESSIBLE ROUTE.
13. PEDESTRIAN ROUTES THAT CONNECT & ENTER THE PUBLIC ROW SHALL BE TREATED AS CURB RAMPS AND WILL BE REQUIRED TO INCLUDE TRUNCATED DOME SURFACES.

NOT TO SCALE

| | |
|--|-------------------|
| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| CURB RAMP & SIDEWALK CONSTRUCTION NOTES | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JUNE 19, 2019 | |
| SHEET 001 OF 001 | DWG NO: COT SW-02 |



CONCRETE SIDEWALK

NOTE:

- 1) BANK SAND IS DEFINED AS A WELL-GRADED SAND, FREE OF SILT, CLAY, LOAM, FRIABLE OR SOLUBLE MATERIALS AND ORGANIC MATTER, MEETING THE UNIFIED SOILS CLASSIFICATION SYSTEM GROUP SYMBOL SW CRITERIA W/ A PLASTICITY INDEX OF ≤ 10 . AND NO MORE THAN 12% OF MATERIAL CAN PASS THE No. 200 SIEVE.
- 2) DOWEL IN AND TIE TO ANY CONCRETE STRUCTURE ADJACENT TO SIDEWALK (DRIVEWAY, INLET BOX, CURB, JUNCTION BOX, ETC.) WITH #3x12" BARS @ 18" O.C. INCLUDE EXPANSION JOINT AT CONNECTION WITH BACK OF CURB.

NOT TO SCALE

CITY OF TOMBALL
ENGINEERING & PLANNING DEPARTMENT

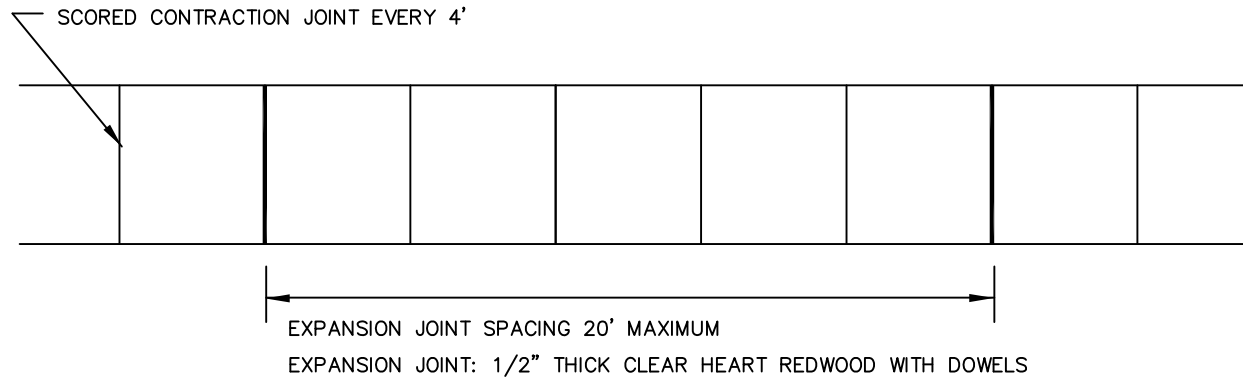
**CONCRETE
SIDEWALK
CONSTRUCTION DETAILS**

APPROVED BY COT:

ENGINEERING & PLANNING DEPARTMENT
EFFECTIVE NOVEMBER 19, 2018

SHEET 001 OF 001

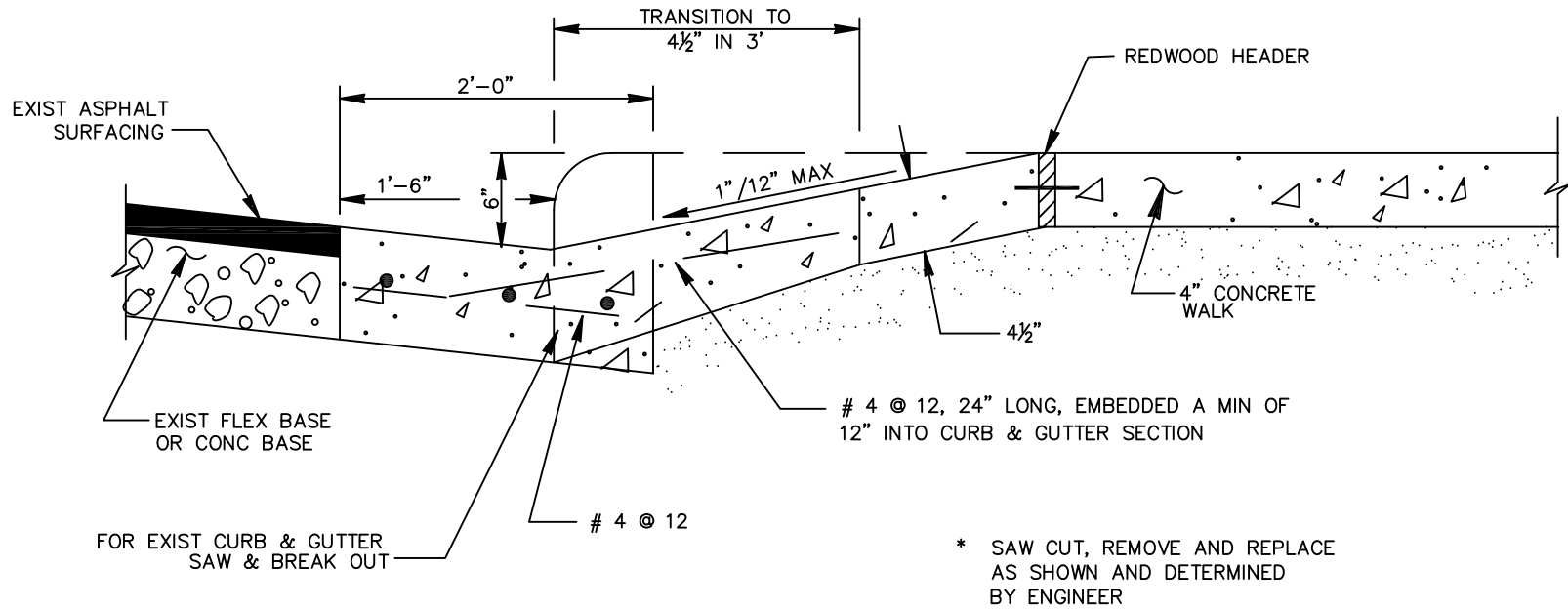
DWG NO: COT SW-03



SIDEWALK JOINT DETAILS

NOT TO SCALE

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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| SIDEWALK EXPANSION JOINT CONSTRUCTION DETAILS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-04 |

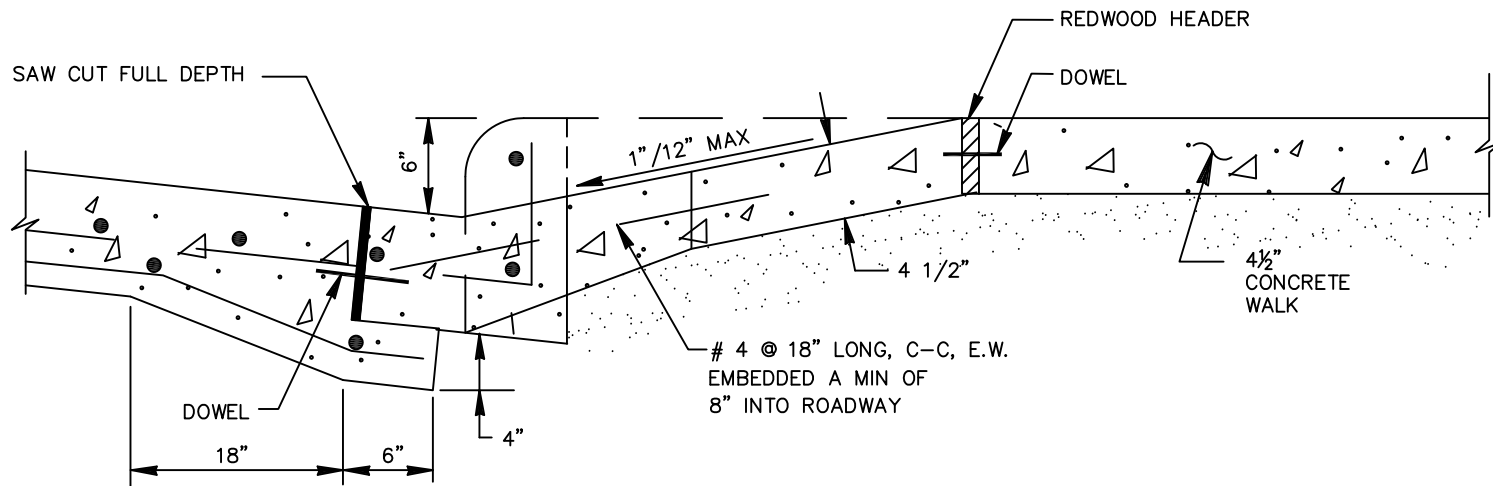


SECTION C

ACCESSIBLE RAMP CURB & GUTTER*

NOT TO SCALE

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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| ACCESSIBLE RAMP CURB & GUTTER CONSTRUCTION DETAILS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-05 |

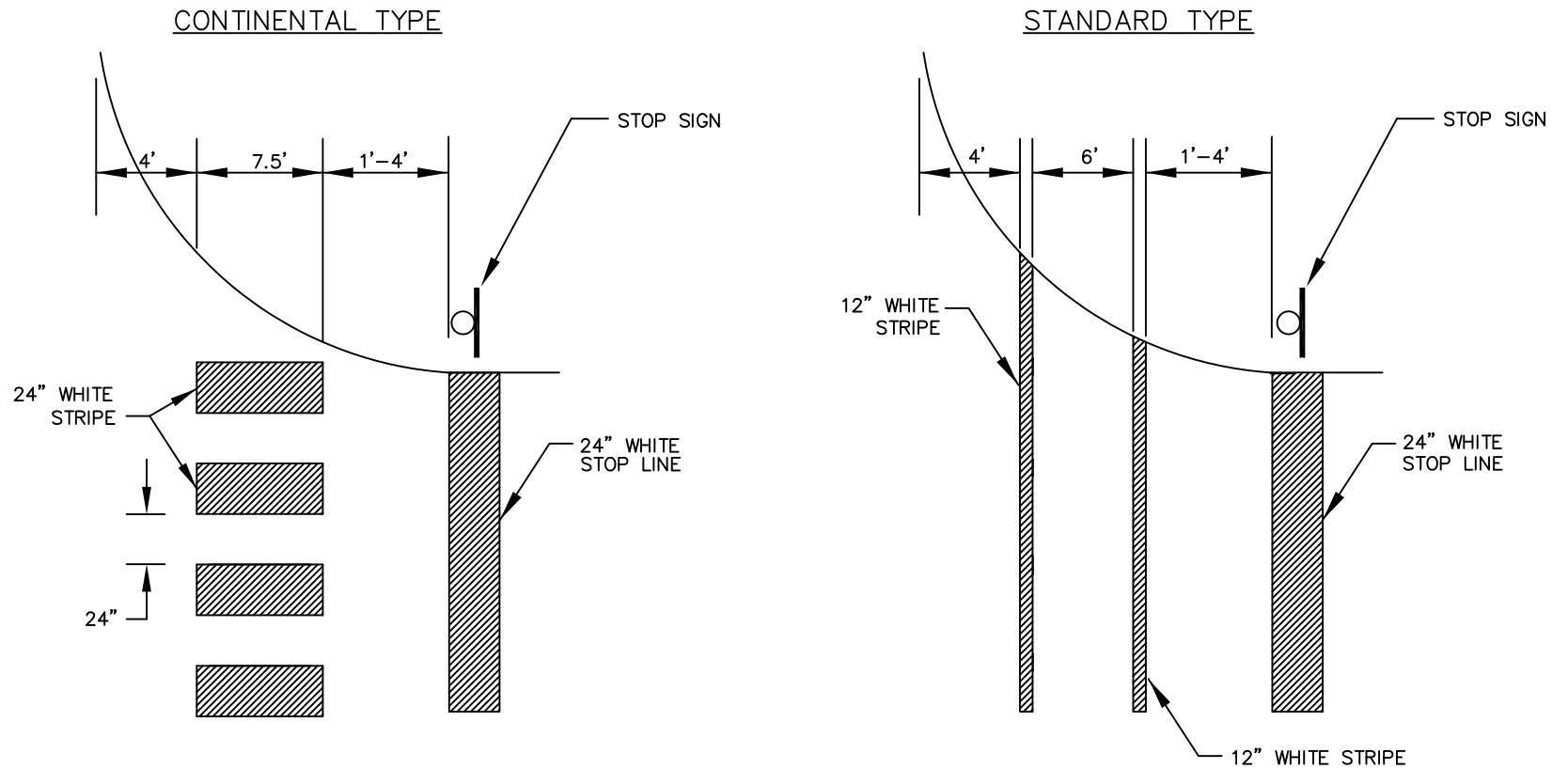


SECTION D

ACCESSIBLE RAMP UNDERCUT

NOT TO SCALE

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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| ACCESSIBLE RAMP UNDERCUT CONSTRUCTION DETAILS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-06 |



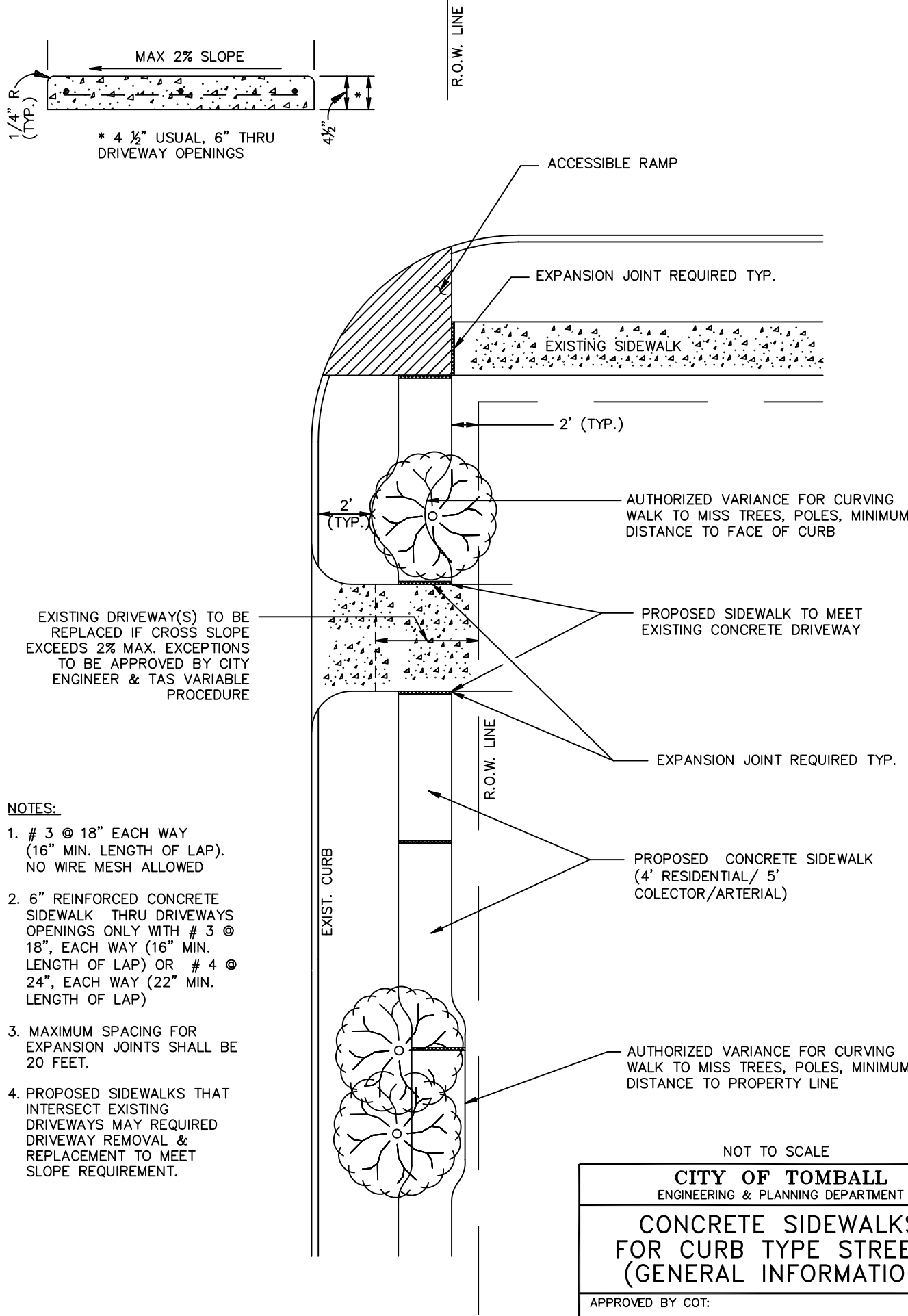
TYPICAL CROSSWALK PLACEMENT

NOTES:

(1) IF CROSSWALK REQUIRED SEE TYPICAL CROSSWALK PLACEMENT DETAIL.

NOT TO SCALE

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|---|-------------------|
| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| TYPICAL CROSSWALK PLACEMENT DETAIL | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-07 |



EXISTING DRIVEWAY(S) TO BE REPLACED IF CROSS SLOPE EXCEEDS 2% MAX. EXCEPTIONS TO BE APPROVED BY CITY ENGINEER & TAS VARIABLE PROCEDURE

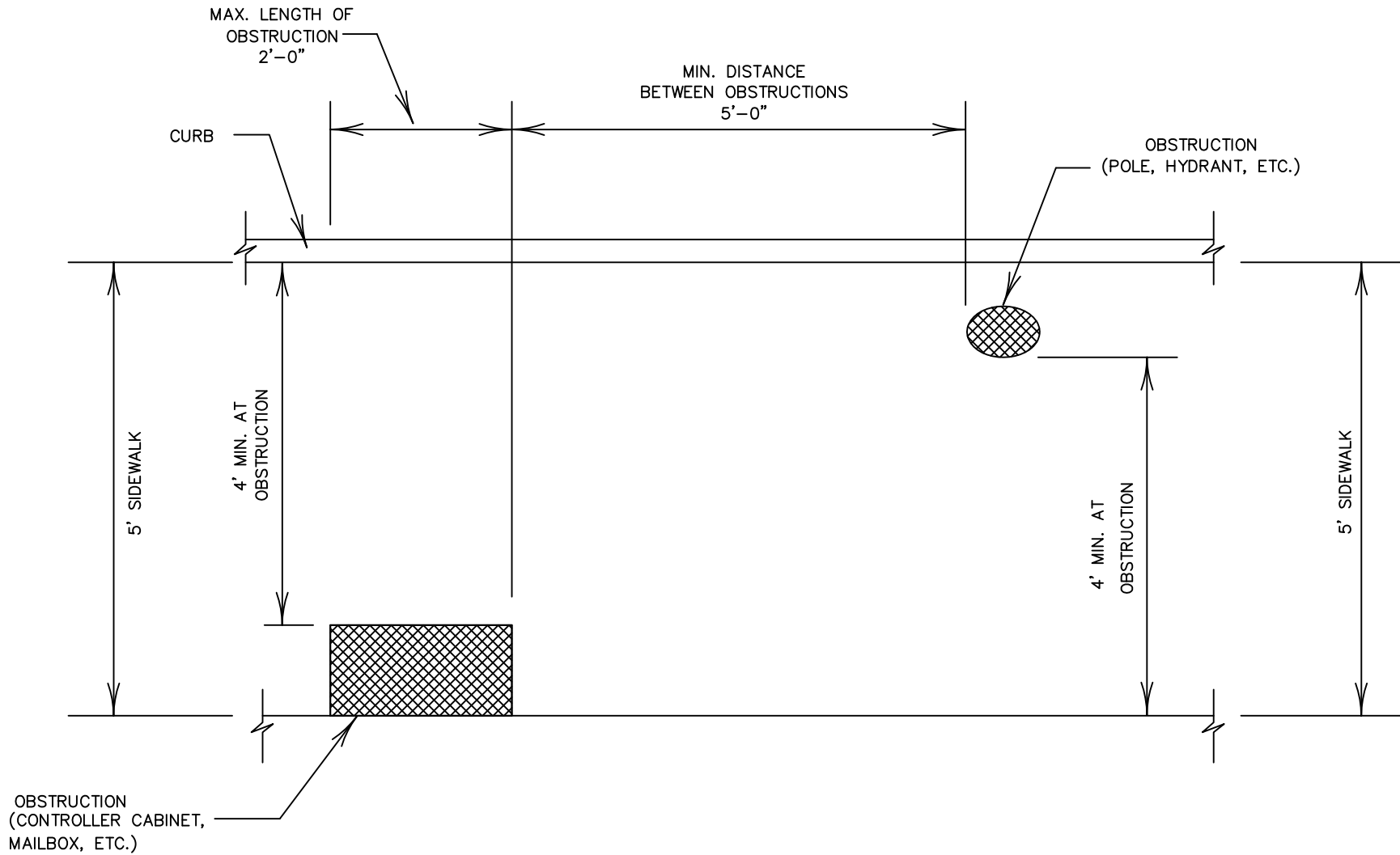
NOTES:

1. # 3 @ 18" EACH WAY (16" MIN. LENGTH OF LAP). NO WIRE MESH ALLOWED
2. 6" REINFORCED CONCRETE SIDEWALK THRU DRIVEWAYS OPENINGS ONLY WITH # 3 @ 18", EACH WAY (16" MIN. LENGTH OF LAP) OR # 4 @ 24", EACH WAY (22" MIN. LENGTH OF LAP)
3. MAXIMUM SPACING FOR EXPANSION JOINTS SHALL BE 20 FEET.
4. PROPOSED SIDEWALKS THAT INTERSECT EXISTING DRIVEWAYS MAY REQUIRED DRIVEWAY REMOVAL & REPLACEMENT TO MEET SLOPE REQUIREMENT.

NOT TO SCALE

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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| CONCRETE SIDEWALKS FOR CURB TYPE STREETS (GENERAL INFORMATION) | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-08 |

CAD FILE PATH:



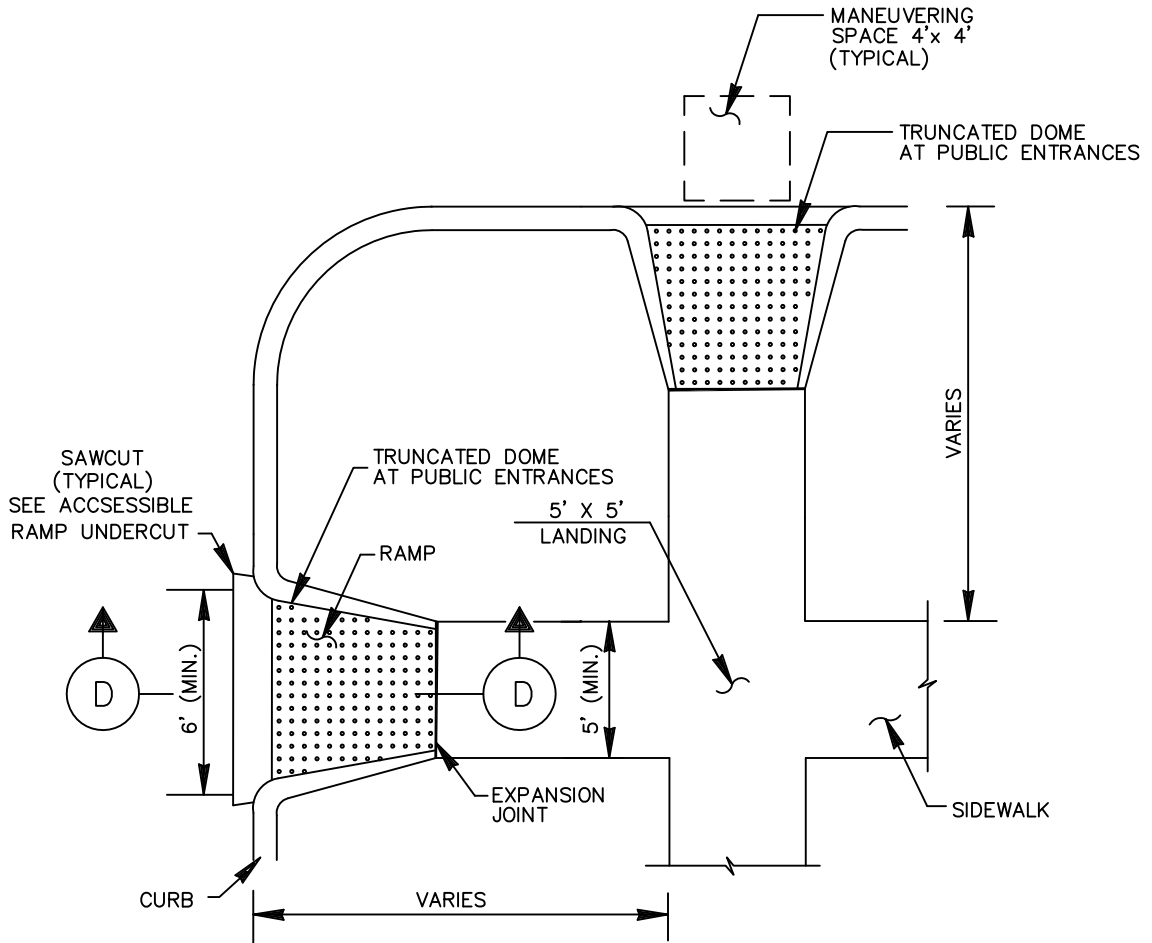
PLAN VIEW

PLACEMENT OF STREET FIXTURES

(ITEMS NOT INTENDED FOR PUBLIC USE.
 MINIMUM 4' x 4' CLEAR GROUND SPACE
 REQUIRED AT PUBLIC USE FIXTURES.)

NOT TO SCALE

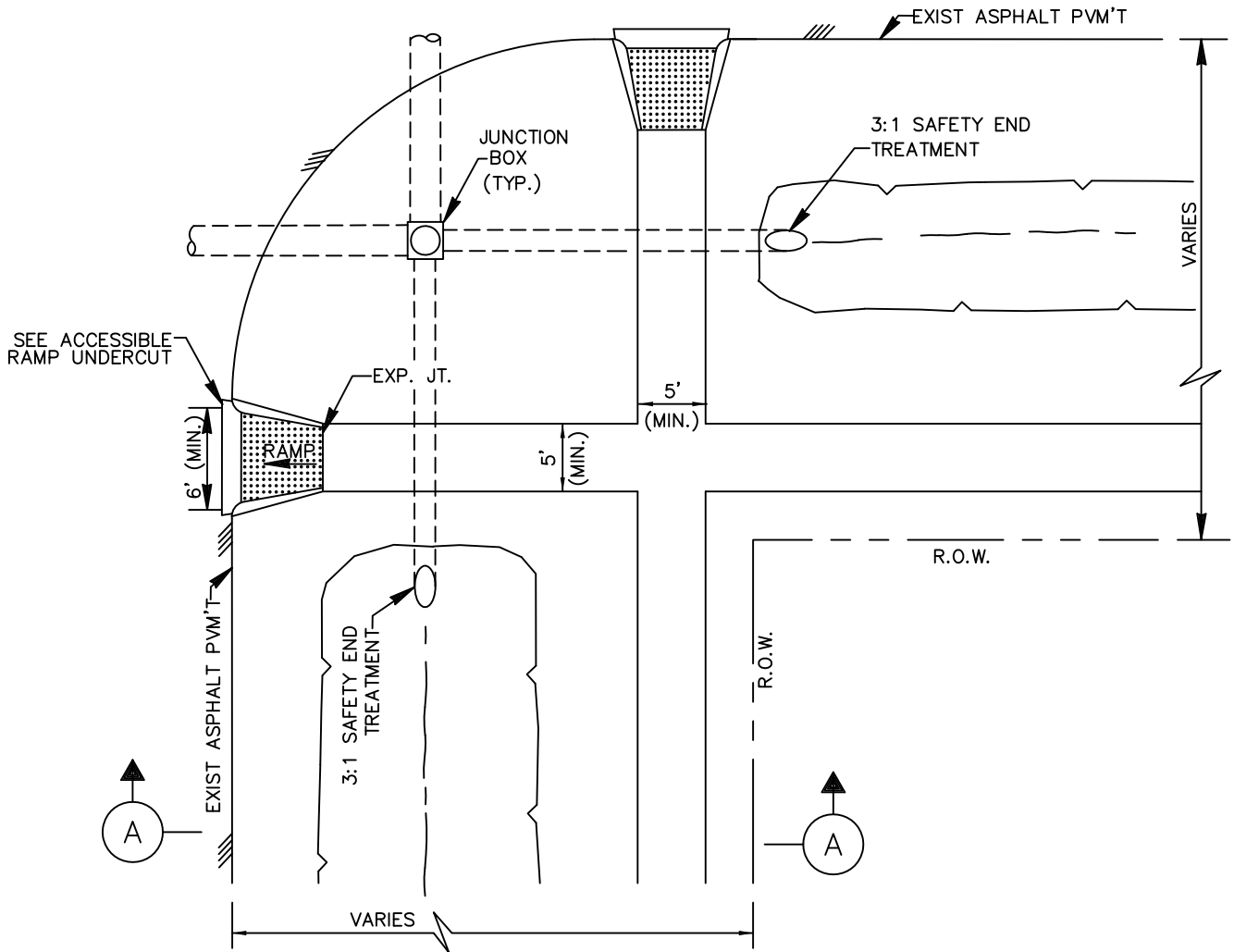
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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| PLACEMENT OF FIXTURES ALONG SIDEWALK | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-09 |



ACCESSIBLE RAMP
SIDEWALK CONNECTION

NOT TO SCALE

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|---|-------------------|
| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| ACCESSIBLE RAMP SIDEWALK CONNECTION CONSTRUCTION DETAILS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-10 |



CROSS RAMP
SIDEWALK CONNECTION
ON OPEN DITCH

NOT TO SCALE

CITY OF TOMBALL
 ENGINEERING & PLANNING DEPARTMENT

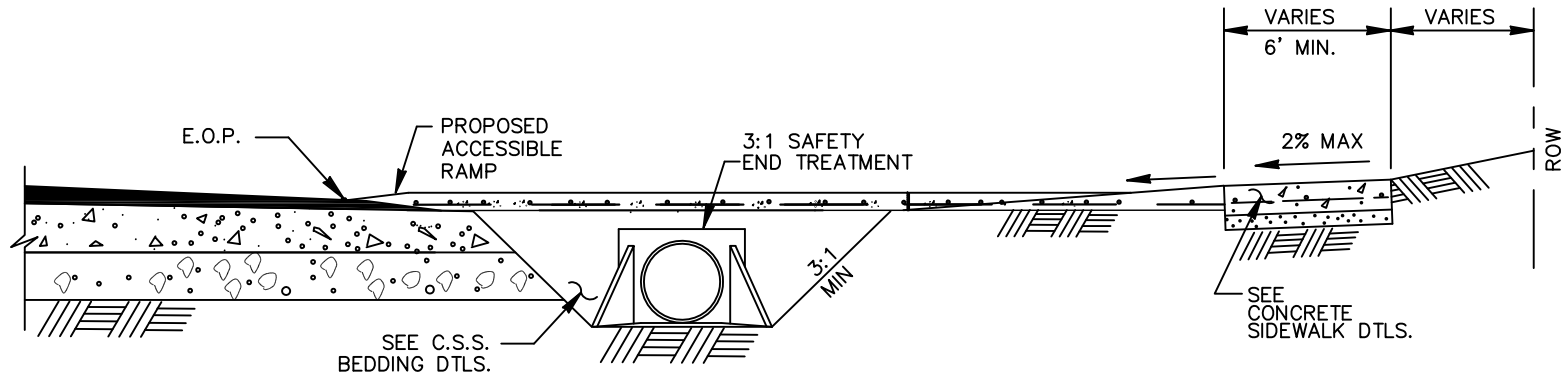
CROSS RAMP
SIDEWALK CONNECTION
ON OPEN DITCH

APPROVED BY COT:

ENGINEERING & PLANNING DEPARTMENT
 EFFECTIVE JULY 1, 2010

SHEET 001 OF 001

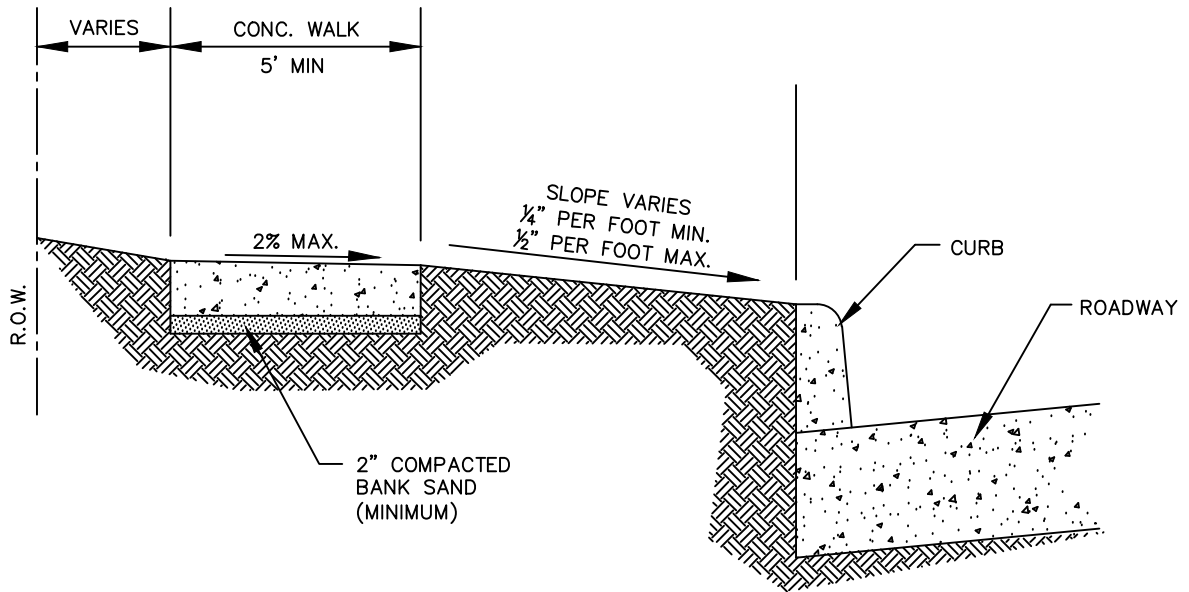
DWG NO: COT SW-11



SECTION (A)

NOT TO SCALE

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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| ACCESSIBLE RAMP CROSS-SECTION 'A' FOR OPEN DITCH | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-12 |



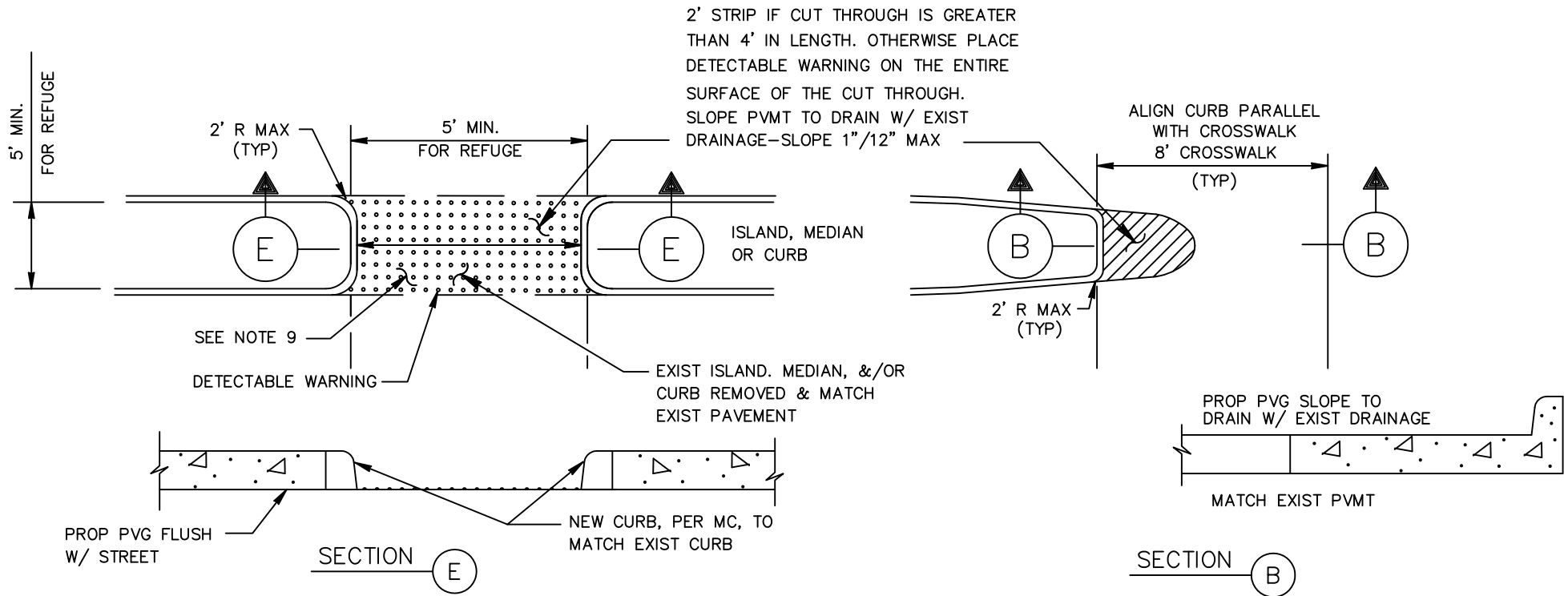
NOTE:

SEE SIDEWALK, CONC/PAVING, AND GENERAL NOTES

TYPICAL SINGLE ROADWAY SIDEWALK

NOT TO SCALE

| | |
|---|-------------------|
| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| TYPICAL SINGLE ROADWAY SIDEWALK CONSTRUCTION DETAILS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE APRIL 16, 2019 | |
| SHEET 001 OF 001 | DWG NO: COT SW-13 |

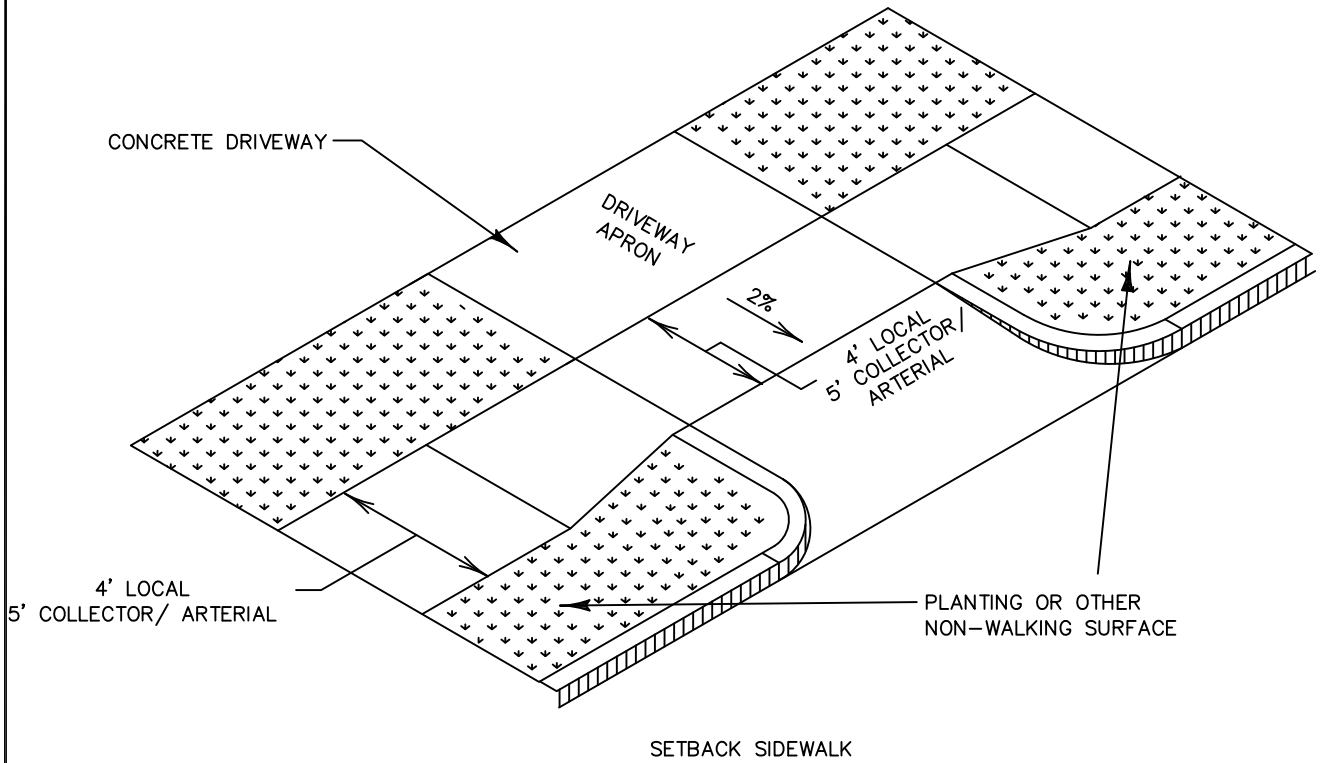


2' STRIP IF CUT THROUGH IS GREATER THAN 4' IN LENGTH. OTHERWISE PLACE DETECTABLE WARNING ON THE ENTIRE SURFACE OF THE CUT THROUGH. SLOPE PVMT TO DRAIN W/ EXIST DRAINAGE—SLOPE 1"/12" MAX

FOR ISLAND, MEDIAN, OR CURB MODIFICATIONS FOR CROSSWALKS

NOT TO SCALE

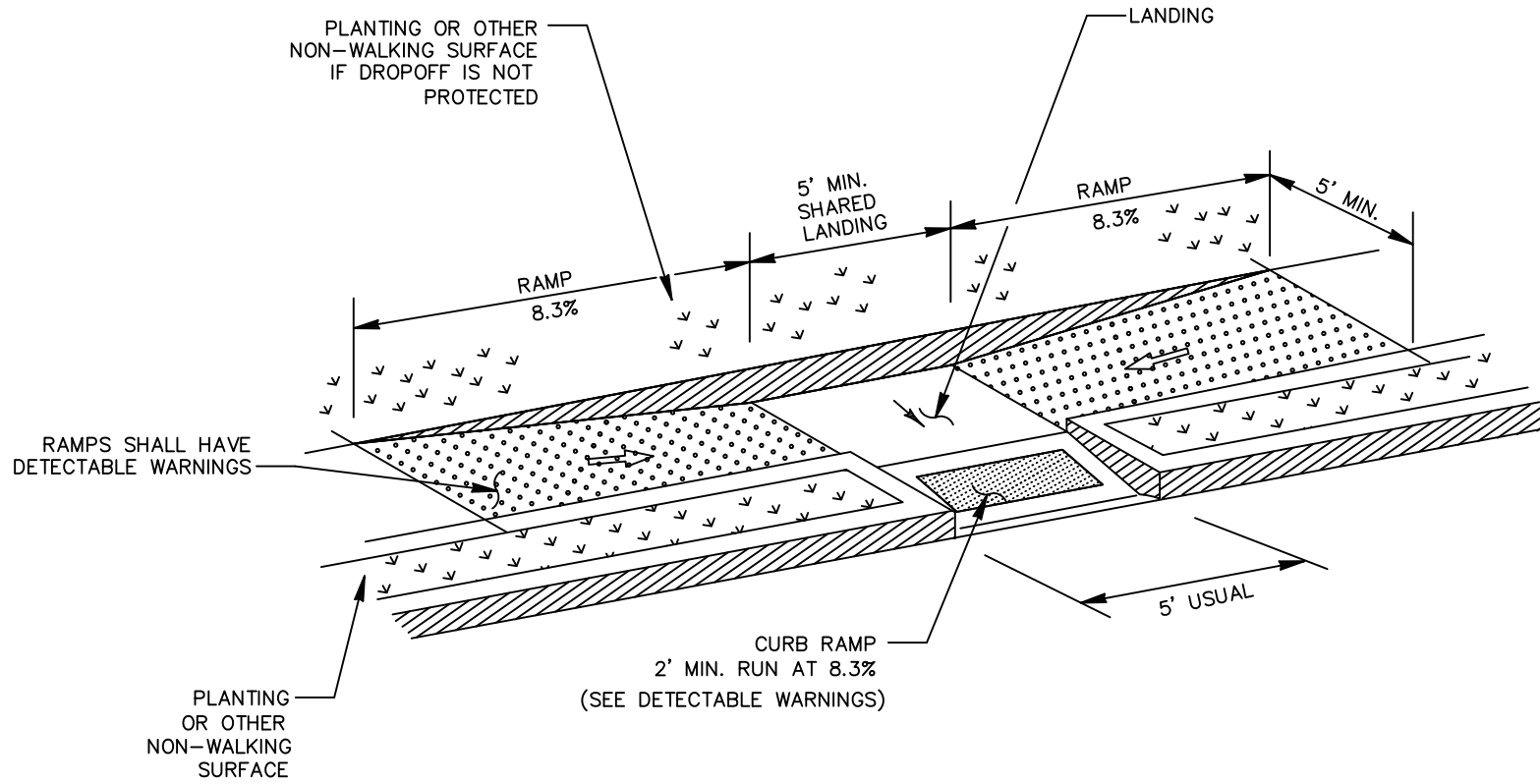
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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| MODIFICATIONS FOR CROSSWALKS ON ISLANDS, MEDIANS OR CURBS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-14 |



SIDEWALK TREATMENT AT DRIVEWAYS

NOT TO SCALE

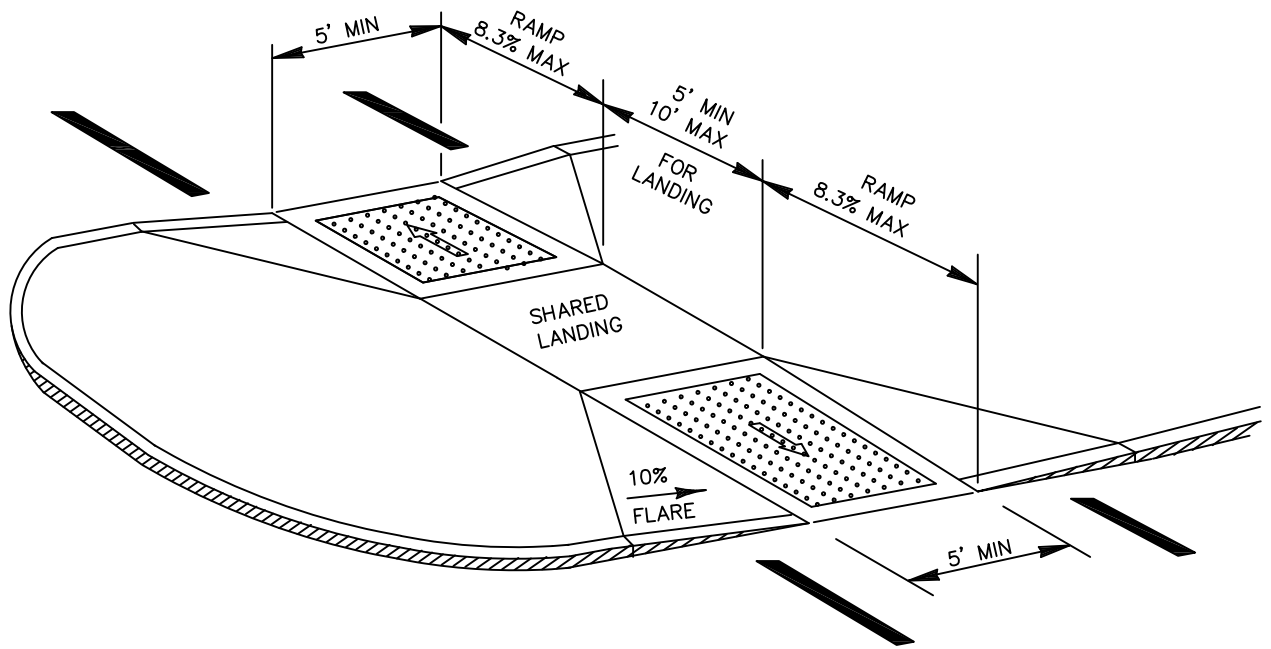
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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | | |
| SIDEWALK TREATMENT AT DRIVEWAYS CONSTRUCTION DETAILS | | |
| APPROVED BY COT: | | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | | |
| SHEET 001 | OF 001 | DWG NO: COT SW-15 |



PARALLEL CURB RAMP

NOT TO SCALE

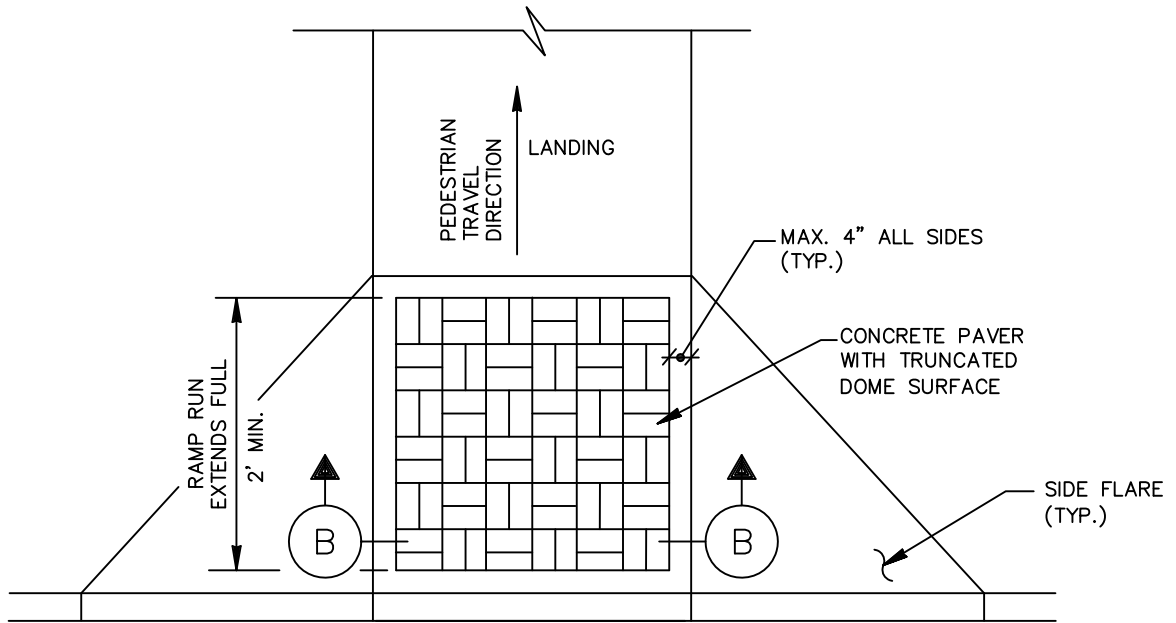
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| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| PARALLEL CURB RAMP & SIDEWALK CONSTRUCTION DETAIL | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-16 |



CURB RAMPS AT MEDIAN ISLANDS

NOT TO SCALE

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|---|-------------------|
| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | |
| CURB RAMP AT MEDIAN ISLANDS CONSTRUCTION DETAILS | |
| APPROVED BY COT: | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | |
| SHEET 001 OF 001 | DWG NO: COT SW-17 |



TRUNCATED DOME PATTERN CURB RAMP

NOT TO SCALE

CITY OF TOMBALL
ENGINEERING & PLANNING DEPARTMENT

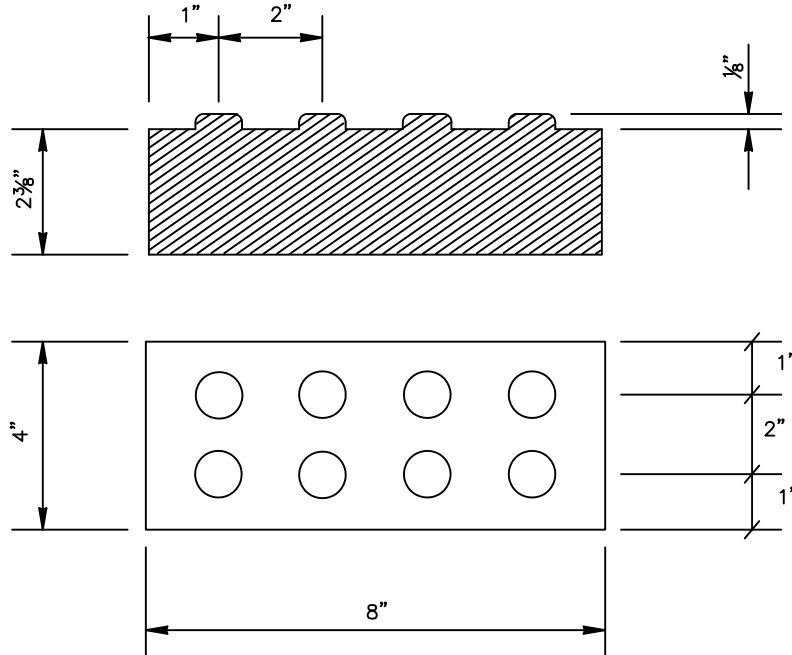
**TRUNCATED DOME
PATTERN CURB RAMP
CONSTRUCTION DETAILS**

APPROVED BY COT:

ENGINEERING & PLANNING DEPARTMENT
EFFECTIVE JULY 1, 2010

SHEET 001 OF 001

DWG NO: COT SW-18



CONCRETE PAVER WITH TRUNCATED DOME SURFACE

NOT TO SCALE

CITY OF TOMBALL
ENGINEERING & PLANNING DEPARTMENT

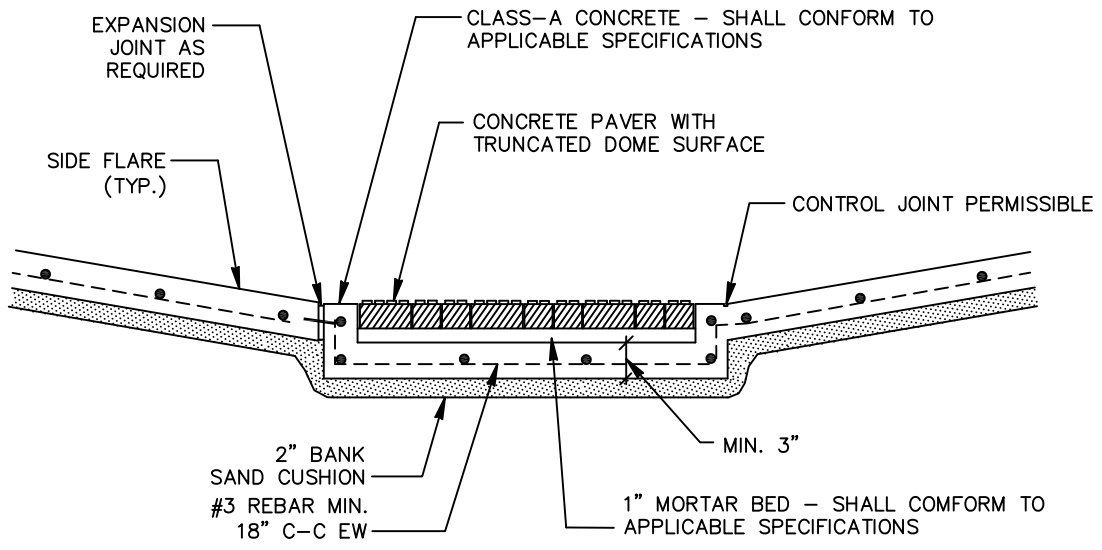
CONCRETE PAVER WITH TRUNCATED DOME SURFACE

APPROVED BY COT:

ENGINEERING & PLANNING DEPARTMENT
EFFECTIVE JULY 1, 2010

SHEET 001 OF 001

DWG NO: COT SW-19



SECTION (B)

NOT TO SCALE

| | | |
|--|--------|-------------------|
| CITY OF TOMBALL ENGINEERING & PLANNING DEPARTMENT | | |
| CONCRETE PAVER WITH TRUNCATED DOME SURFACE CONSTRUCTION DETAILS | | |
| APPROVED BY COT: | | |
| ENGINEERING & PLANNING DEPARTMENT EFFECTIVE JULY 1, 2010 | | |
| SHEET 001 | OF 001 | DWG NO: COT SW-20 |