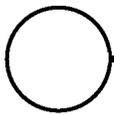


UTILITIES LEGEND

— S —	SEWER LINE
— G —	GAS LINE
— E —	ELECTRIC LINE
— W —	WATER LINE
— T —	TELEPHONE/CATV LINE

www.AutocADDetails.net



UTILITIES LEGEND

NOT TO SCALE

01C-1001

LEGEND

 DRAINAGE FLOW

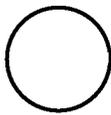
494
505
FINISH GRADES

EXISTING GRADES

494.9 T.O.W. 505'
SPOT GRADE OR OBJECT MARKER

SITE RETAINING WALL

www.AutoCADDetails.net

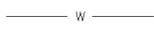
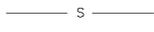
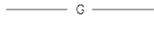


CIVIL LEGEND

NOT TO SCALE

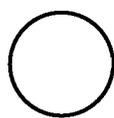
01C-1002

LEGEND

-  FND 1/2" ROD & CAP
-  SET 1/2" ROD w/ CAP
-  SPOT ELEVATION EAST EDGE OF SIDEWALK
-  SMALL PINON OR CEDAR EVERGREEN TREE
-  LARGE PINON OR CEDAR EVERGREEN TREE
-  UNDERGROUND ELECTRIC (APPROX. LOC.)
-  WATER (APPROX. LOC.)
-  SEWER (APPROX. LOC.)
-  GAS (APPROX. LOC.)
-  TELEPHONE (APPROX. LOC.)

104.07

www.AutocADDetails.net

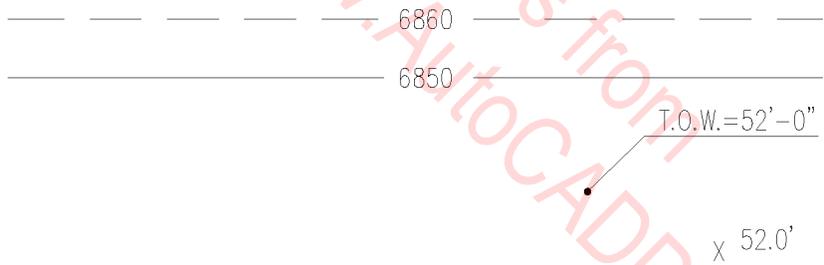


CIVIL LEGEND

NOT TO SCALE

01C-1003

GRADING LEGEND

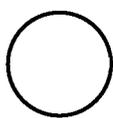


EXISTING CONTOUR

FINISHED CONTOUR

SPOT ELEVATION

GRADE SPOT ELEVATION



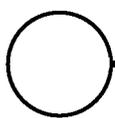
GRADING LEGEND

NOT TO SCALE

01C-1004

LEGEND

-  FIRE HYDRANT
 -  MANHOLE & SANITARY SEWER LINE
 -  WATER VALVE & DOMESTIC WATER LINE
 - + 12.61 SPOT ELEV. BY FIELD SURVEY
 -  PROPOSED FINAL GRADE
- NOTE: ADD 1200' TO ALL ELEV. FOR [CITY] ELEV. DATUM

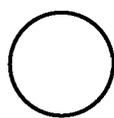


CIVIL LEGEND

NOT TO SCALE

01C-1005

JOINT SPACING	
PAVEMENT THICKNESS, INCHES	RECOMMENDED SPACING OF CONTRACTION JOINTS (FEET)
<9	12 1/2 TO 15
9 TO 12	15 TO 20
>12	20 TO 25*
	* 20' MAX. FOR AIR FORCE



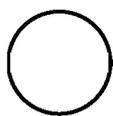
JOINT SPACING

N.T.S.

01C-1006

www.Samples from AutoCADDetails.net

JOINT SPACING	
PAVEMENT THICKNESS, INCHES	RECOMMENDED SPACING OF CONTRACTION JOINTS (FEET)
<9	12 1/2 TO 15
9 TO 12	15 TO 20
>12	20 TO 25*
	* 20' MAX. FOR AIR FORCE



JOINT SPACING

N.T.S.

01C-1006

GRADING NOTES

- A. A GRADING PERMIT IS REQUIRED.
- B. NO MINIMUM FINISH FLOOR ELEVATION SHALL BE ALTERED.
- C. STAKING FINISH FLOOR ELEVATION IS THE RESPONSIBILITY OF THE DEVELOPER AND THE DEVELOPER'S ENGINEER.
- D. CERTIFIED SHALLOW PIT PERCOLATION TEST RESULTS ARE _____ CFH/SF. BASED ON A 50% ATTENUATION OF THE SHALLOW PIT PERCOLATION TEST RESULTS, THE ESTIMATED DRAINAGE TIME OF RETENTION POND _____ IS _____ HOURS IF TIME IS GREATER THAN 36 HOURS ONE OR MORE DRYWELLS ARE REQUIRED.
- E. CONTRACTOR SHALL PROVIDE GRADING FOR POSITIVE DRAINAGE IN ALL RETENTION BASINS AT ELEVATIONS AS SHOWN ON THE PLANS. BOTTOM OF BASIN SHALL BE GRADED TO DRAIN TOWARD DRYWELLS (WHEN USED). MAXIMUM SIDE-SLOPES SHALL BE 4:1.
- F. DRYWELL INLET GRATES SHALL BE 0.5 FEET ABOVE BOTTOM OF THE RETENTION BASIN.
- G. DRILLING LOGS FOR DRYWELLS WILL BE FURNISHED TO THE CITY INSPECTOR PRIOR TO FINAL ACCEPTANCE.
- H. A PERCOLATION TEST WILL BE REQUIRED OF COMPLETED DRYWELLS PRIOR TO ACCEPTANCE. SHOULD EXISTING SOIL CONDITIONS BE ENCOUNTERED WHICH LACK SUFFICIENT PERCOLATION RATES, ADDITIONAL DRYWELLS OR AN ALTERNATE METHOD OF STORM WATER RUN-OFF DISPOSAL WILL BE REQUIRED. THE PERCOLATION RATE FOR DRYWELL NO. _____ IS _____ CFS.
- I. DRYWELL CONSTRUCTION SHALL BE DONE ONLY BY CONTRACTOR'S LICENSED BY THE [STATE] DEPARTMENT OF ENVIRONMENTAL QUALITY. APPLICATION FOR DRYWELL REGISTRATION WAS SUBMITTED TO [STATE] DEPARTMENT OF ENVIRONMENTAL QUALITY ON _____.
- J. ALL WEEP HOLES IN WALLS SHALL BE PROVIDED WITH EROSION PROTECTION 12" THICK WITH D50 = 4" RIPRAP 24" IN WIDTH, EXTENDED TO THE BACK OF SIDEWALK OR TO THE BOTTOM OF RETENTION BASIN, WHICHEVER APPLIES.



GRADING NOTES

NOT TO SCALE

01A-2001

SEWER NOTES

- A. ALL SEWER TAPS SHALL BE WYE TYPE.
- B. CONNECTIONS TO EXISTING SEWER MAINS SHALL BE ACCOMPLISHED BY MACHINE TAPPING, UTILIZING A SADDLE, OR BY CONSTRUCTION OF A MANHOLE.
- C. SEWER TAPS SHOULD BE 4-1/2 FEET DEEP AT PROPERTY LINE. TO RAISE THE TAP FROM THE MAINS DEEPER THAN 6 FEET, THE WYE AND 1/8 BEND SHALL BE SET AT A 45 DEGREE ANGLE FROM HORIZONTAL AND A SHORT PIECE OF STRAIGHT PIPE SHALL BE PLACED ON THE 1/8 BEND. ANOTHER 1/8 BEND IS PLACED AT THE OTHER END OF THE SHORT PIPE TO BRING THE TAP TO APPROPRIATE GRADE AT THE PROPERTY LINE.
- D. ALL SEWER SERVICE CONNECTIONS SHALL BE EXTENDED A SUFFICIENT DISTANCE BEYOND STREET RIGHT-OF-WAY LINES TO CLEAR ALL FACILITIES TO BE INSTALLED IN PUBLIC UTILITY EASEMENTS WHICH PARALLEL THE STREET RIGHT-OF-WAY.
- E. METALLIC, DETECTIBLE WARNING TAPE OR LOCATOR WIRE SHALL BE REQUIRED AT LOCATIONS DESIGNATED BY THE OFF-SITE INSPECTOR WHEN CHANGES IN HORIZONTAL PIPE ALIGNMENTS ARE NOT APPARENT FROM SURFACE APPURTENANCES. THE TAPE OR WIRE SHALL BE PLACED ONE FOOT ABOVE THE TOP OF PIPE (MAXIMUM DEPTH 4 FEET) AND SHALL EXTEND A MINIMUM OF 6 FEET IN EACH DIRECTION FROM THE ALIGNMENT CHANGE AND SHALL BE SHOWN ON AS-BUILT PLANS.
- F. ALL PLASTIC PIPE WITH A CURVED ALIGNMENT SHALL BE IDENTIFIED WITH 3-INCH SIDE METALLIC, DETECTIBLE WARNING TAPE WITH THE WORD "SEWER" OR "WASTEWATER". THE TAPE SHALL BE INSTALLED 12 TO 18 INCHES BELOW THE GROUND SURFACE OVER THE ENTIRE LENGTH OF THE PIPE.
- G. MANHOLE FRAME AND COVER SHALL BE ADJUSTED PER M.A.G, STANDARD DETAIL 422, EXCEPT WHEN OUTSIDE OF PAVEMENT, IN WHICH CASE IT SHALL BE ADJUSTED PER CITY OF [CITY] SPECIFICATION [NUMBER].
- H. ALL MANHOLE INTERIORS SHALL BE PAINTED WITH "INSECTA INSECTICIDAL COATING - WHITE SEMI-GLOSS LATEX" OR APPROVED EQUAL.
- I. ALL PVC SEWER PIPE SHALL BE CONSTRUCTED WITH CLASS "B" BEDDING.



SEWER NOTES

NOT TO SCALE

01A-2002

PAVING NOTES

- A. THE LOCATION OF ALL VALVES MUST BE REFERENCED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION.
- B. NO PAVING CONSTRUCTION SHALL BE PERFORMED UNTIL ALL UNDERGROUND UTILITIES WITHIN THE RIGHT-OF-WAY HAVE BEEN COMPLETED.
- C. THE BASE COURSE WILL NOT BE PLACED ON SUBGRADE UNTIL BASE REQUIREMENTS HAVE BEEN COMPLETED AND ACCEPTED BY THE CITY ENGINEER.
- D. GUTTERS WILL BE WATER TESTED IN THE PRESENCE OF THE CITY ENGINEER TO INSURE PROPER DRAINAGE PRIOR TO FINAL APPROVAL.
- E. THE EXACT POINT OF PAVEMENT MATCHING FOR TERMINATION AND OVERLAY MAY BE DETERMINED IN THE FIELD BY THE CITY ENGINEER.
- F. NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT AND SIDEWALKS HAVE BEEN SWEEPED CLEAN OF ALL DIRT AND DEBRIS.
- G. BLUE REFLECTIVE SPOTTERS SHALL BE INSTALLED ON THE STREET PAVEMENT AT FIRE HYDRANT LOCATIONS IN ACCORDANCE WITH [CITY] DETAIL [NUMBER].
- H. STREET NAME SIGNS WILL BE INSTALLED BY THE CITY ON DEVELOPER INSTALLED POLES AT THE DEVELOPER'S EXPENSE. POLES SHALL BE CITY OF [CITY] STANDARD DETAIL [NUMBER]. PAYMENT WILL BE COLLECTED AT THE TIME A PAVING PERMIT IS ISSUED.
- I. CERTIFIED SOIL TEST SHOWS _____ PERCENT SWELL TESTED AT 2 TO 3 PERCENT BELOW OPTIMUM MOISTURE WITH 100 PSF SURCHARGE. MINIMUM DENSITY REQUIREMENTS FOR COMPACTION UNDER SIDEWALK AND CURBS SHALL BE _____ PERCENT. ALL COMPACTION UNDER SIDEWALKS AND CURBS SHALL BE PERFORMED WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
- J. ALL COMPACTION UNDER PAVEMENT AREAS SHALL BE PERFORMED ACCORDING TO MAG SPECIFICATIONS AND AT 0 TO 5 PERCENT BELOW OPTIMUM MOISTURE CONTENT.
- K. ALL TRAFFIC CONTROL SIGNS SHALL BE CONSTRUCTED OF HIGH INTENSITY GRADE SHEETING, UNLESS OTHERWISE NOTED.
- L. ALL STREET SECTIONS, EXCEPT ARTERIALS, SHALL HAVE INSTALLED A PRESERVATIVE SEAL COAT PER MAG STANDARD SPECIFICATION 334 AND SHALL BE EMULSIFIED ASPHALT GRADE SS-1H PER MAG STANDARD SPECIFICATION 713.

WATER NOTES

- A. FIRE HYDRANTS SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED IN ACCORDANCE WITH CITY OF [CITY] STANDARD DETAIL [NUMBER]. ALL FIRE HYDRANTS SHALL BE PAINTED ACCORDING TO FIRE DEPARTMENT STANDARDS AFTER INSTALLATION.
- B. ALL WATER SERVICE LINE AND METER BOX INSTALLATIONS SHALL CONFORM TO CITY OF [CITY] STANDARD DETAIL [NUMBER].
- C. METER BOXES AND LIDS TO BE SUPPLIED BY DEVELOPER AND INSTALLED FACING LOT. (SEE CITY OF [CITY] STANDARD DETAIL [NUMBER] AND M.A.G. STANDARD DETAIL 320.) NO PLASTIC METER BOXES.
- D. CITY OF [CITY] TO FURNISH AND INSTALL ALL WATER METERS WITH PREVAILING COSTS TO BE PAID BY DEVELOPER.
- E. ALL VALVES 6" - 24" SHALL BE GATE TYPE IN CONFORMANCE WITH M.A.G. STANDARD SPECIFICATION 630.3, UNLESS OTHERWISE NOTED.
- F. ALL VALVE BOXES SHALL CONFORM TO CITY OF [CITY] STANDARD DETAILS [NUMBER] AND [NUMBER].
- G. CITY WATER VALVES WILL BE OPERATED BY CITY PERSONNEL ONLY.
- H. BUTTERFLY VALVE OPERATOR WILL BE OFFSET TO THE SIDE OF MAIN AWAY FROM MONUMENT LINE.
- I. ALL TAPS SHALL USE A BRONZE SERVICE SADDLE. EIGHT (8) INCHES OR LESS SHALL BE SINGLE STRAP AND TEN (10) INCHES OR GREATER SHALL BE DOUBLE STRAP.
- J. TAPS IN ACP SHALL BE MADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE ACP MANUFACTURERS ASSOCIATION.
- K. METALLIC, DETECTIBLE WARNING TAPE OR LOCATOR WIRE SHALL BE REQUIRED AT LOCATIONS DESIGNATED BY THE OFF-SITE INSPECTOR WHEN CHANGES IN HORIZONTAL PIPE ALIGNMENT ARE NOT APPARENT FROM SURFACE APPURTENANCES. THE TAPE OR WIRE SHALL BE PLACED ONE FOOT ABOVE THE TOP OF PIPE (MAXIMUM DEPTH 4 FEET) SHALL EXTEND A MINIMUM OF 6 FEET IN EACH DIRECTION FROM THE ALIGNMENT CHANGE AND SHALL BE SHOWN ON AS-BUILT PLANS.
- L. MECHANICAL JOINT OR RESTRAINED DUCTILE IRON PIPE SHALL BE USED FOR WATER LINE PROTECTION WHEN M.A.G. STANDARD DETAIL 404 IS SPECIFIED ON THE PLANS.
- M. VALVE BOX AND COVER GRADE LOCATED OUTSIDE OF A PAVED AREA SHALL BE SET ON TO TWO (1" - 2") INCHES ABOVE SIDEWALK OR ADJACENT GRADE.
- N. NO VALVE SHALL BE LOCATED BENEATH SIDEWALK OR SIDEWALK RAMP.



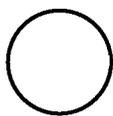
WATER NOTES

NOT TO SCALE

01A-2004

CONSTRUCTION NOTES

- A. ALL DESIGN AND CONSTRUCTION MUST BE IN ACCORDANCE WITH THE UNIFORM STANDARD SPECIFICATIONS AND DETAILS PUBLISHED BY THE [COUNTY] ASSOCIATION OF GOVERNMENTS AND AS AMENDED BY THE TOWN OF [TOWN].
- B. THE CONTRACTOR SHALL NOTIFY THE TOWN OF [TOWN] ENGINEERING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF ANY CONSTRUCTION FOR INSPECTION.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE RELOCATION OF ALL EXISTING UTILITIES REQUIRED FOR THE PROPOSED CONSTRUCTION.
- D. THE CONTRACTOR SHALL ADJUST ALL VALVES, MANHOLES, CLEANOUTS, ETC., BOTH NEW AND OLD, TO FINISH PAVEMENT GRADE PER THESE PLANS AND STANDARD DETAILS.
- E. CONCRETE SPEC. – M.A.G. STD SPEC. CLASS "B."
CURB: M.A.G. STANDARD DETAIL 220 TYPE "A."
SIDEWALK: M.A.G. STANDARD DETAIL 230.
- F. PAVING: AGGREGATE BASE COURSE;
THICKNESS; TOWN OF [TOWN] STANDARD DETAIL [NUMBER].
MATERIAL; CONFORMING TO SECTION 702.2 M.A.G. SPECS
- G. ASPHALTIC CONCRETE;
THICKNESS; 2 1/2" MIN. PLACED IN TWO LIFTS.
MATERIAL; CONFORMING TO M.A.G. STANDARD SPEC. 710.
BASE COURSE; 1 1/2" – C 3/4" MIX / 5.5% OIL
SURFACE COURSE: 1" – D 1/2" MIX / 6.0% OIL



CONSTRUCTION NOTES

NOT TO SCALE

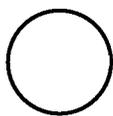
01A-2005

GENERAL NOTES

- A. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ADOPTED M.A.G. SPECIFICATIONS AND STANDARD DETAILS AS MODIFIED BY THE CITY OF [CITY].
- B. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- C. THE CITY ENGINEER'S OFFICE SHALL BE NOTIFIED 24 HOURS PRIOR TO STARTING EACH PHASE OF CONSTRUCTION.
- D. PRIOR TO ANY CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR/DEVELOPER SHALL NOTIFY THE STREET DIVISION AT [PHONE]. THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING IN PLACE OR RELOCATING ALL CITY OWNED IRRIGATION AND LANDSCAPING MATERIALS. ALL RELOCATIONS SHALL BE AS DIRECTED BY STREET DIVISION PERSONNEL.
- E. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE CITY ENGINEER AND/OR ALL WORK MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- F. THE CONTRACTOR SHALL UNCOVER ALL EXISTING LINES BEING TIED INTO TO VERIFY THEIR LOCATION. THE CONTRACTOR SHALL LOCATE OR HAVE LOCATED ALL EXISTING UNDERGROUND UTILITIES (ELECTRIC, TELEPHONE, PIPELINES, ETC.) AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND SHALL ELIMINATE ALL CONFLICTS PRIOR TO START OF CONSTRUCTION.
- G. THE CITY OF [CITY] IS NOT RESPONSIBLE FOR LIABILITY ACCRUED DUE TO DELAYS AND/OR DAMAGES TO UTILITIES IN CONJUNCTION WITH THIS CONSTRUCTION. THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY RELOCATION.
- H. NO FINAL ACCEPTANCE SHALL BE ISSUED UNTIL 4 MIL PHOTO MYLAR REPRODUCIBLE "AS-BUILT" PLANS CERTIFIED AND SEALED BY A REGISTERED CIVIL ENGINEER, HAVE BEEN SUBMITTED AND ACCEPTED BY THE CITY ENGINEER.
- I. BACKFILLING SHALL NOT BE STARTED UNTIL LINES ARE APPROVED BY THE CITY ENGINEER.
- J. ALL BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH M.A.G. STANDARD SPECIFICATION 601, TYPE 1.
- K. DISPOSAL OF AND STOCKPILING OF EXCESS MATERIAL WITHIN THE [CITY] CITY LIMITS OR PLANNING AREA SHALL BE DONE IN SUCH A WAY THAT WILL NOT CREATE A NUISANCE AND SHALL COMPLY WITH ADMINISTRATIVE REGULATION NO. [NUMBER]. THE PLACING OF MATERIAL ON PRIVATE PROPERTY OF ANOTHER REQUIRES WRITTEN AUTHORIZATION.
- L. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE [CITY] TRAFFIC BARRICADE MANUAL.
- M. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS FOR CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD PRIOR TO ENTERING PUBLIC STREETS, AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN STREETS, ALLEY DUST, AND TAKE WHATEVER MEASURES ARE NECESSARY TO ENSURE THAT ALL ROADS ARE MAINTAINED IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
- N. APPLICATIONS FOR STREET CUT PERMITS MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO APPROVAL OF IMPROVEMENT PLANS. ALL PAVEMENT REPLACEMENT SHALL BE EITHER FULL-DEPTH OF A.B.C. OR A.B.C. SLURRY BACKFILL IN ACCORDANCE WITH THE CITY OF [CITY] STANDARD SPECIFICATION 4 AND M.A.G. STANDARD DETAIL 200, "1" TOP.
- O. AN APPROVED SET OF PLANS SHALL BE MAINTAINED ON THE JOB SITE AT ALL TIMES THAT WORK IS IN PROGRESS. DEVIATION FROM THE PLANS SHALL NOT BE ALLOWED WITHOUT AN APPROVED PLAN REVISION.
- P. A MINIMUM HORIZONTAL SEPARATION OF SIX (6) FEET IS REQUIRED BETWEEN SEWER SERVICES AND WATER OR FIRELINE SERVICES. A MINIMUM HORIZONTAL SEPARATION OF SIX FEET IS REQUIRED BETWEEN RECLAIMED WATER SERVICES AND SEWER, WATER, OR FIRELINE SERVICES.
- Q. NO ABOVE GRADE FACILITY SHALL BE LOCATED CLOSER THAN SIX (6) FEET TO THE FACE OF CURB FOR POLES TWO & ONE HALF (2 1/2) INCHES, OR EQUIVALENT, IN DIAMETER OR LESS.
- R. I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION, OR AS NOTED, AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGNING & STRIPING NOTES

- A. THE CITY TRAFFIC ENGINEER'S OFFICE SHALL BE NOTIFIED 24 HOURS PRIOR TO STARTING ANY SIGNING OR STRIPING WORK.
- B. ALL PAVEMENT MARKINGS, SIGN MATERIALS AND CONSTRUCTION SHALL CONFORM TO [STATE] DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- C. SIGN LOCATIONS AND OFFSETS MAY BE ADJUSTED BY THE CITY ENGINEER TO IMPROVE VISIBILITY.
- D. ALL MEDIAN NOSES SHALL BE PAINTED YELLOW FROM TIP OF MEDIAN BACK 10 FEET.
- E. ALL RAISED PAVEMENT REFLECTORS SHALL BE INSTALLED WITH CRAFTCO PAVEMENT REFLECTOR ADHESIVE, OR EQUAL.
- F. ALL TRAFFIC CONTROL SIGNS SHALL BE ATTACHED TO STREET LIGHT POLES IF THE POLE IS WITHIN 25 FEET OF SIGN LOCATION AS SHOWN ON THE SIGNING AND STRIPING PLANS.
- G. ALL CROSSWALKS, STOP BARS, AND LEFT/RIGHT TURN STRIPING SHALL BE THERMOPLASTIC.
- H. ALL TRAFFIC CONTROL SIGNS SHALL BE CONSTRUCTED OF HIGH INTENSITY GRADE SHEETING, UNLESS OTHERWISE NOTED.
- I. ALL EXISTING SIGNS TEMPORARILY REMOVED BY THE CONTRACTOR SHALL BE SALVAGED FOR REINSTALLATION BY THE CONTRACTOR. ALL EXISTING SIGNS PERMANENTLY REMOVED BY THE CONTRACTOR SHALL BE SALVAGED FOR RETURN TO THE CITY SIGN SHOP.



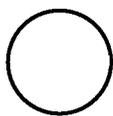
SIGNING & STRIPING NOTES

NOT TO SCALE

01A-2007

STREET LIGHT NOTES

- A. INSTALLATION PER CITY OF [CITY] STREET LIGHTING STANDARDS AND SPECIFICATIONS.
- B. THE [POWER COMPANY] CONNECTION FEE SHALL BE PAID BY THE DEVELOPER TO THE CITY AT TIME OF STREET LIGHT INSTALLATION PERMIT ISSUANCE. THE [POWER COMPANY] CONNECTION FEE, INCLUDING SALES TAX, IS: [FEE].
- C. THE CONSTRUCTION CONTRACTOR WILL COORDINATE HIS WORK WITH THE [POWER COMPANY] LIGHTING DIVISION PRIOR TO THE START OF CONSTRUCTION.
- D. POLES WILL NOT BE SET UNTIL [POWER COMPANY] CONDUCTOR IS IN PLACE.
- E. STREET LIGHT CONDUCTOR TRENCHES WILL NOT BE BACK-FILLED UNTIL INSPECTED AND APPROVED BY OFFSITE INSPECTOR.
- F. DESIGNS IN CONFORMANCE WITH APPENDIX "A" OF THE STREET LIGHTS STANDARDS SPECIFY G.E. POWER DOOR SERIES LUMINAIRE. APPROVED EQUALS ARE LISTED IN THE DESIGN MANUAL.
- G. ANY VARIANCE TO AN APPROVED LUMINAIRE SHALL REQUIRE A NEW DESIGN ACCOMPANIED WITH POINT-TO-POINT LIGHTING CALCULATIONS AT TEN FOOT INTERVALS INDICATING MAINTAINED FOOTCANDLE LEVELS BETWEEN LUMINARIES AND ACROSS THE WIDTH OF THE ROADWAY FOR APPROVAL BY THE CITY ENGINEER.
- H. POLES SHALL BE SET NO CLOSER THAN SIX (6) FEET FROM FACE OF CURB.
- I. THE JUNCTION BOX NEAREST A POLE SHALL BE LOCATED OUT OF THE PUBLIC RIGHT-OF-WAY IN A PUBLIC UTILITY EASEMENT UNLESS OTHERWISE DIRECTED.



STREET LIGHT NOTES

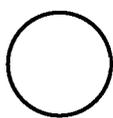
NOT TO SCALE

01A-2008

FLEXIBILITY STATEMENT

THE GRAPHIC SHOWN AS THE OVERALL DEVELOPMENT PLAN DEPICTS GENERAL LOCATIONS AND ILLUSTRATE CONCEPTS OF THE TEXTUAL PROVISIONS OF THE DEVELOPMENT PLAN. IN GRANTING PLAT APPROVAL, THE BOARD OF COUNTY COMMISSIONERS ALLOWS MINOR VARIATIONS FOR THE PURPOSE OF ESTABLISHING:

- A. FINAL ROAD AND PEDESTRIAN WALKWAY ALIGNMENTS
- B. FINAL CONFIGURATION OF LOT AND TRACT SIZES AND SHAPES
- C. FINAL BUILDING ENVELOPES
- D. FINAL ACCESS AND PARKING LOCATIONS
- E. LANDSCAPING ADJUSTMENTS



FLEXIBILITY STATEMENT

NOT TO SCALE

01A-2009

SUMMARY CHART

TOTAL AREA = 22.455 ACRES = 978,139 SQ. FT.

USE AREA "A" – OPEN SPACE 410,000 SQ. FT.

USE AREA "B" – DEVELOPMENT SPACE

COMMERCIAL 256,000 SQ. FT.

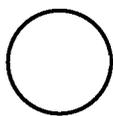
RESIDENTIAL 96,000 SQ. FT.

(OF WHICH 46,000 SQ. FT. IS FOR
DEED RESTRICTED EMPLOYEE HOUSING)

FLEXIBLE 4,000 SQ. FT.

(COMMERCIAL OR RESIDENTIAL)

PARKING 826 SPACES



SUMMARY CHART

NOT TO SCALE

01A-2010

STORM WATER RETENTION

TOTAL AREA WITHIN PARCEL = 247944 S.F.

PLUS AREA WITHIN CUL-DE-SACS = 14138 S.F.

TOTAL NET AREA = 262082 S.F.

IMPERVIOUS AREA BUILDING FOOTPRINT = 2195 S.F.

PAVING & HARD SURFACES = 50809 S.F.

TOTAL IMPERVIOUS = 53004 S.F.

PERVIOUS AREA (262082 LESS 53004) = 209078 S.F.

C.W. VALUE = $(2195)(0.95) + (50809)(0.90) + (209078)(0.70)$
 $/262082 = \text{C.W.} = 0.74$

RETENTION VOLUME REQUIRED = $I \times A \times \text{CW} / 12$

$I = 3''$ (100YEAR / 24 HOUR STORM)

$V = (3.0'') (262082) (0.74) / 12 = 48485 \text{ C.F.}$

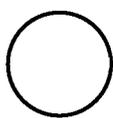
RETENTION VOLUME PROVIDED

RETENTION - EAST SIDE ALONG BLOCK FENCE = 41910 C.F.

RETENTION - WITHIN SHELTER AREA

132000 S.F. @ ONE INCH DEEP = 11000 C.F.

TOTAL VOLUME PROVIDED = 52910 C.F.



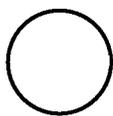
STORM WATER RETENTION

NOT TO SCALE

01A-2011

ADDITIONAL PROVISIONS

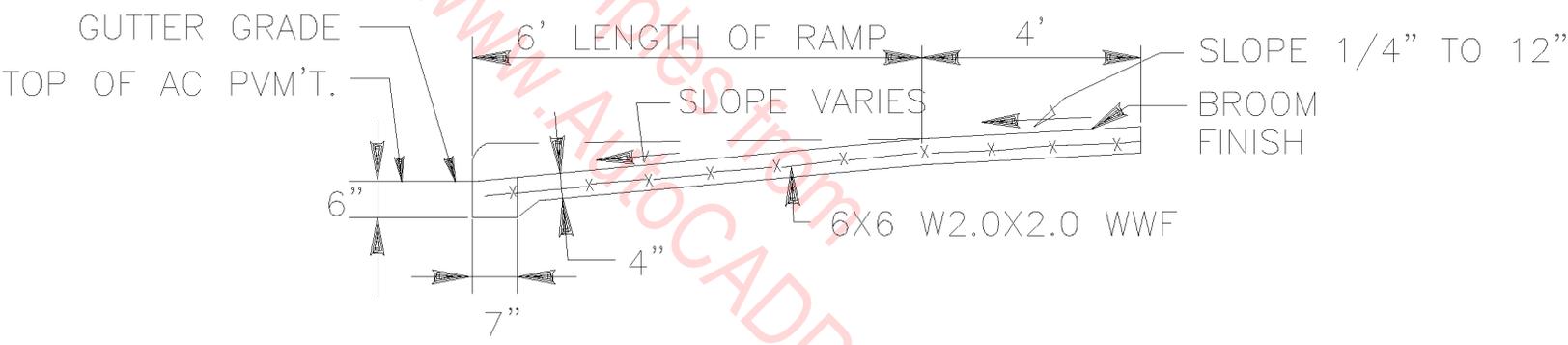
- A. MOVEMENT OF APPROVED COMMERCIAL AND RESIDENTIAL SPACE FROM ONE ENVELOPE TO ANOTHER MAY OCCUR PROVIDED THE TOTAL APPROVED SPACE ALLOCATIONS ARE NOT EXCEEDED.
- B. NO CHANGES ARE PERMITTED THAT WILL CHANGE THE PURPOSE OF THE PROJECT, WHICH IS DEFINED IN THE PUD CONTROL DOCUMENT AS "A TOWN CENTER FOR THE COMMUNITY OF [COMMUNITY], ALLOWING FOR FLEXIBILITY AND CREATIVITY IN THE DESIGN AND PHYSICAL ARRANGEMENT OF THE PROPOSED COMMERCIAL/RESIDENTIAL USES."
- C. ADDITIONAL PARKING SPACES MAY BE ADDED.
- D. THE TOTAL NUMBER OF BUILDINGS WILL BE FLEXIBLE PROVIDING THE TOTAL APPROVED SPACE COMMERCIAL, RESIDENTIAL AND FLEX SPACE IS NOT EXCEEDED.



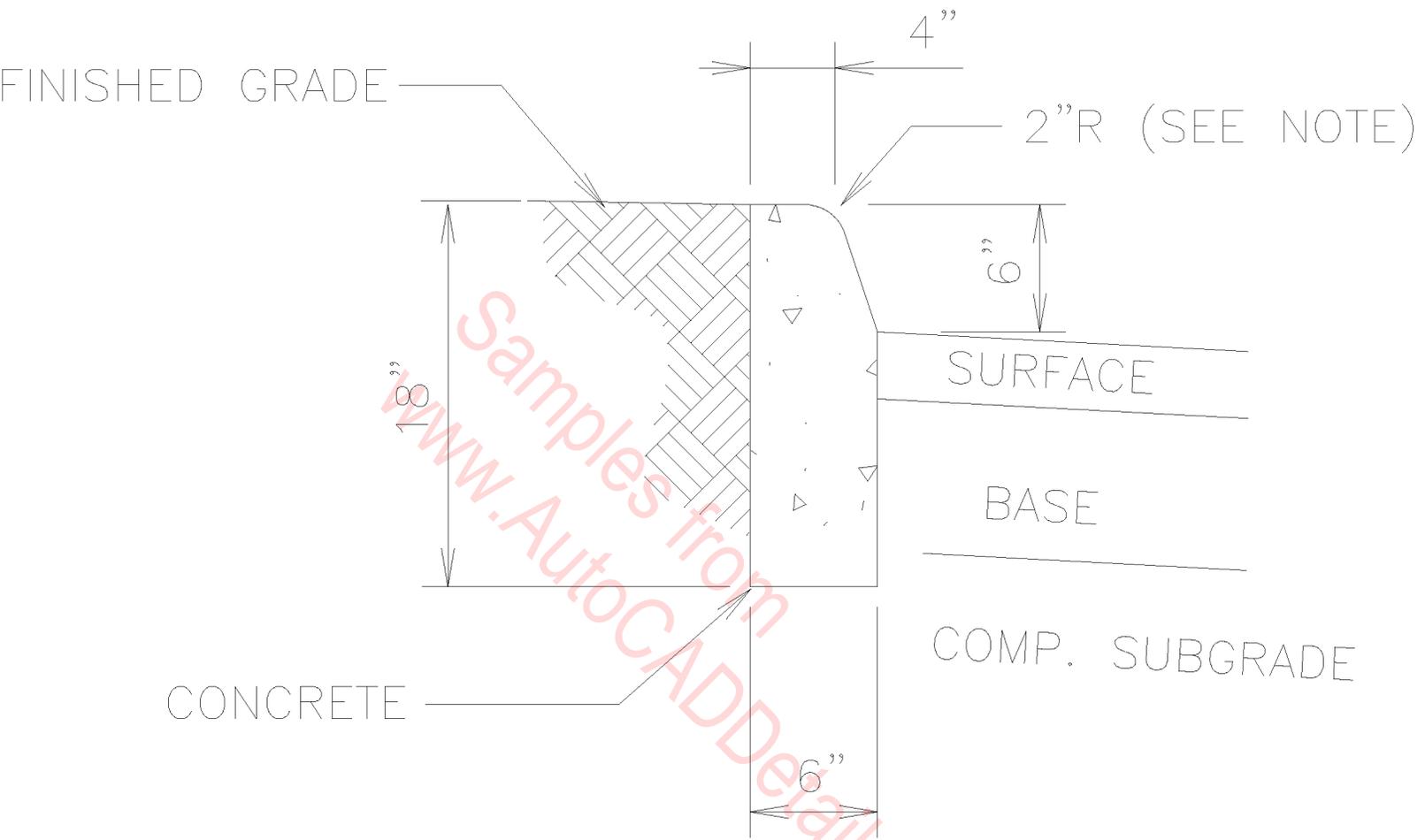
ADDITIONAL PROVISIONS

NOT TO SCALE

01A-2012



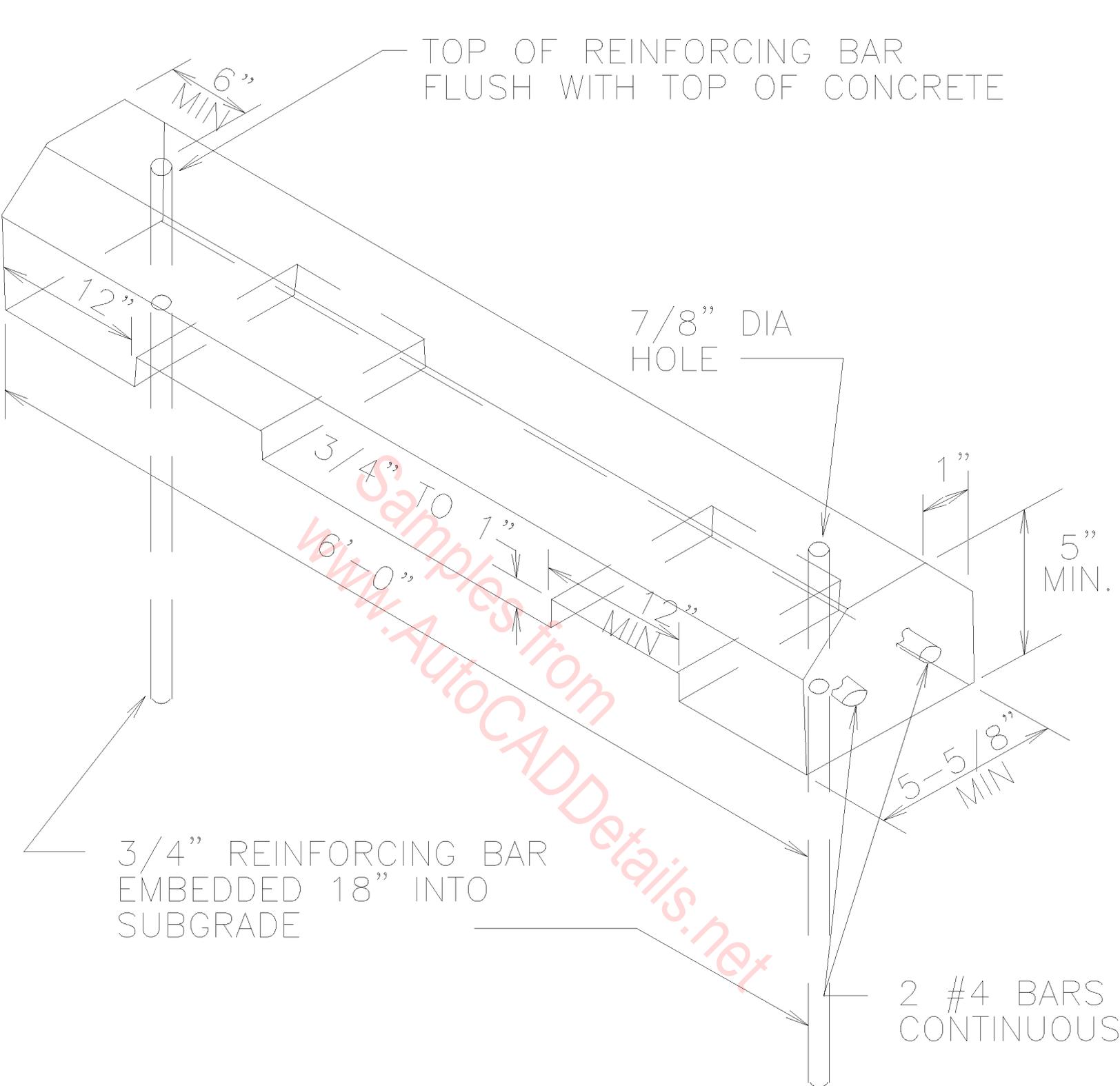
RAMP DETAIL
N.T.S.



NOTE: STANDARD CURB SHAPE OF THE STATE IN WHICH THE PROJECT IS LOCATED MAY BE SUBSTITUTED.

CURB

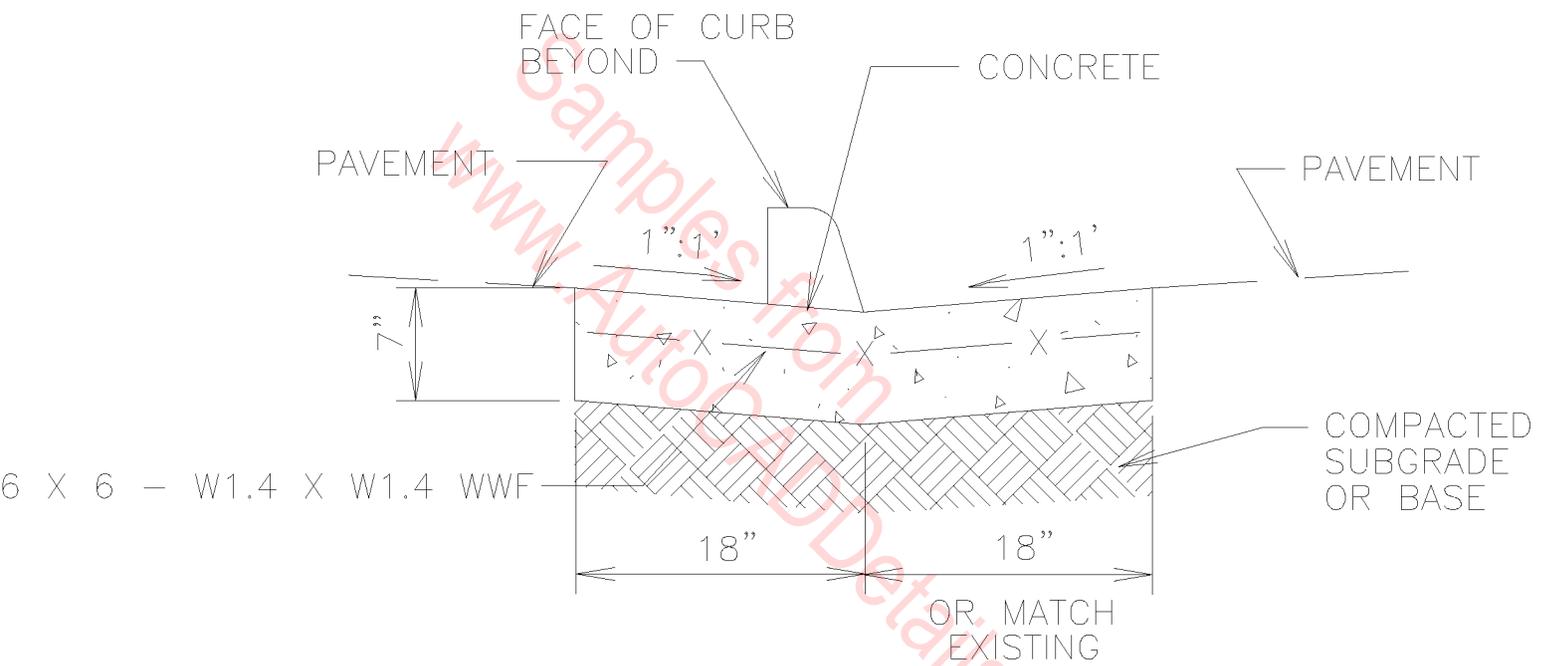
N.T.S.



PARKING BUMPER

(PRECAST CONCRETE)

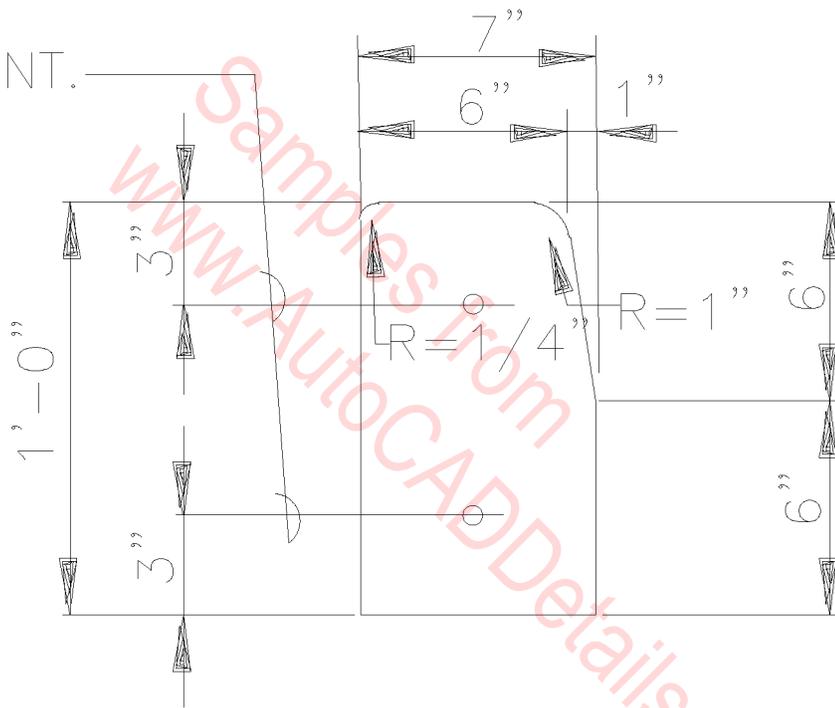
N.T.S.



STANDARD VALLEY GUTTER DETAIL

N.T.S.

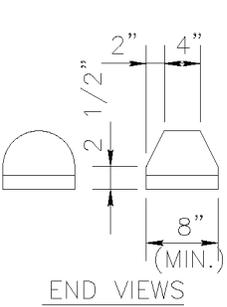
2-#4 CONT.



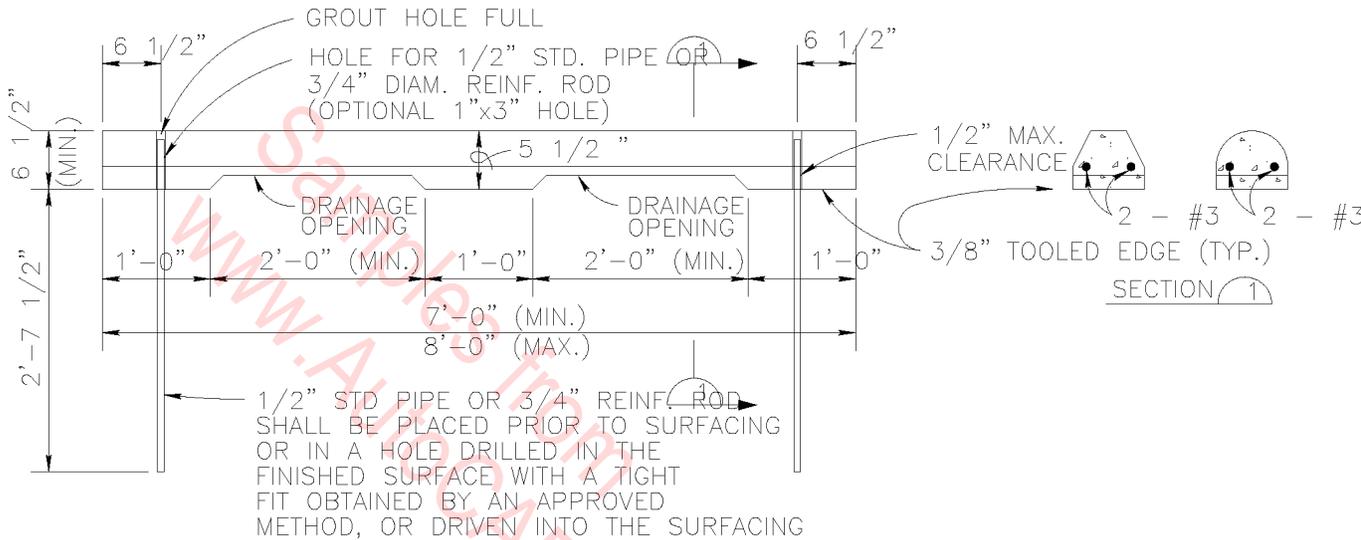
CAST-IN-PLACE CONC. CURB
N.T.S.



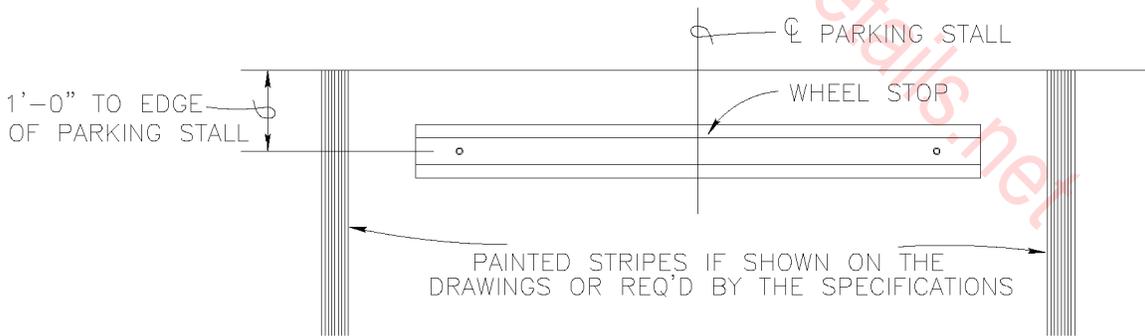
PLAN



END VIEWS



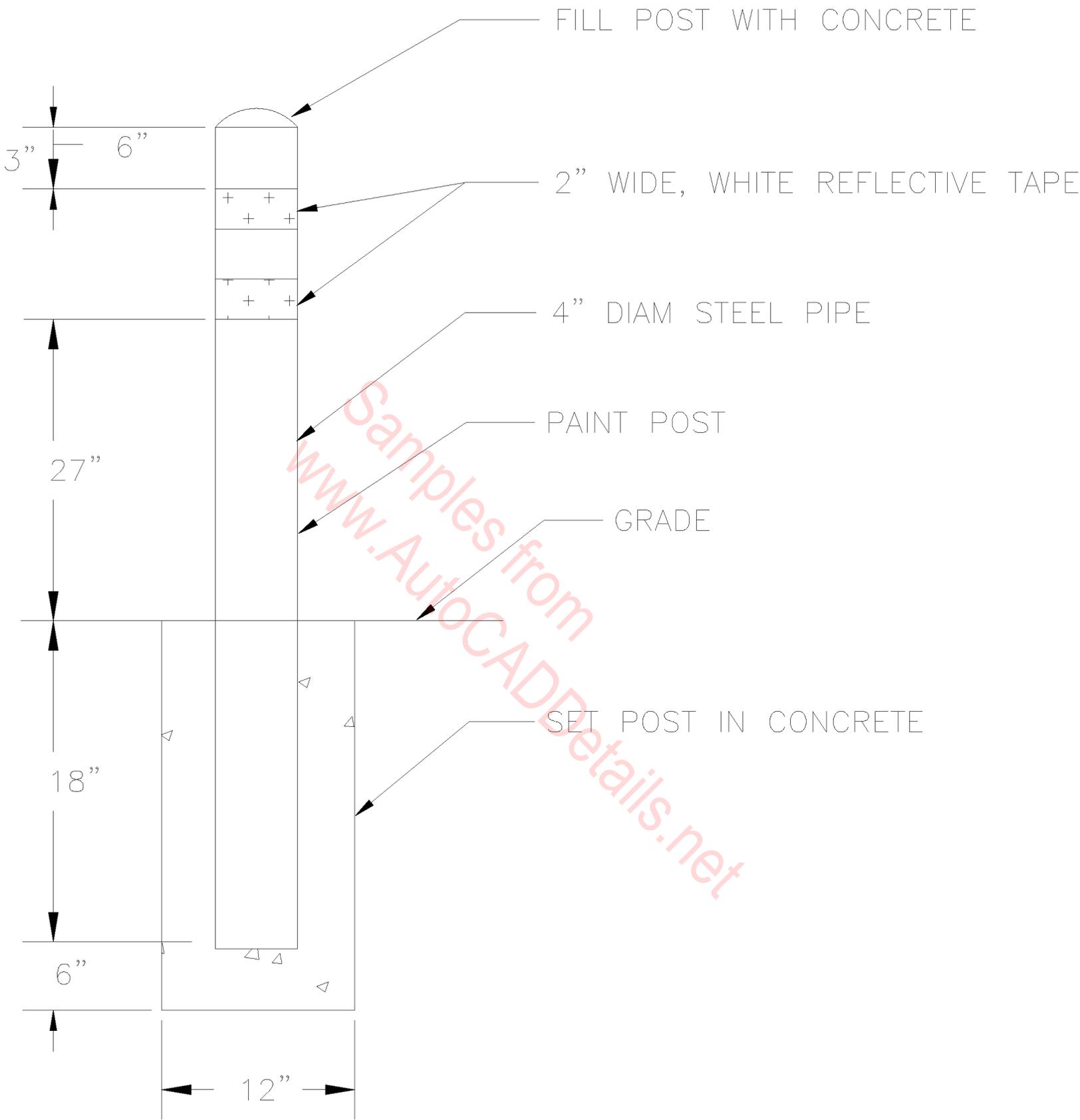
ELEVATION



INSTALLATION PLAN

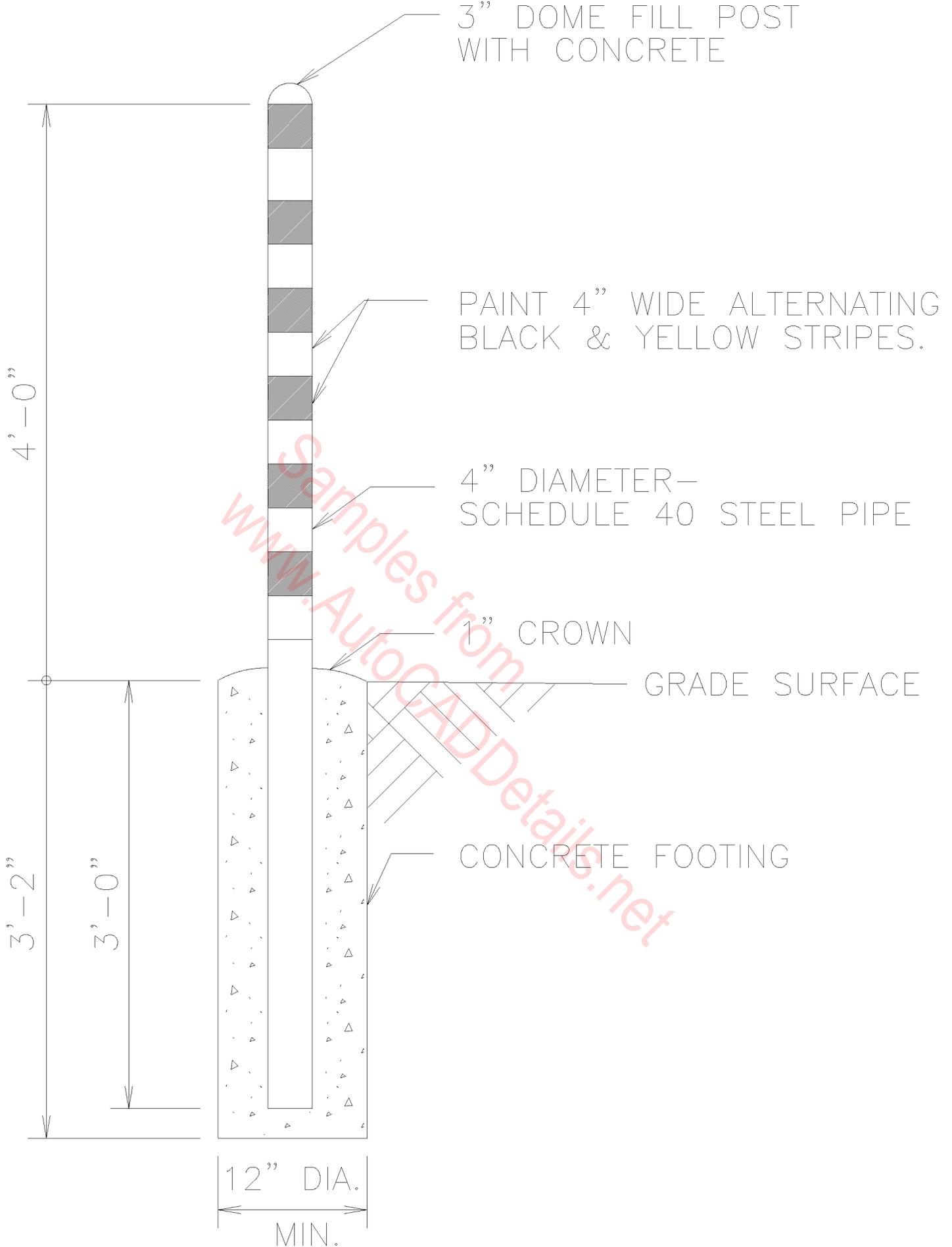
PRECAST CONCRETE WHEEL STOP DETAILS

N.T.S.



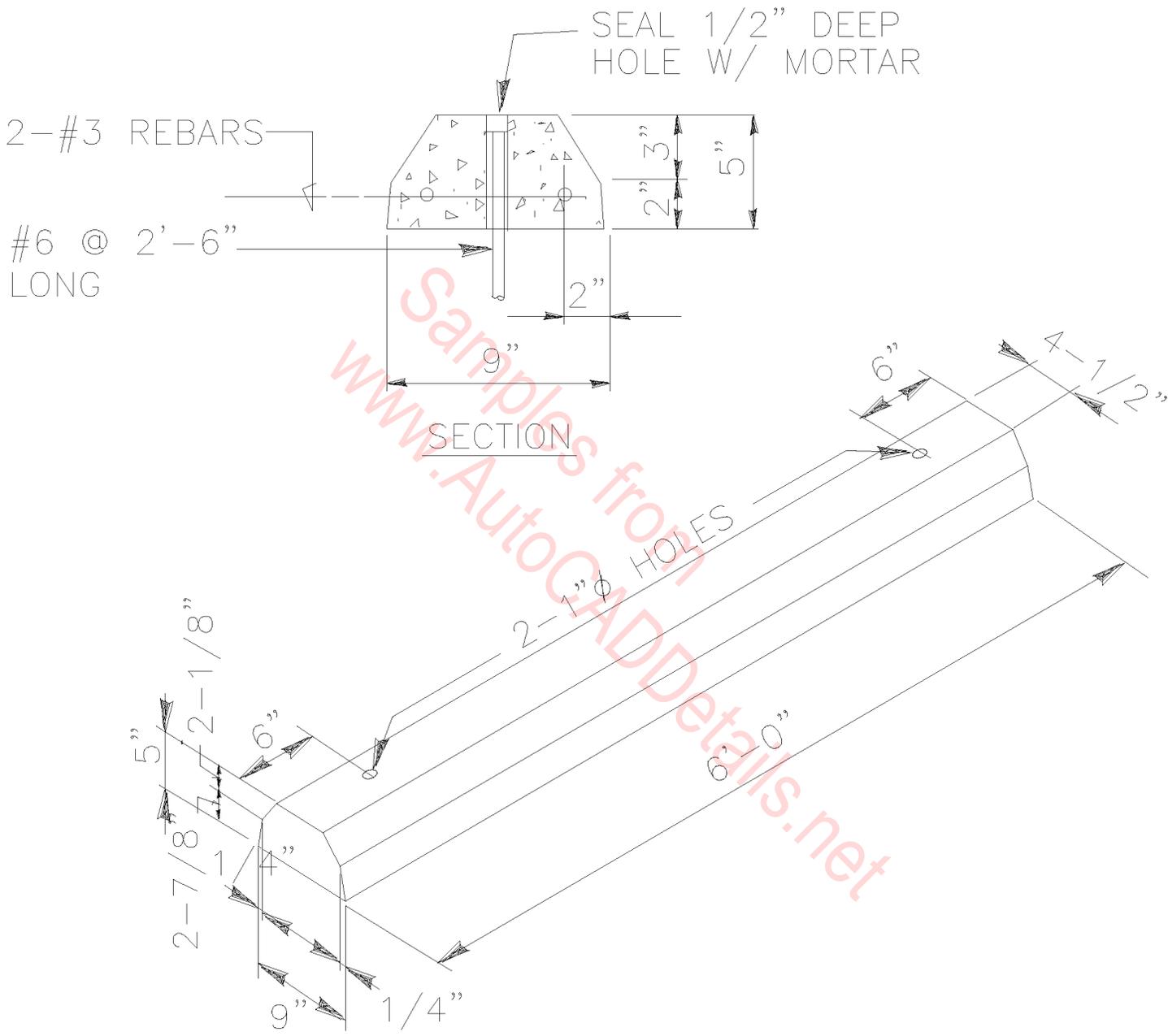
TYPICAL BOLLARD DETAIL

N.T.S.

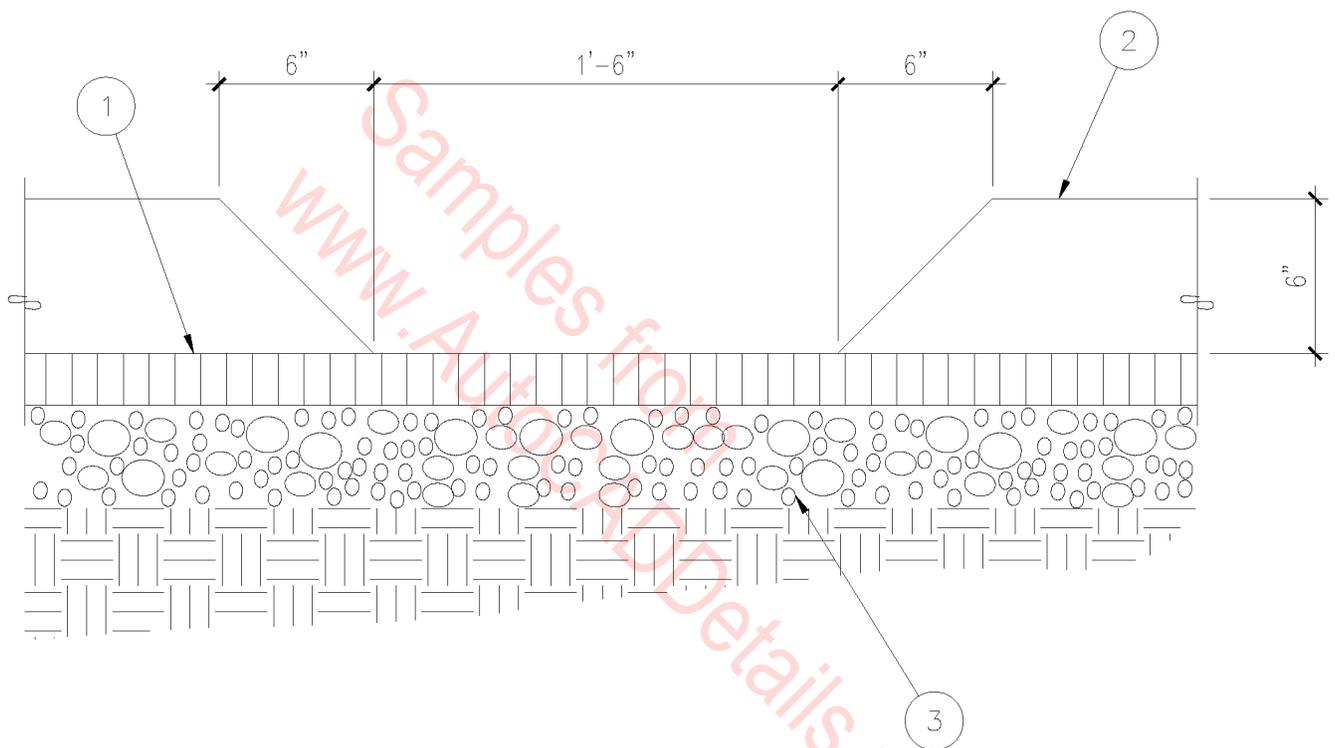


GUARD POST DETAIL

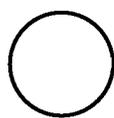
N.T.S.



PRECAST CONCRETE WHEEL STOP
 N.T.S.



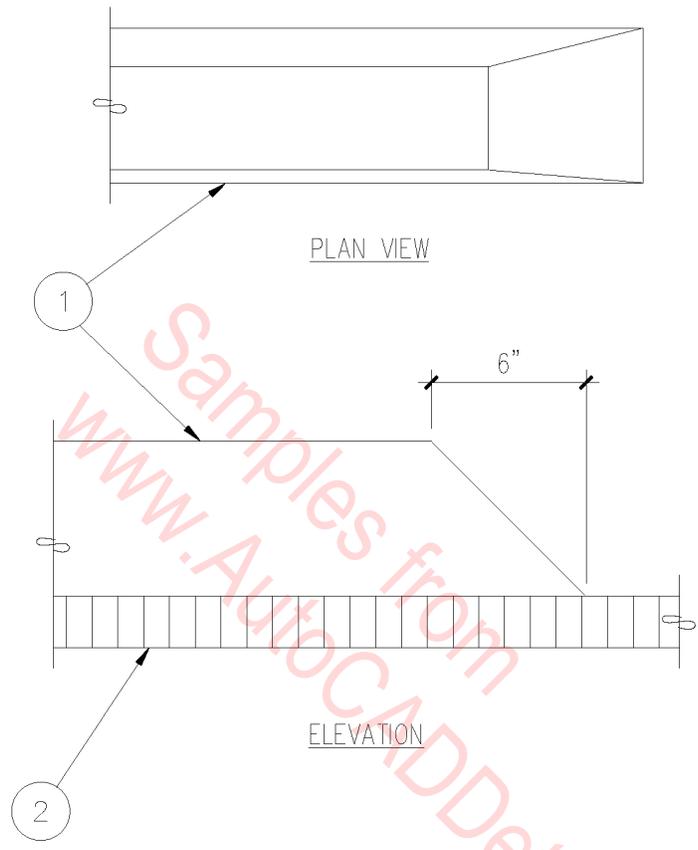
- 1. ASPHALTIC CONCRETE.
- 2. EXTRUDED CONCRETE CURB.
- 3. 4" A.B.C.



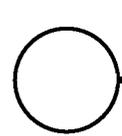
DRAINAGE CURB CUT

1 1/2" = 1'-0"

02A-2001



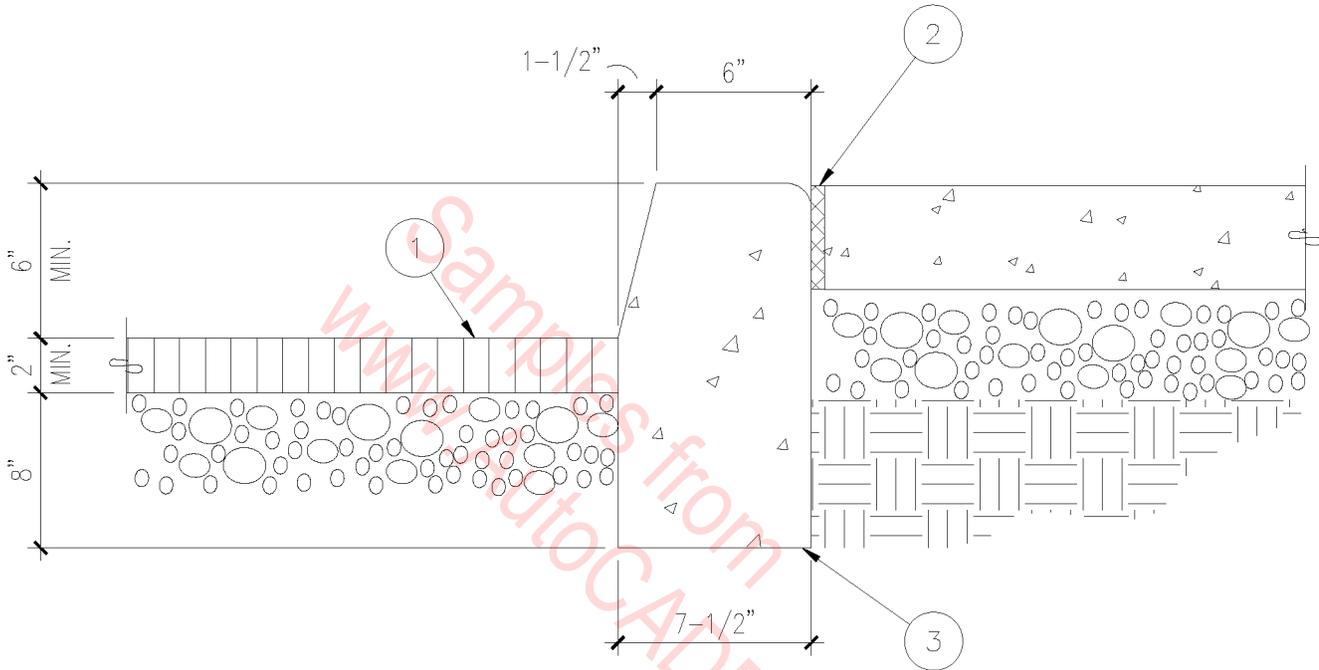
1. MATCHING EXTRUDED CONCRETE CURB.
2. ASPHALTIC CONCRETE.



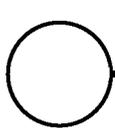
EXTRUDED CURB END

1 1/2" = 1'-0"

02A-2002



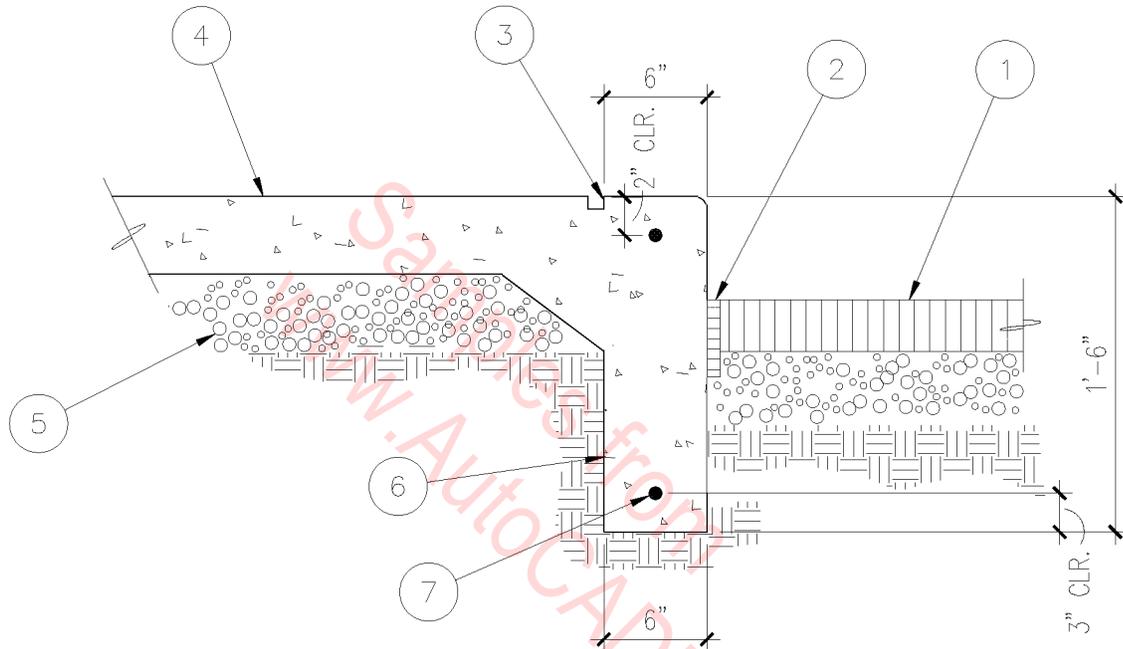
- 1. ASPHALTIC CONCRETE.
- 2. 3/8" EXPANSION JOINT.
- 3. CONCRETE CURB.



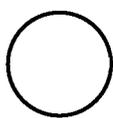
TYPICAL SIDEWALK CURB

1 1/2" = 1'-0"

02A-2003



1. ASPHALTIC CONCRETE OVER AGGREGATE BASE COURSE.
2. 1/2" ASPHALTIC IMPREGNATED EXPANSION JOINT.
3. 1/2" TOOLED JOINT.
4. 4" CONCRETE SLAB.
5. AGGREGATE BASE COURSE.
6. CONCRETE STEM MIN. 3" INTO SUB BASE.
7. (2) #4 REBARS CONTINUOUS.

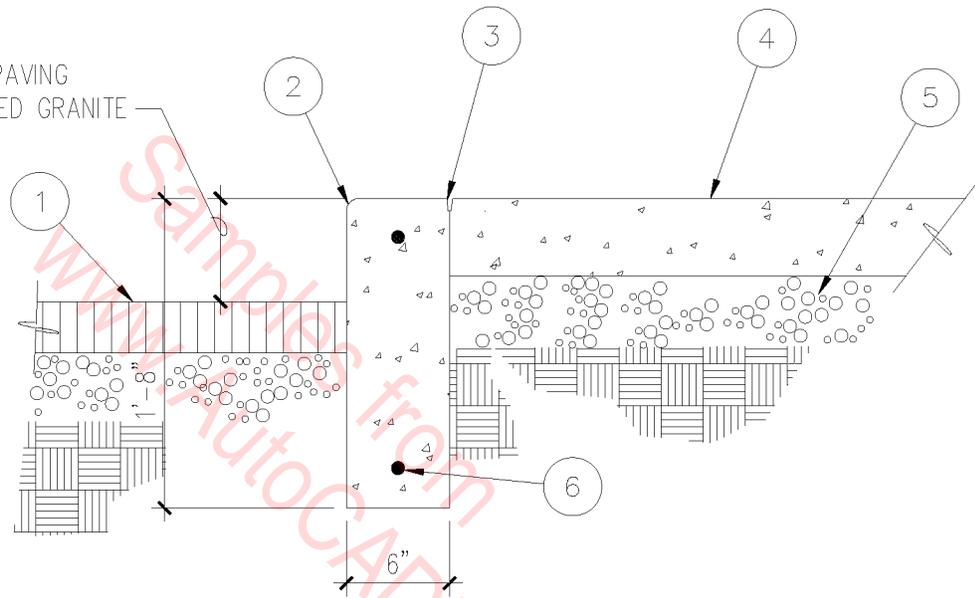


CONCRETE CURB

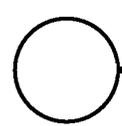
1" = 1'-0"

02A-2004

6" @ ASPHALT PAVING
2" @ DECOMPOSED GRANITE



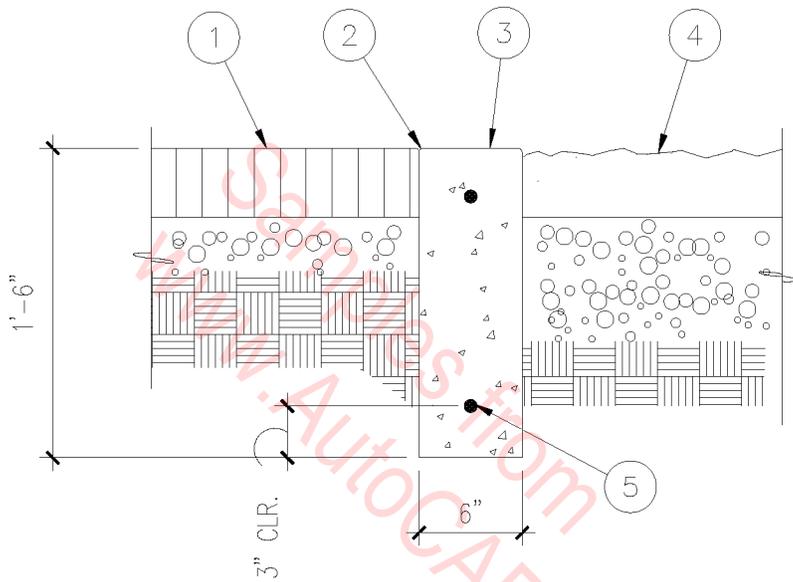
1. ASPHALT OR DECOMPOSED GRANITE ON AGGREGATE BASE COURSE.
2. RADIUS EDGE.
3. TOOLED JOINT.
4. CONCRETE SLAB ON A.B.C.
5. A.B.C.
6. (2) #4 REBARS CONTINUOUS.



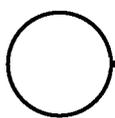
SIDEWALK @ PAVING

1" = 1'-0"

02A-2005



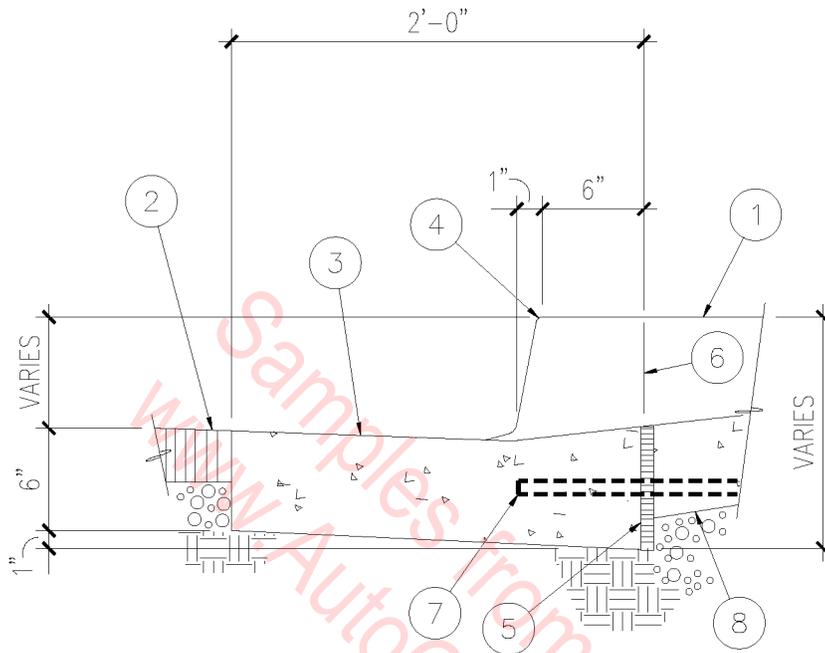
1. ASPHALTIC CONCRETE
OVER A.B.C.
2. 3/4" RADIUS.
3. CONCRETE CURB.
4. DECOMPOSED GRANITE
FIRE LANE.
5. (2) #4 REBARS
CONTINUOUS.



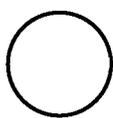
RIBBON CURB

1" = 1'-0"

02A-2006



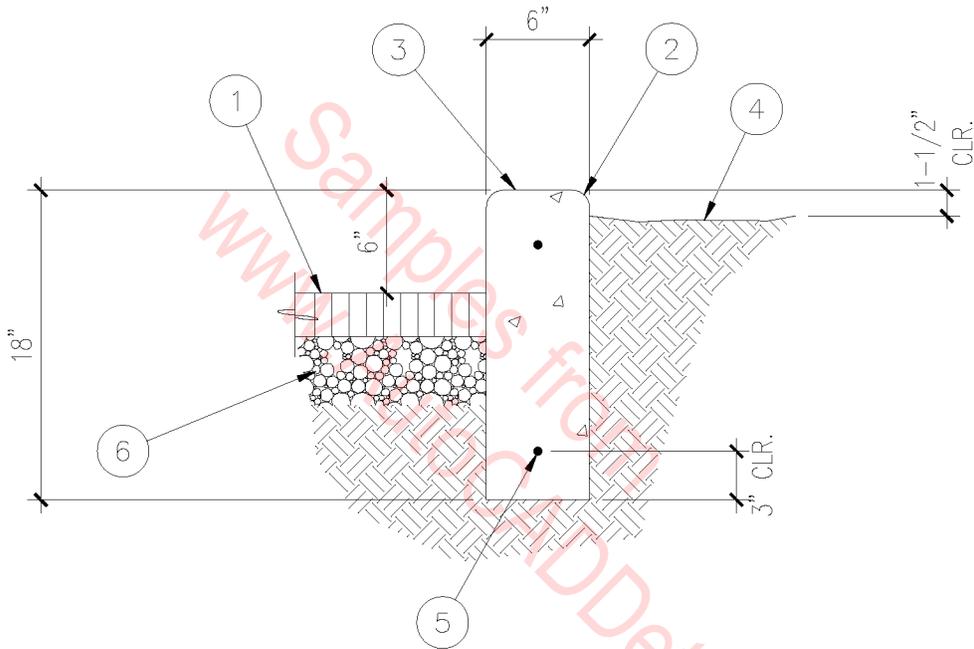
1. CONCRETE CURB BEYOND.
2. ASPHALT PAVING OVER AGGREGATE BASE COURSE.
3. CONCRETE CURB AND GUTTER.
4. 3/4" RADIUS.
5. 1/2" X 6" ASPHALT IMPREGNATED EXPANSION JOINT MATERIAL.
6. CONCRETE CURB SCORE LINE IN CURB BEYOND.
7. #4 REBARS 2'-0" LONG @ 18" O.C. MAX.
8. 5" CONCRETE SLAB ON 6" AGGREGATE BASE COURSE.



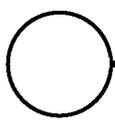
CONCRETE GUTTER

1" = 1'-0"

02A-2007



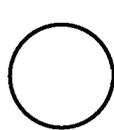
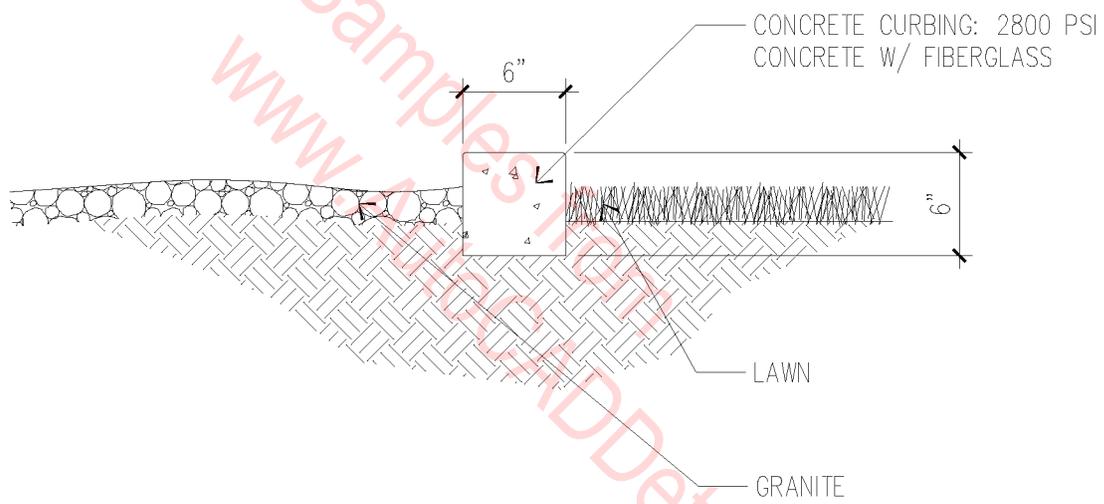
1. ASPHALTIC CONCRETE.
2. TOOLED EDGE.
3. CONCRETE CURB.
4. FINISH GRADE.
5. (2) #4 REBARS CONTINUOUS.
6. AGGREGATE BASE COURSE.



CURB @ GRADE

1" = 1'-0"

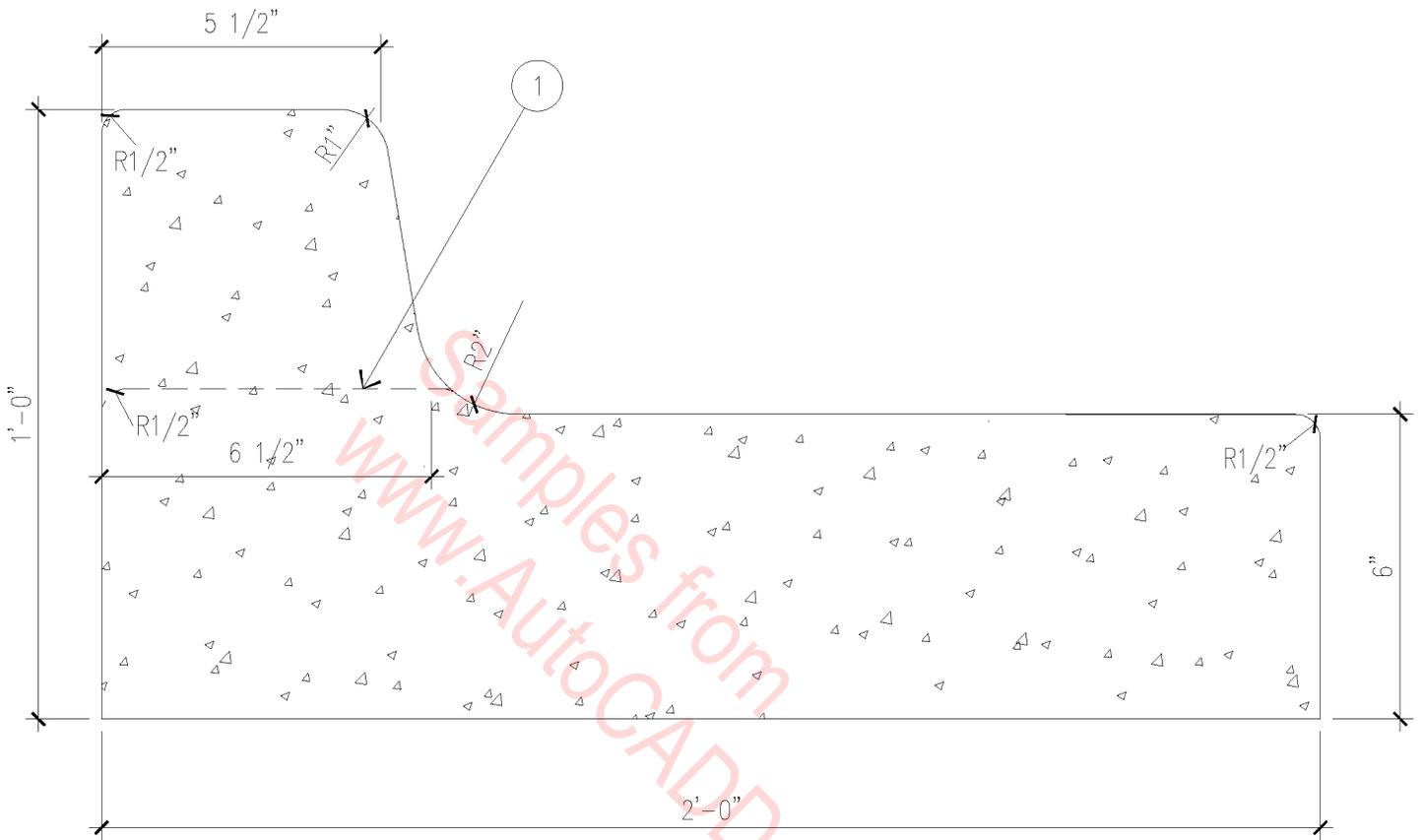
02A-2008



CURBING DETAIL

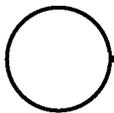
1" = 1'-0"

02A-2010



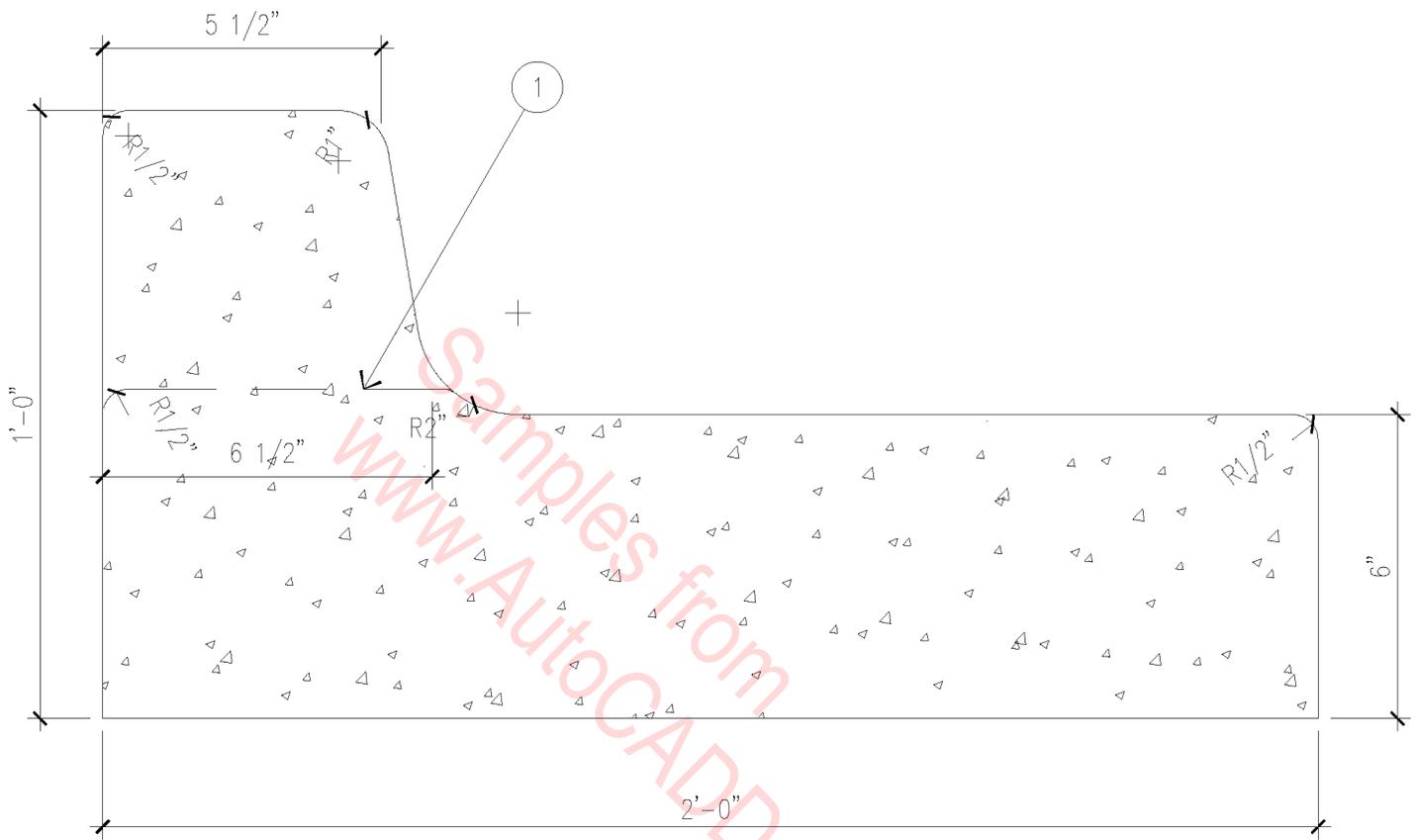
1. TOP OF CURB AT CURB CUT AND SIDEWALK WHERE BACK OF CURB ELEVATIONS ARE SHOWN ON PLANS.

TYPICAL PRECAST CONCRETE CURB AND GUTTER DETAIL



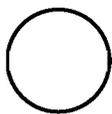
3" = 1'-0"

02A-2011



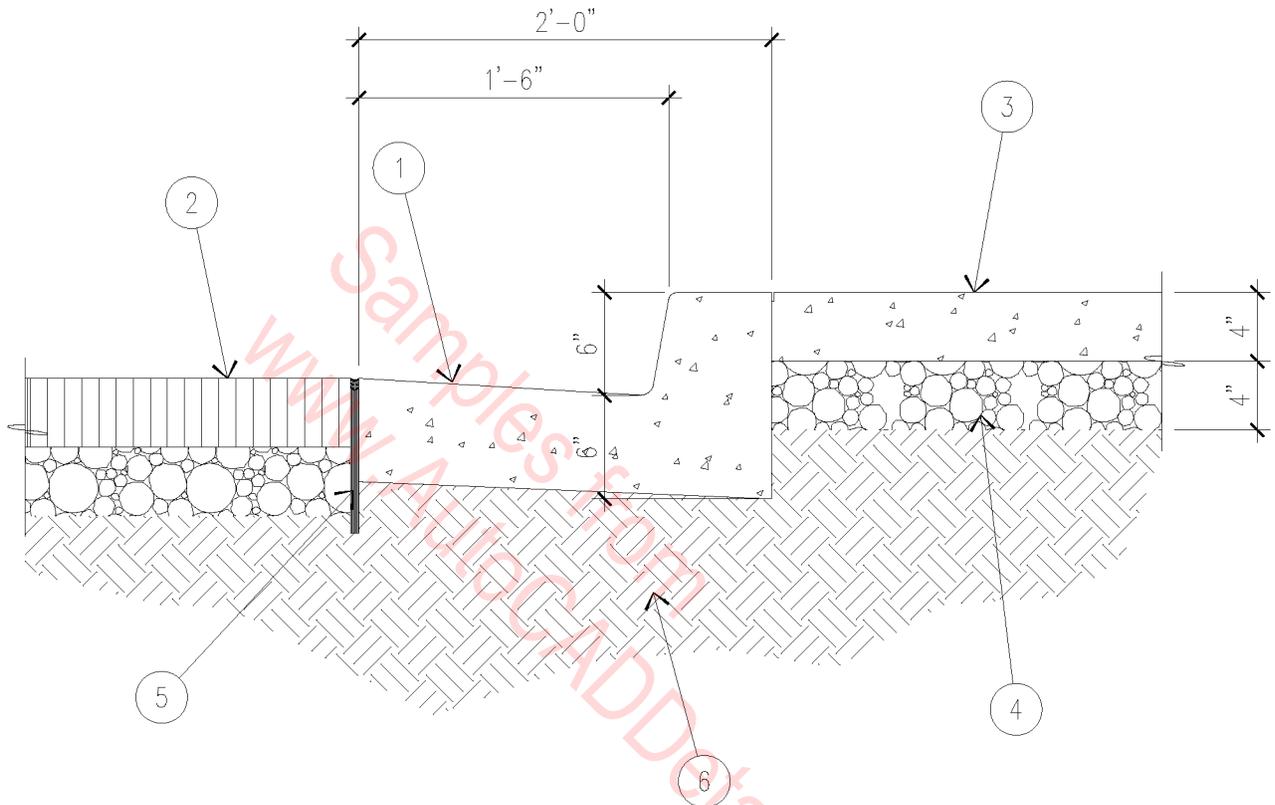
1. TOP OF CURB AT CURB CUT AND SIDEWALK WHERE BACK OF CURB ELEVATIONS ARE SHOWN ON PLANS.

TYPICAL PRECAST CONCRETE CURB AND GUTTER DETAIL



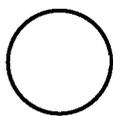
3" = 1'-0"

02A-2011



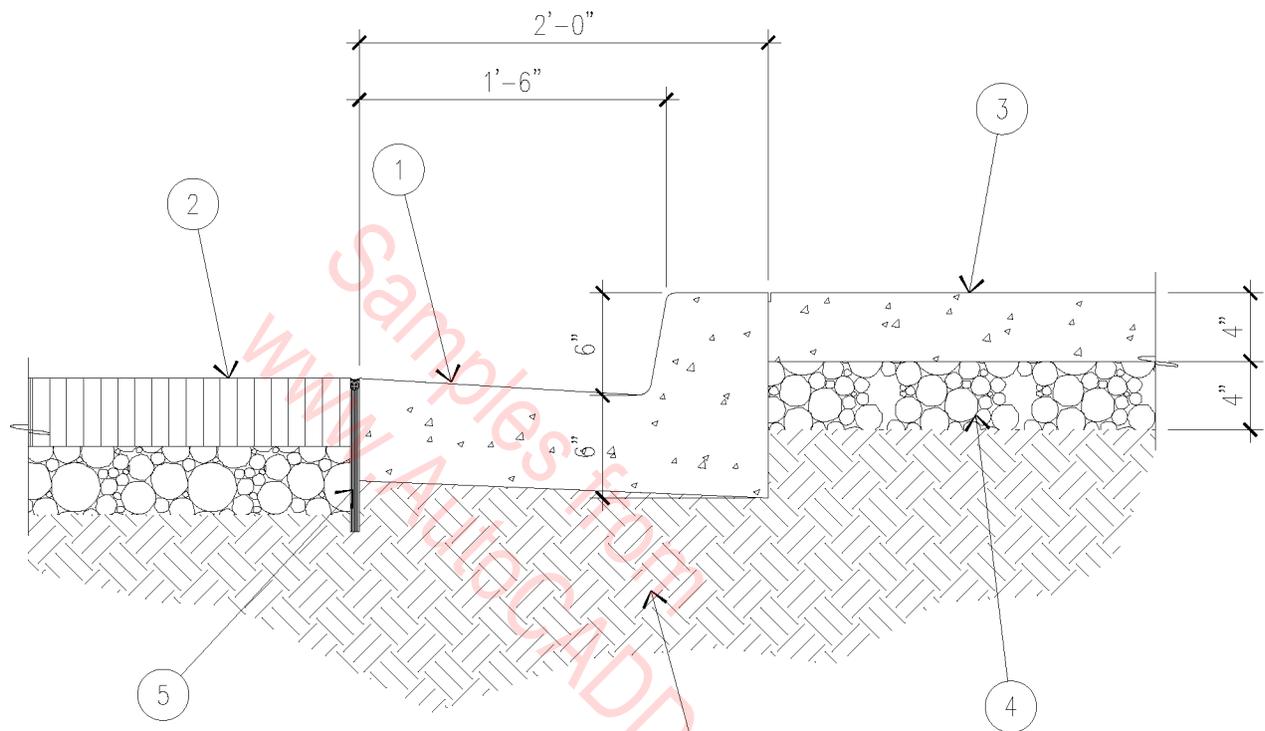
- | | |
|---------------------------------|------------------------------|
| 1. CONCRETE CURB AND GUTTER. | 4. 4" ABC COMPACTED TO 95%. |
| 2. ASPHALTIC CONCRETE PAVEMENT. | 5. EXPANSION JOINT MATERIAL. |
| 3. 4" CONCRETE SIDEWALK. | 6. UNDISTURBED SOIL. |

CONCRETE CURB AND GUTTER



1" = 1'-0"

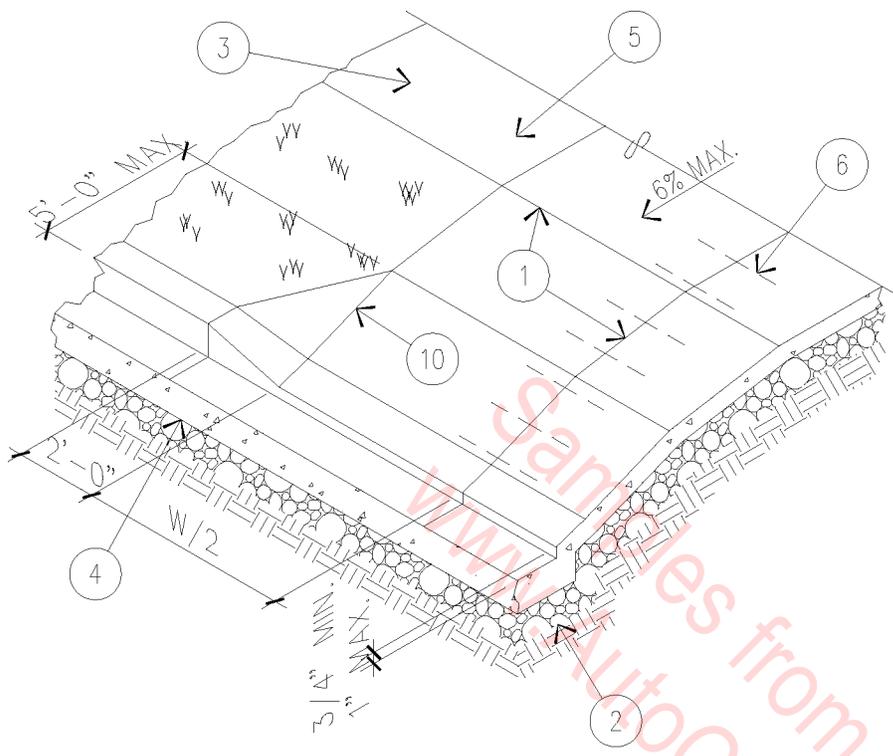
02A-2012



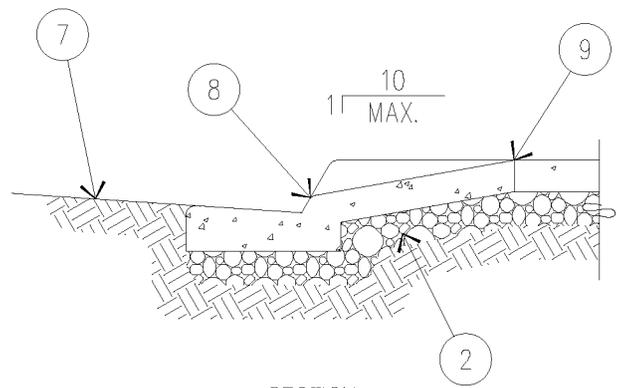
- | | |
|---------------------------------|------------------------------|
| 1. CONCRETE CURB AND GUTTER. | 4. 4" ABC COMPACTED TO 95%. |
| 2. ASPHALTIC CONCRETE PAVEMENT. | 5. EXPANSION JOINT MATERIAL. |
| 3. 4" CONCRETE SIDEWALK. | 6. UNDISTURBED SOIL. |

○
—
 CONCRETE CURB AND GUTTER
 1" = 1'-0"

02A-2012



PLAN



SECTION

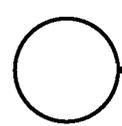
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. SCORE LINE.

GENERAL NOTES:

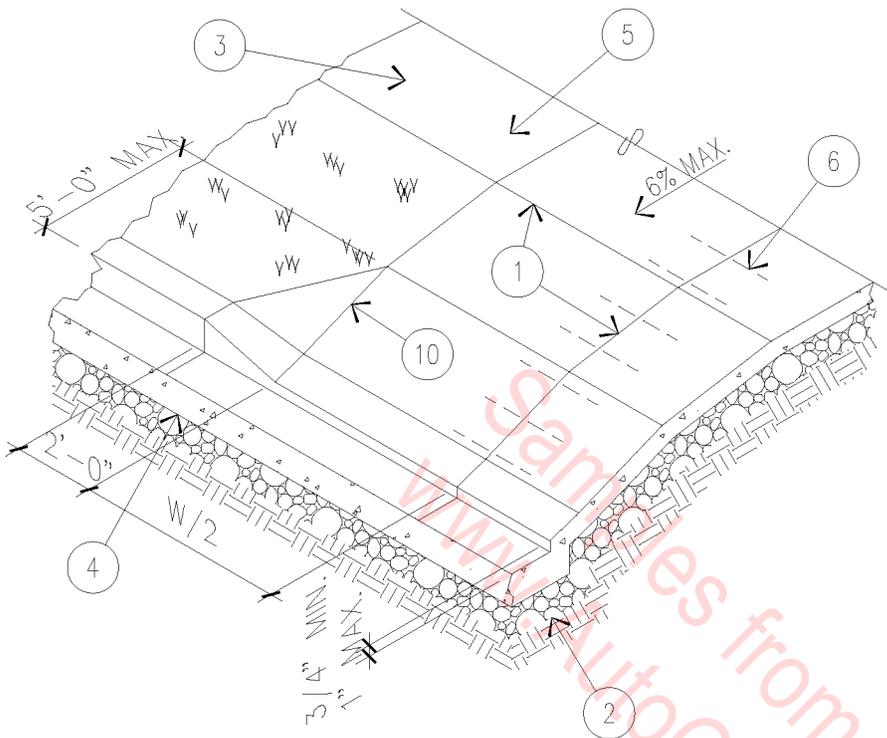
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- D. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- E. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.
- F. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.

FLARE DRIVEWAY APPROACH

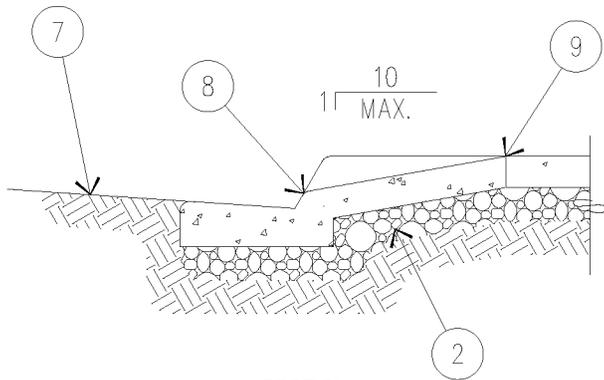


N.T.S.

02A-2013



PLAN



SECTION

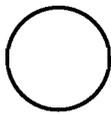
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. SCORE LINE.

GENERAL NOTES:

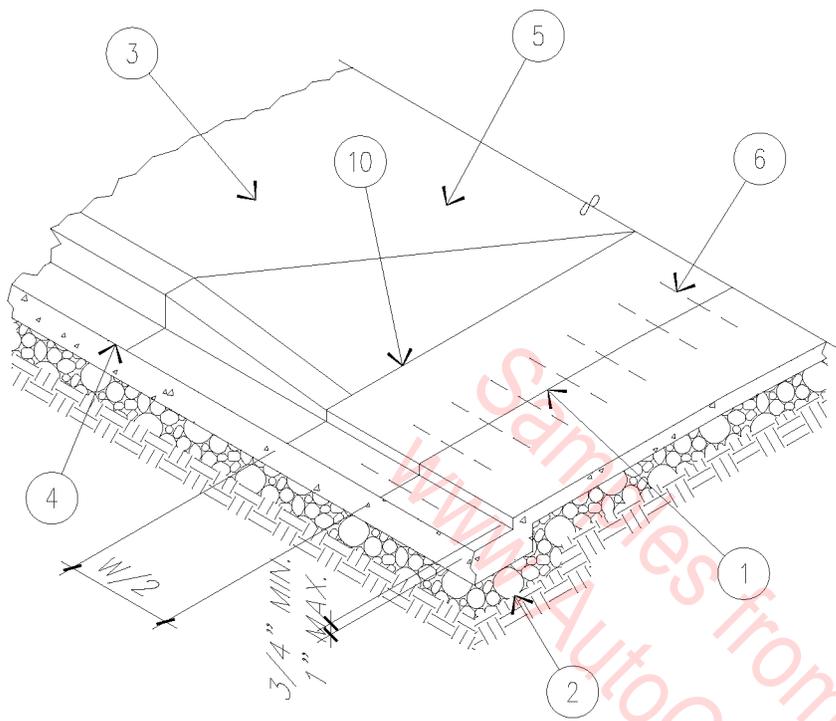
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- D. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- E. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.
- F. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.

FLARE DRIVEWAY APPROACH

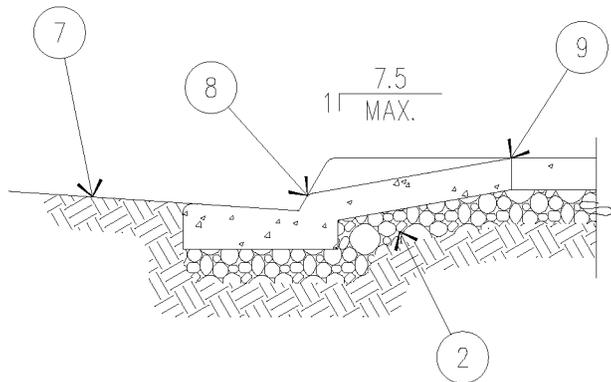


N.T.S.

02A-2013



PLAN



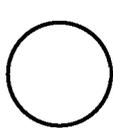
SECTION

KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. STRAIGHT SCORE LINE.

GENERAL NOTES:

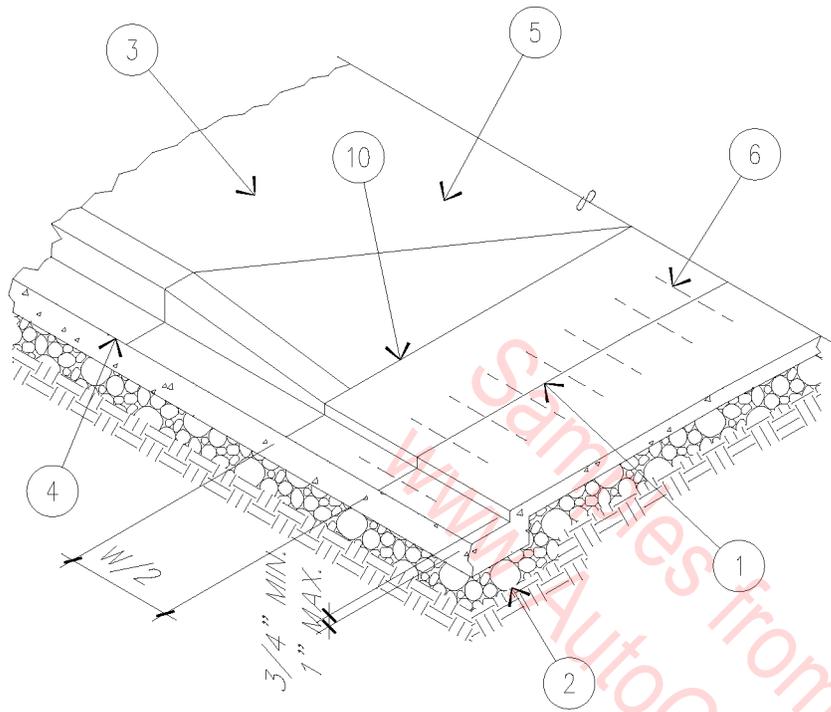
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- D. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.



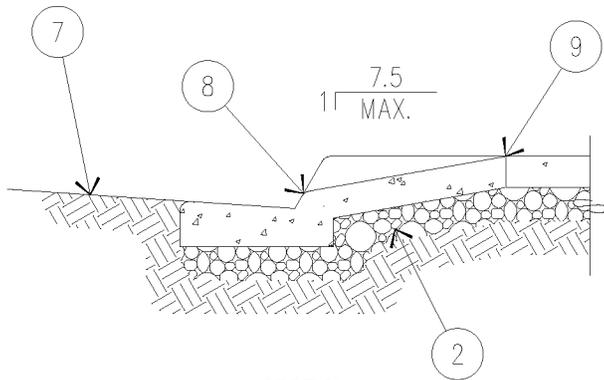
DIP DRIVEWAY APPROACH

N.T.S.

02A-2014



PLAN



SECTION

KEYNOTES:

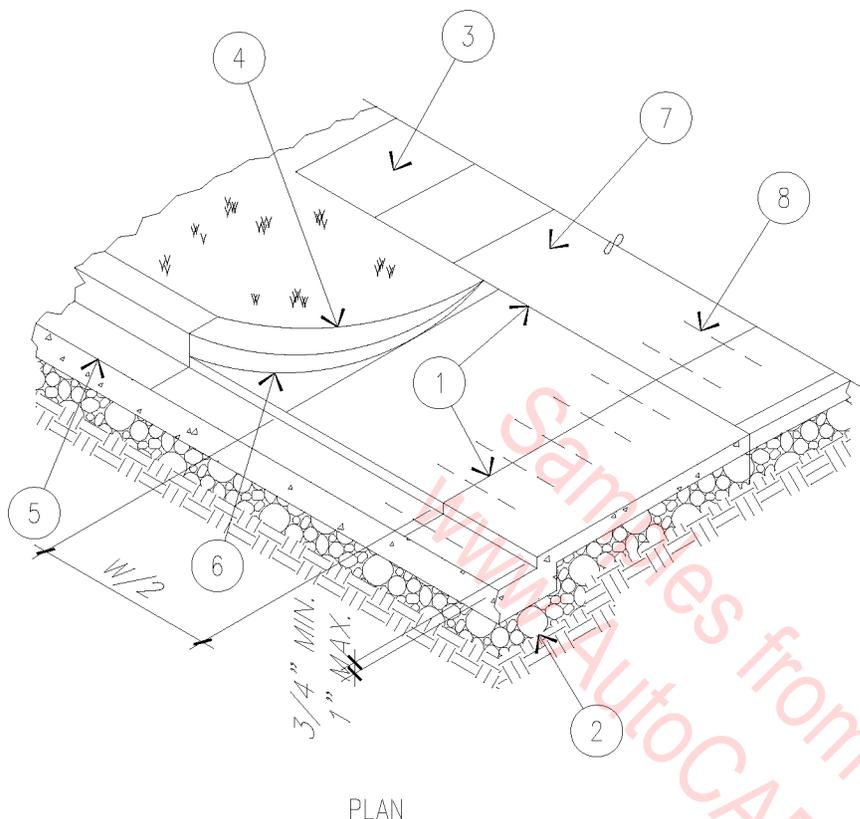
1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. STRAIGHT SCORE LINE.

GENERAL NOTES:

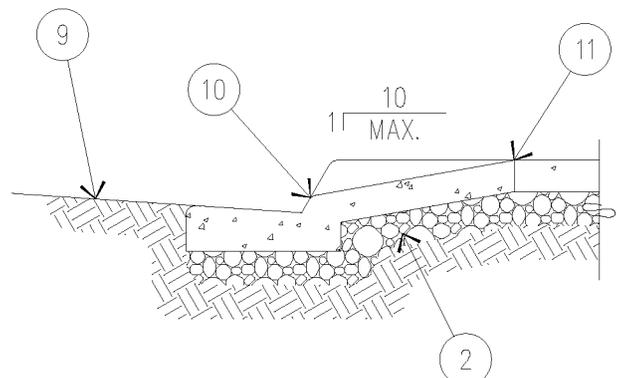
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- D. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.

DIP DRIVEWAY APPROACH
N.T.S.

02A-2014



PLAN



SECTION

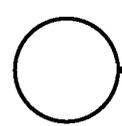
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. 5'-6" MAXIMUM RADIUS.
5. LIP OF GUTTER.
6. CURB RETURN.
7. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
8. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
9. STREET CROSS SLOPE.
10. 1 1/2" RADIUS.
11. 1/2" EXPANSION JOINT.

GENERAL NOTES:

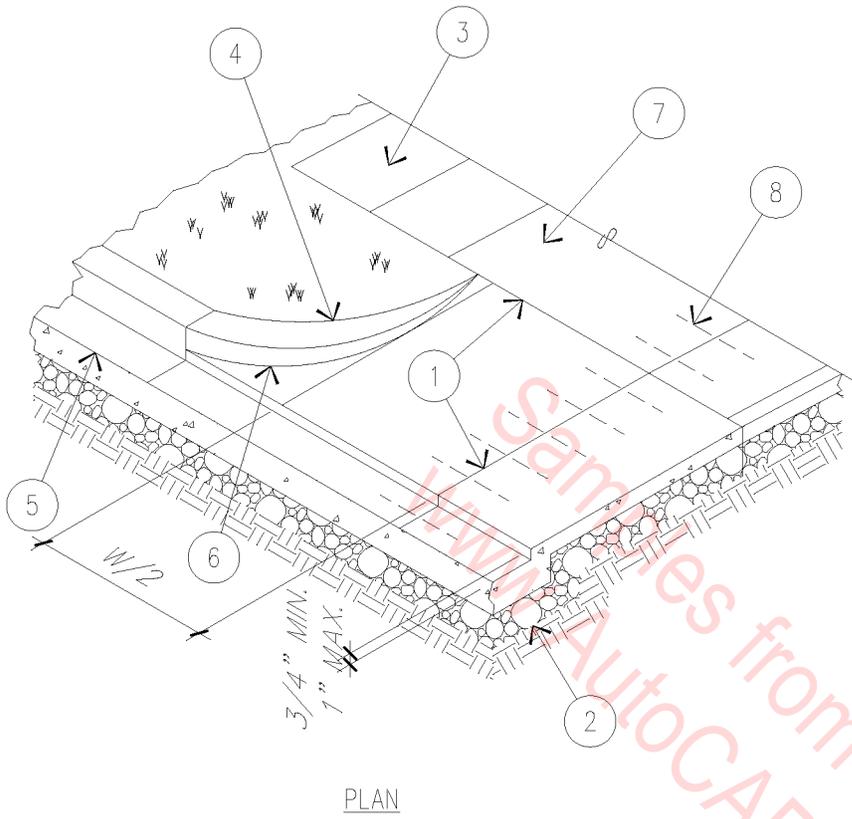
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. LIP MAY BE ELIMINATED IF DESIRED.
- D. CONCRETE SHALL BE MONOLITHIC 4,000 P.S.I. REINFORCED WITH POLYPROPYLENE MULTI-FILAMENT FIBERS.

OPEN DRIVEWAY APPROACH

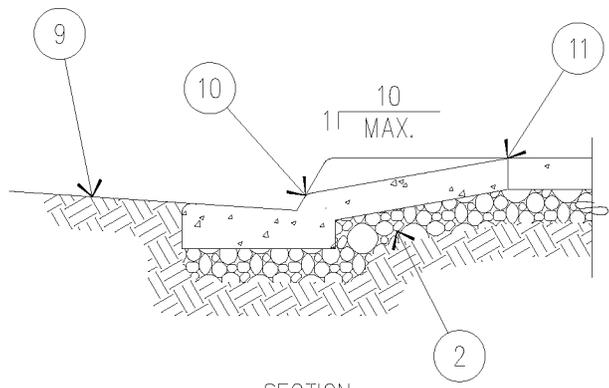


N.T.S.

02A-2015



PLAN



SECTION

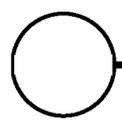
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
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6. CURB RETURN.
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8. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
9. STREET CROSS SLOPE.
10. 1 1/2" RADIUS.
11. 1/2" EXPANSION JOINT.

GENERAL NOTES:

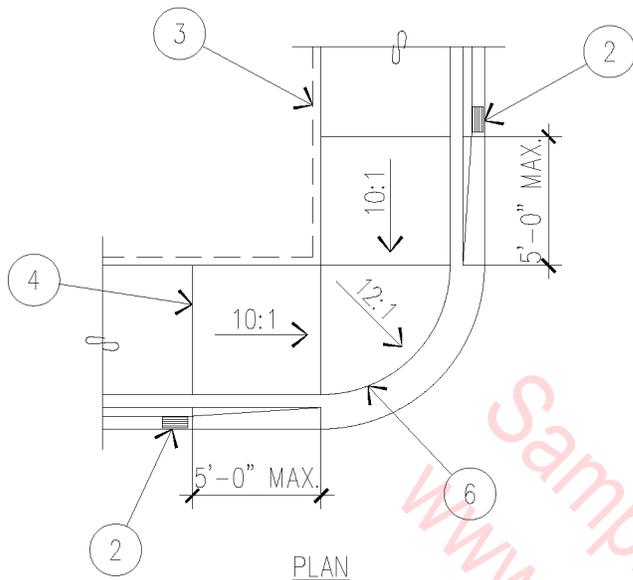
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. LIP MAY BE ELIMINATED IF DESIRED.
- D. CONCRETE SHALL BE MONOLITHIC 4,000 P.S.I. REINFORCED WITH POLYPROPYLENE MULTI-FILAMENT FIBERS.

OPEN DRIVEWAY APPROACH

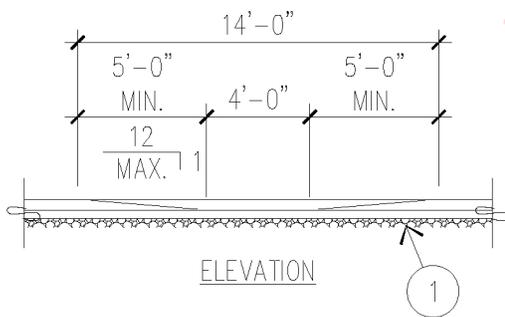


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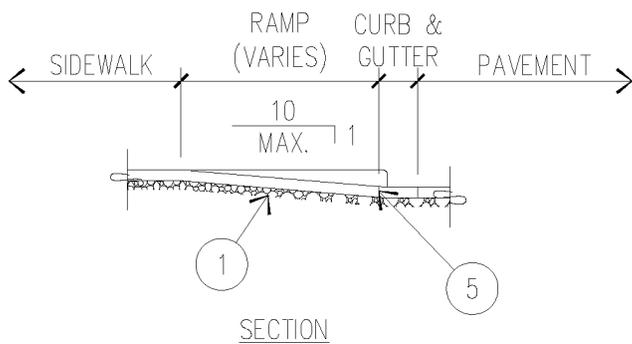
02A-2015



PLAN



ELEVATION



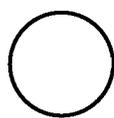
SECTION

KEYNOTES:

1. UNDER RAMP USE UNTREATED BASE COURSE MATERIAL ONLY WHERE EXISTING SOIL IS UNSATISFACTORY AND WHERE USE IS PROPERLY APPROVED.
2. LOCATE THE INLET GRATE 2" MINIMUM AWAY FROM THE PEDESTRIAN CROSSWALK WITH ALL DRAINAGE INTERCEPTED BEFORE IT GETS TO THE CROSSWALK AREA.
3. WHERE EXISTING GROUND BEHIND SIDEWALK IS TOO HIGH TO ALLOW SIDEWALK TO RAMP DOWN, GRADE GROUND TO ACCEPTABLE SLOPE OR INSTALL CURB WALL AS REQUIRED.
4. EXPANSION JOINT (TYPICAL).
5. CONSTRUCTION JOINT.
6. CONSTRUCTION JOINT OR POUR MONOLITHICALLY AT CONTRACTOR'S OPTION.

GENERAL NOTES:

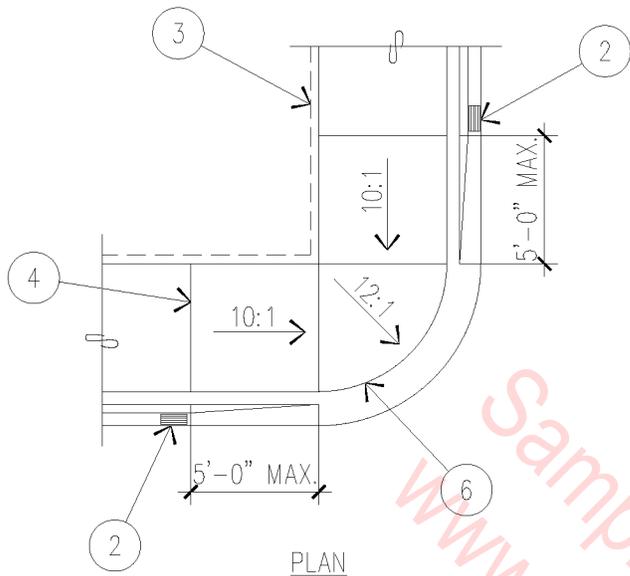
- A. USE 4,000 P.S.I. CONCRETE.
- B. SLOPES SHOWN AS 12:1 SHALL BE MEASURED USING THE AVERAGE GRADE OF THE CLOSEST 50' OF SIDEWALK UPHILL FROM THE RAMP AS A HORIZONTAL REFERENCE (BY DEFINITION). WHERE THE AVERAGE GRADE IS LESS THAN 12:1 OR HAS A NEGATIVE SLOPE, THE SIDEWALK RAMP SHALL BE CONSTRUCTED AS 12:1 FROM ACTUAL HORIZONTAL.
- C. ALTERNATE LOCATION OF HANDICAP RAMP FOR STREETS WITH P.T. CURVE RADIUS OF LESS THAN 25 FEET AND WITH SLOPES GREATER THAN 10% USED WITH PROPER APPROVAL.
- D. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
- E. USE FINE HAIR BROOM TO FINISH ON GRADES UNDER 6%. OVER 6% GRADE, USE ROUGH HAIR BROOM.
- F. SLOPES SHOWN ARE MAXIMUM SLOPES.



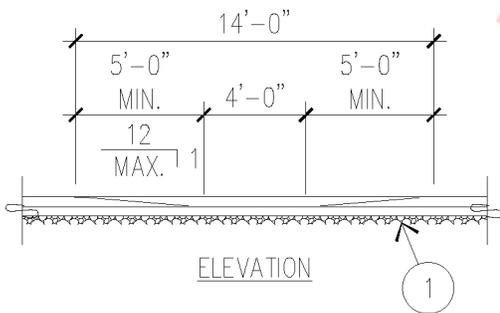
SIDEWALK RAMP

N.T.S.

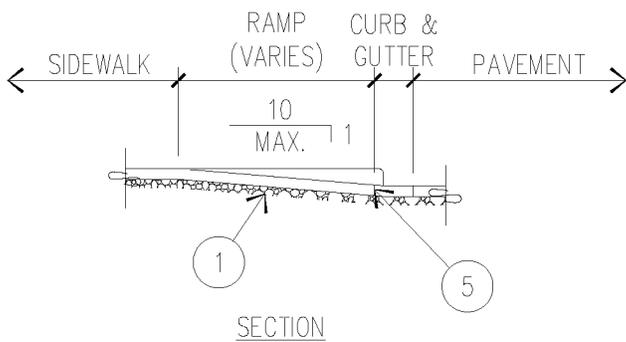
02A-2016



PLAN



ELEVATION



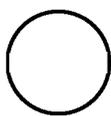
SECTION

KEYNOTES:

1. UNDER RAMP USE UNTREATED BASE COURSE MATERIAL ONLY WHERE EXISTING SOIL IS UNSATISFACTORY AND WHERE USE IS PROPERLY APPROVED.
2. LOCATE THE INLET GRATE 2" MINIMUM AWAY FROM THE PEDESTRIAN CROSSWALK WITH ALL DRAINAGE INTERCEPTED BEFORE IT GETS TO THE CROSSWALK AREA.
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4. EXPANSION JOINT (TYPICAL).
5. CONSTRUCTION JOINT.
6. CONSTRUCTION JOINT OR POUR MONOLITHICALLY AT CONTRACTOR'S OPTION.

GENERAL NOTES:

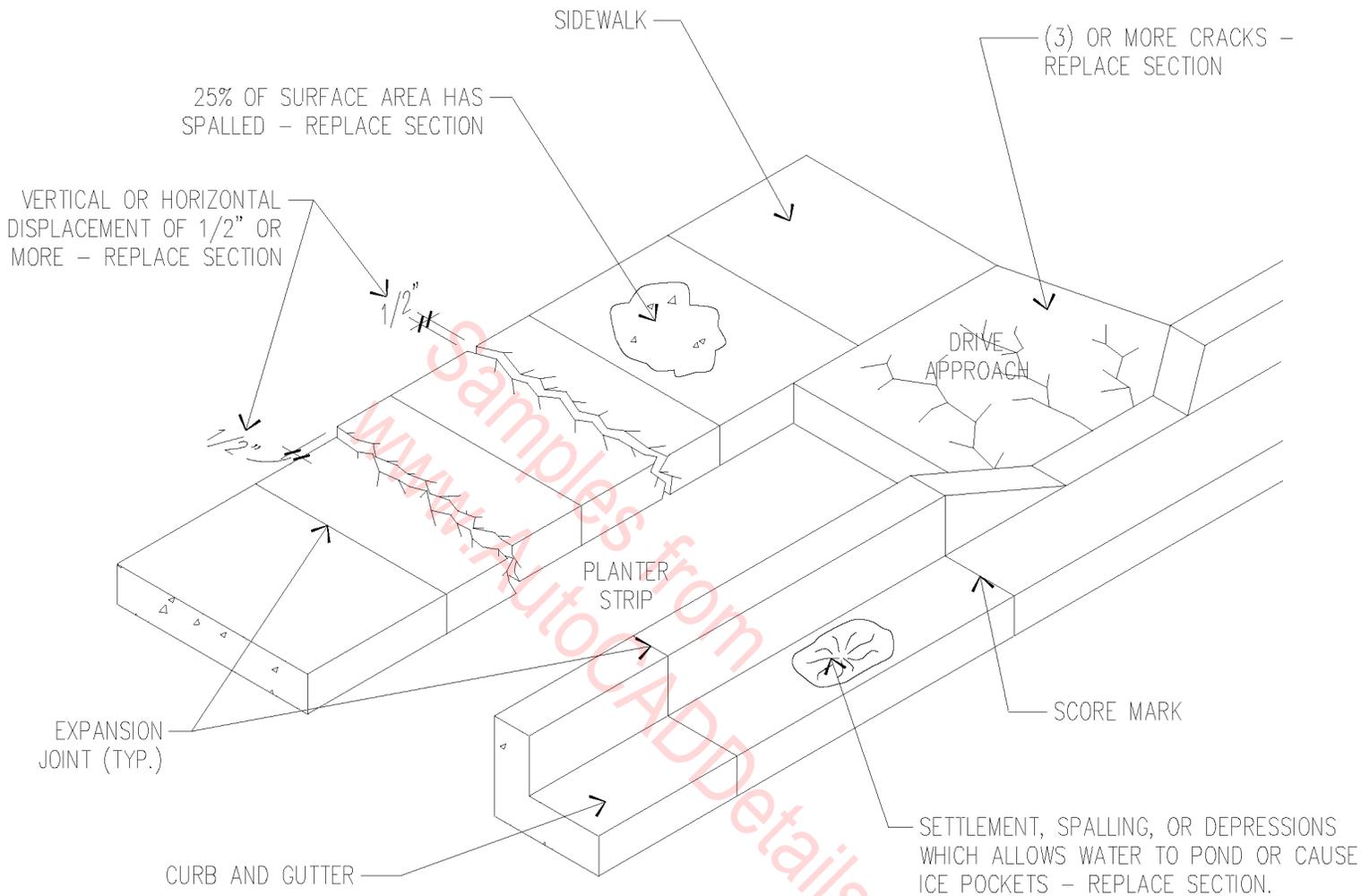
- A. USE 4,000 P.S.I. CONCRETE.
- B. SLOPES SHOWN AS 12:1 SHALL BE MEASURED USING THE AVERAGE GRADE OF THE CLOSEST 50' OF SIDEWALK UPHILL FROM THE RAMP AS A HORIZONTAL REFERENCE (BY DEFINITION). WHERE THE AVERAGE GRADE IS LESS THAN 12:1 OR HAS A NEGATIVE SLOPE, THE SIDEWALK RAMP SHALL BE CONSTRUCTED AS 12:1 FROM ACTUAL HORIZONTAL.
- C. ALTERNATE LOCATION OF HANDICAP RAMP FOR STREETS WITH P.T. CURVE RADIUS OF LESS THAN 25 FEET AND WITH SLOPES GREATER THAN 10% USED WITH PROPER APPROVAL.
- D. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
- E. USE FINE HAIR BROOM TO FINISH ON GRADES UNDER 6%. OVER 6% GRADE, USE ROUGH HAIR BROOM.
- F. SLOPES SHOWN ARE MAXIMUM SLOPES.



SIDEWALK RAMP

N.T.S.

02A-2016

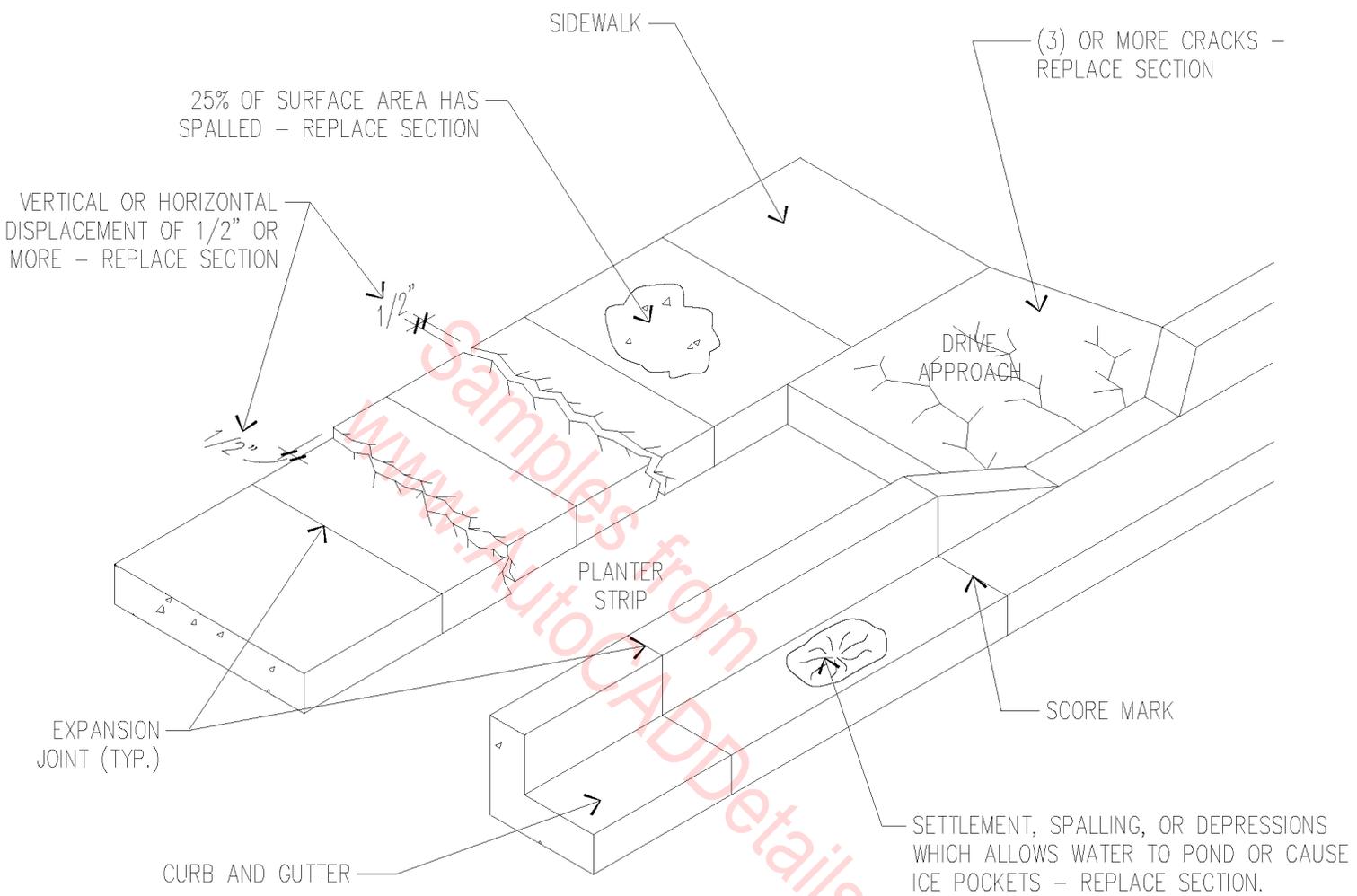


NOTE:
REPLACEMENT IS REQUIRED IF ANY COMPONENT HAS
ONE OR MORE OF THE CONDITIONS NOTED ABOVE.

CONCRETE REPLACEMENT CRITERIA

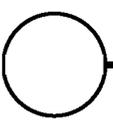
N.T.S.

02A-2017



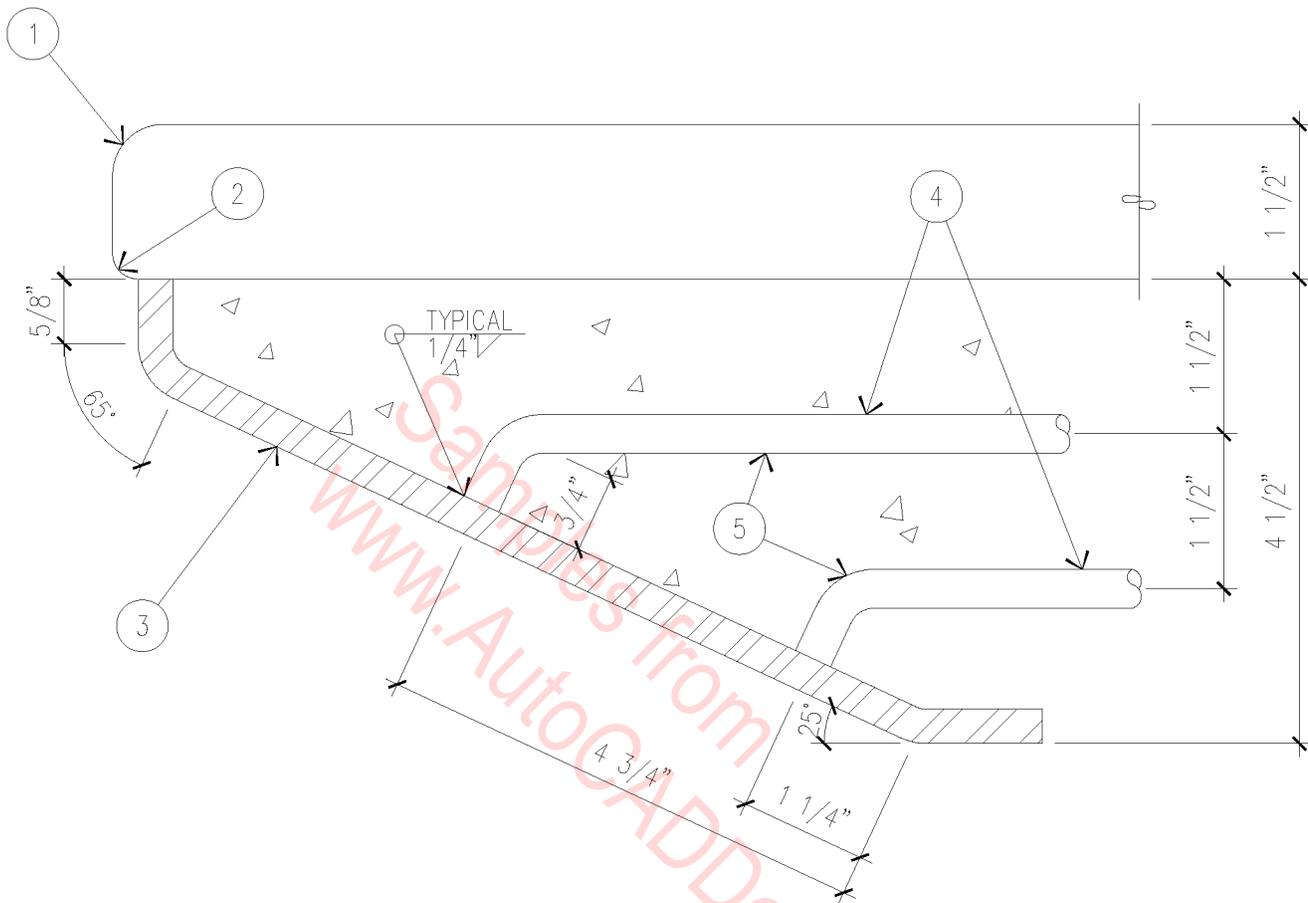
NOTE:
 REPLACEMENT IS REQUIRED IF ANY COMPONENT HAS
 ONE OR MORE OF THE CONDITIONS NOTED ABOVE.

CONCRETE REPLACEMENT CRITERIA



N.T.S.

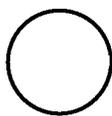
02A-2017



1. 1/2" RADIUS.
2. 1/4" RADIUS
3. 5/16" X 10" PLATE (ASTM A36),
BENT AS SHOWN.
4. #3 X 9" AT 24" O.C.
5. STAGGER ANCHORS.

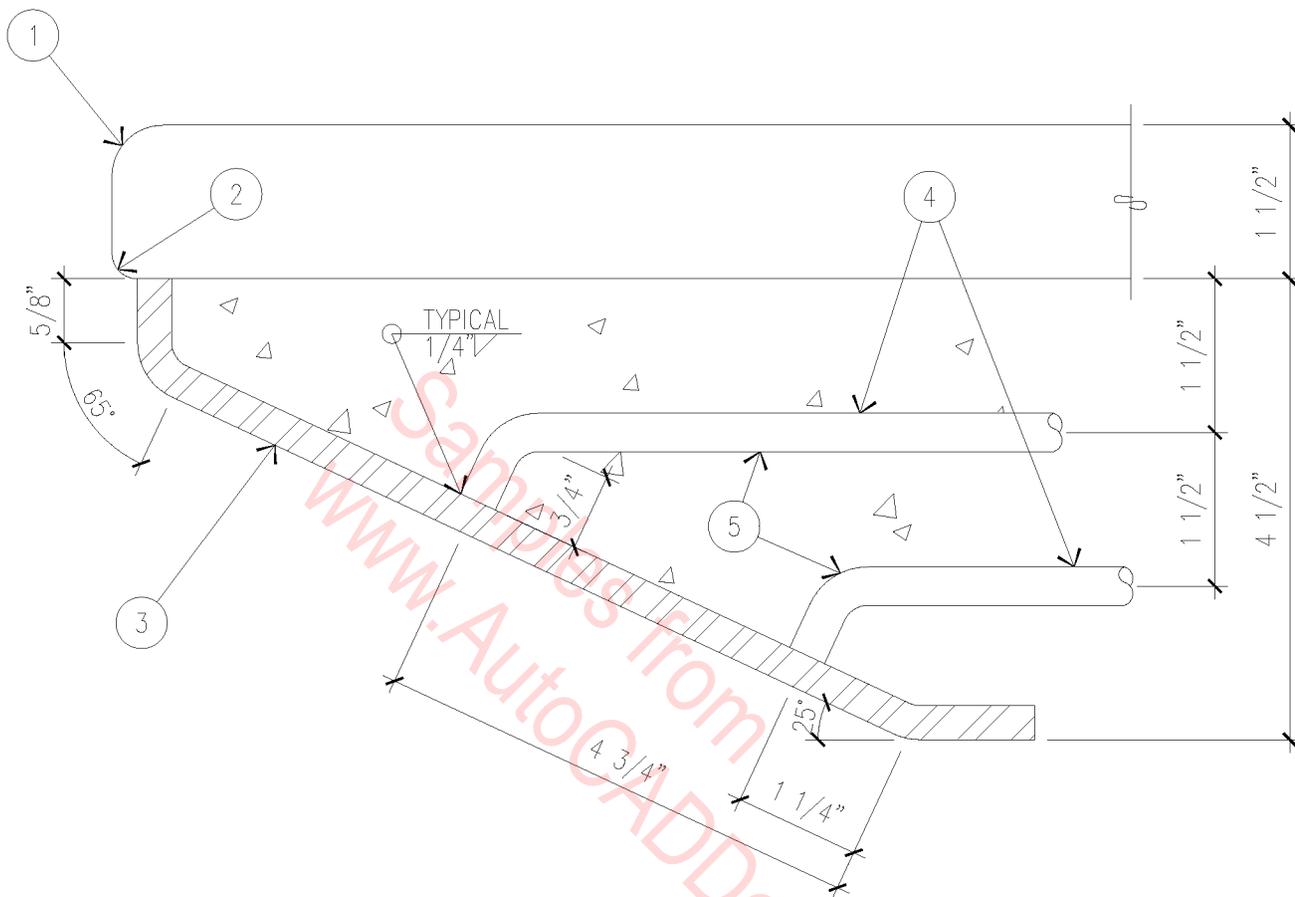
NOTE: HOT DIP GALVANIZE AFTER FABRICATION.

CURB OPENING INLET FACE PLATE



6" = 1'-0"

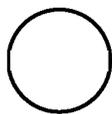
02A-2018



1. 1/2" RADIUS.
2. 1/4" RADIUS
3. 5/15" X 10" PLATE (ASTM A36),
BENT AS SHOWN.
4. #3 X 9" AT 24" O.C.
5. STAGGER ANCHORS.

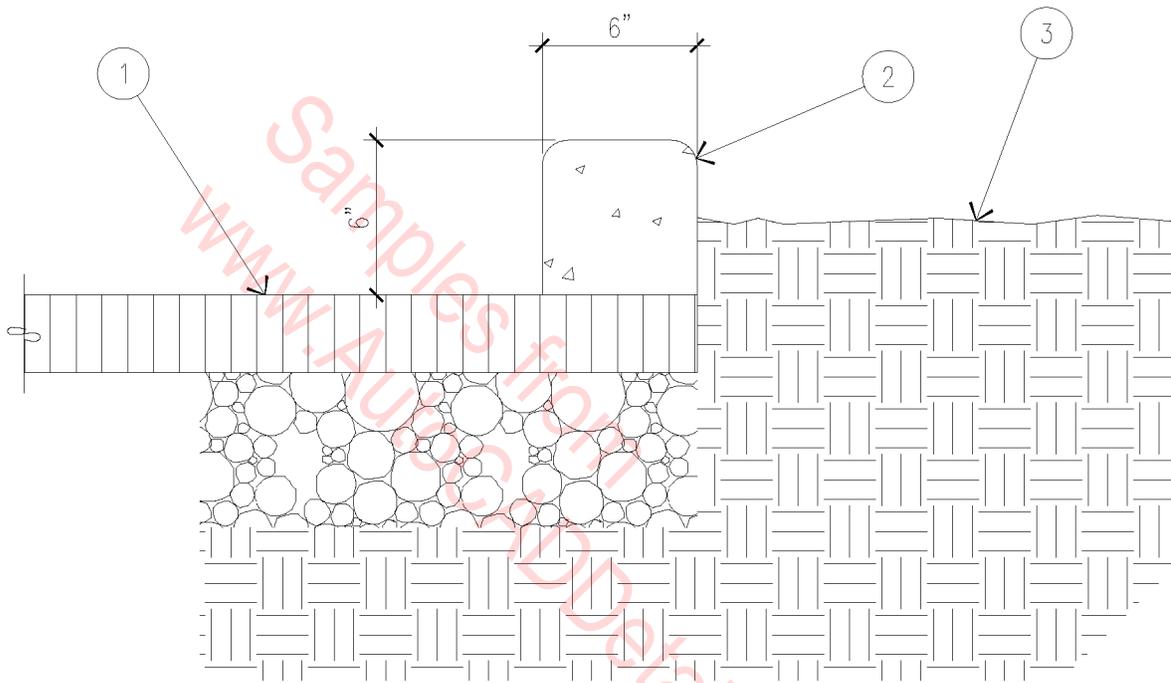
NOTE: HOT DIP GALVANIZE AFTER FABRICATION.

CURB OPENING INLET FACE PLATE

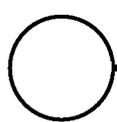


6" = 1'-0"

02A-2018



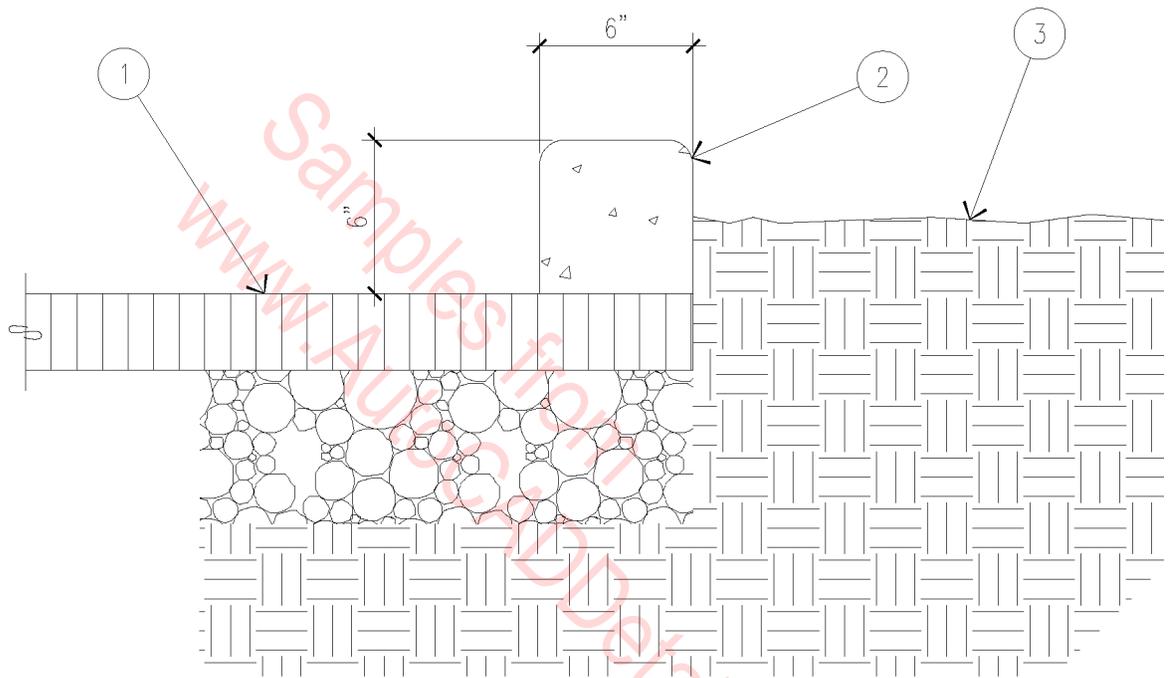
1. ASPHALT PAVEMENT ON BASE COURSE.
2. 6" EXTRUDED CURB ON ASPHALT.
3. FINISHED GRADE.



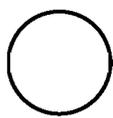
EXTRUDED CURB

1 1/2" = 1'-0"

02A-2019



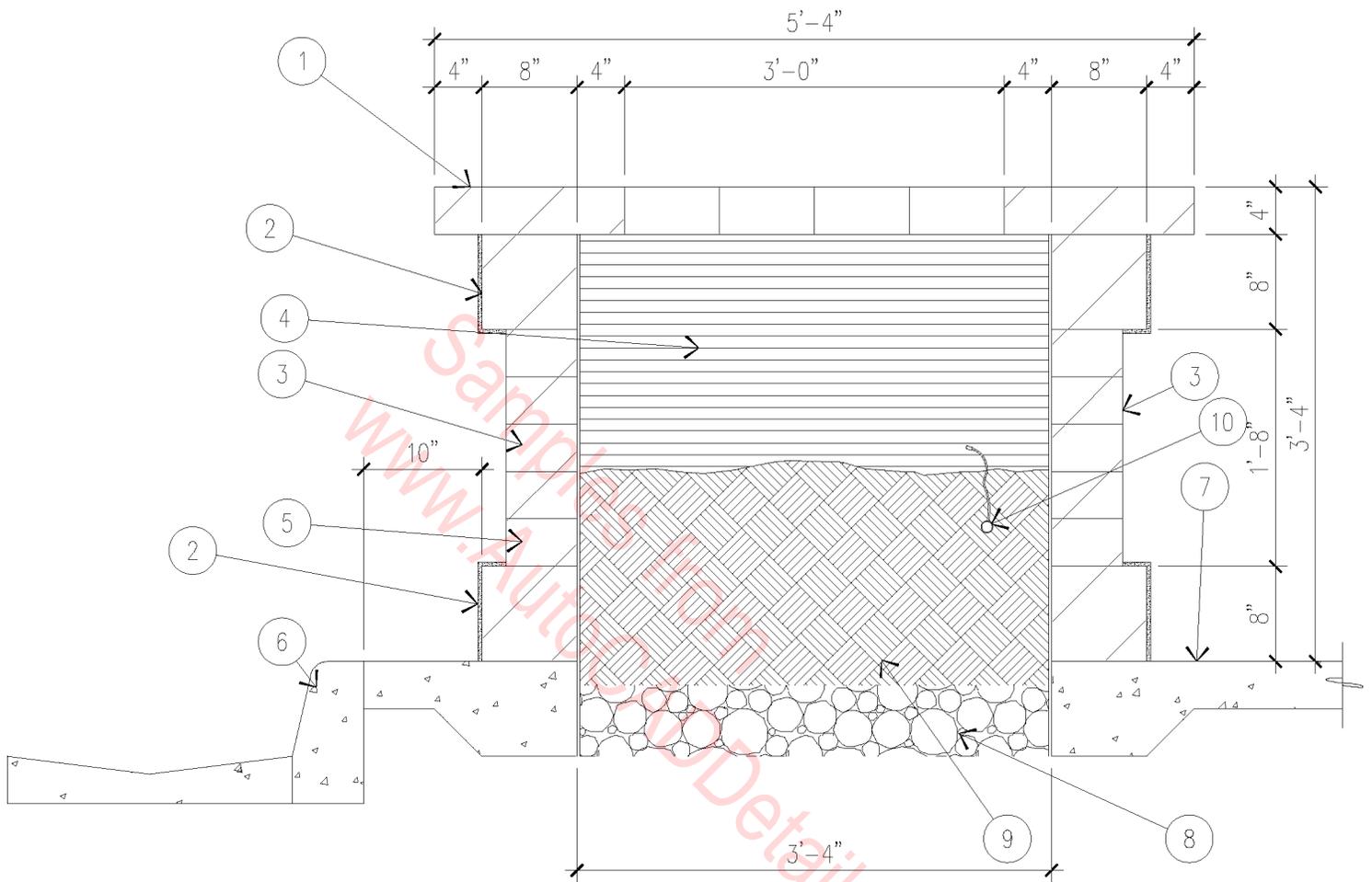
1. ASPHALT PAVEMENT ON BASE COURSE.
2. 6" EXTRUDED CURB ON ASPHALT.
3. FINISHED GRADE.



EXTRUDED CURB

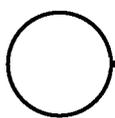
1 1/2" = 1'-0"

02A-2019



1. 4" X 8" X 16" 'FOUNDERS BLOCK' CAP.
2. 8" X 8" X 16" CMU WITH 3/8" CEMENT STUCCO FINISH.
3. 6" X 4" X 16" 'FOUNDERS BLOCK.'
4. WATERPROOF INTERIOR WITH TAR.
5. NO END MORTAR IN FIRST ROW ON STREET SIDE ONLY - LEAVE GAP OPEN FOR WEEP.

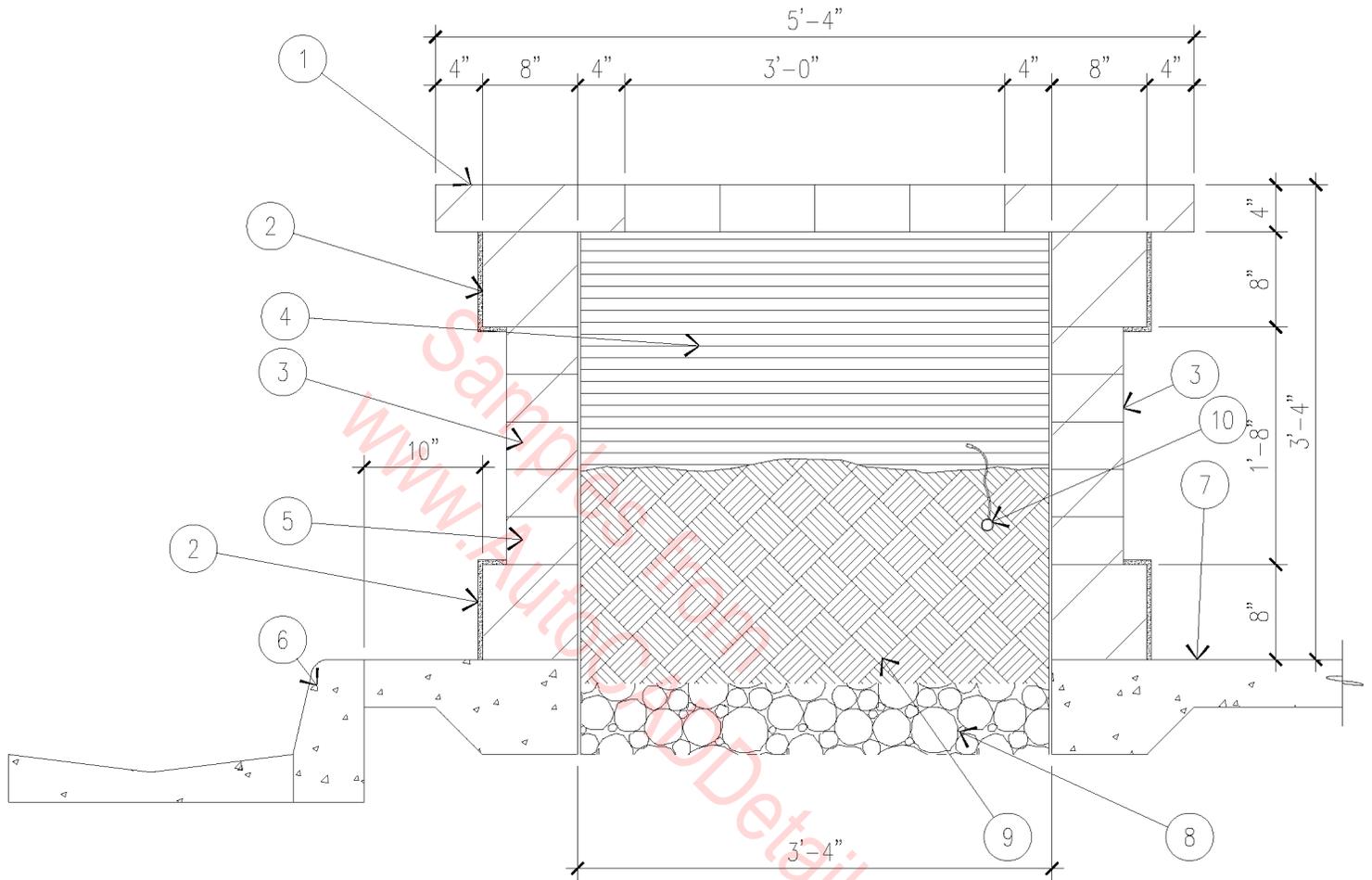
6. EXISTING CURB AND GUTTER.
7. SIDEWALK.
8. 6" OF GRAVEL FILL IN BOTTOM OF PLANTER.
9. TOP SOIL FILL FOR PLANTS AND TREES.
10. IRRIGATION LINE.



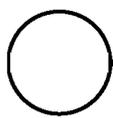
STREET TREE PLANTER

3/4" = 1'-0"

02A-2020



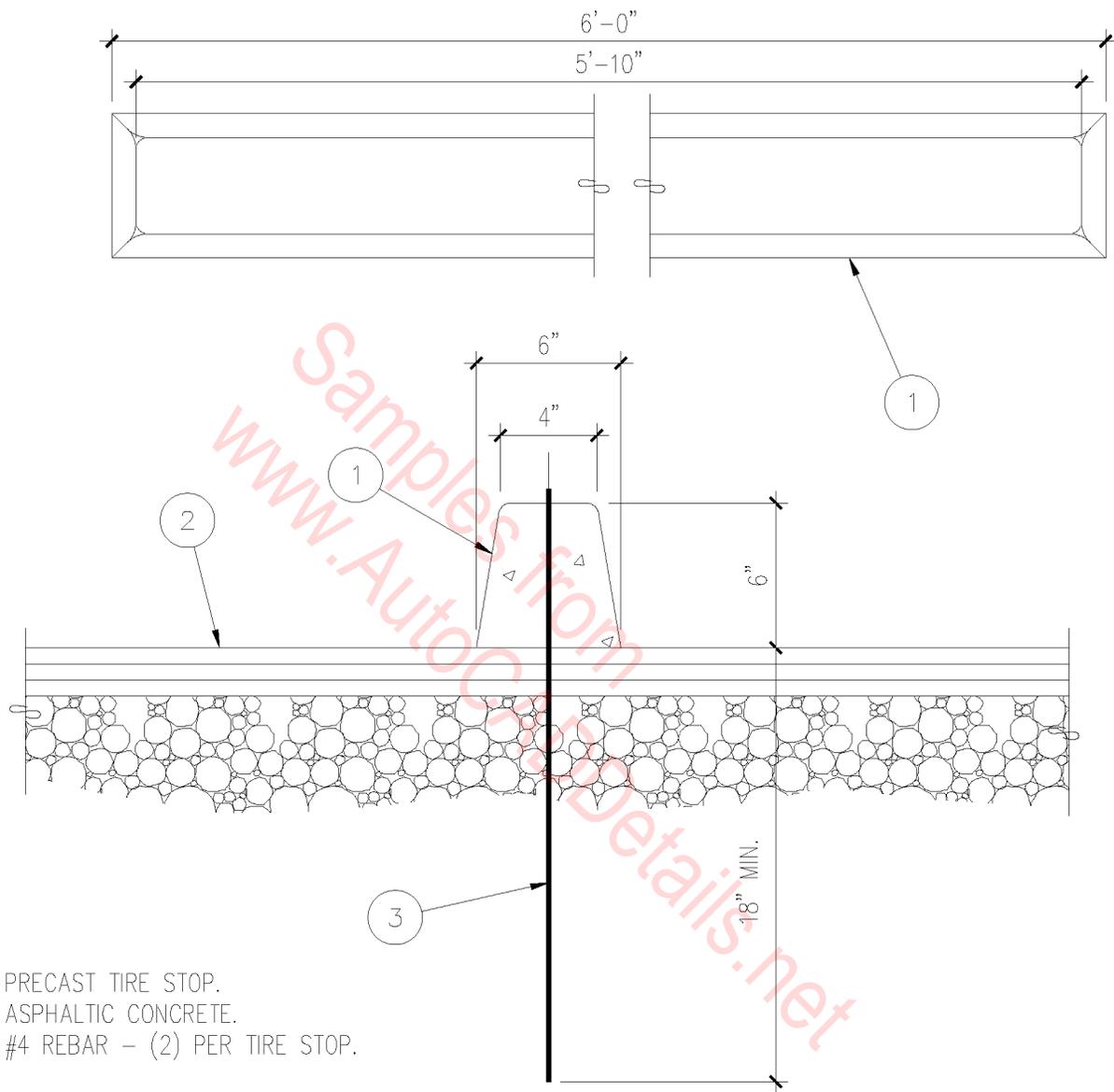
1. 4" X 8" X 16" 'FOUNDERS BLOCK' CAP.
2. 8" X 8" X 16" CMU WITH 3/8" CEMENT STUCCO FINISH.
3. 6" X 4" X 16" 'FOUNDERS BLOCK.'
4. WATERPROOF INTERIOR WITH TAR.
5. NO END MORTAR IN FIRST ROW ON STREET SIDE ONLY - LEAVE GAP OPEN FOR WEEP.
6. EXISTING CURB AND GUTTER.
7. SIDEWALK.
8. 6" OF GRAVEL FILL IN BOTTOM OF PLANTER.
9. TOP SOIL FILL FOR PLANTS AND TREES.
10. IRRIGATION LINE.



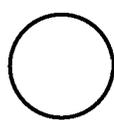
STREET TREE PLANTER

3/4" = 1'-0"

02A-2020



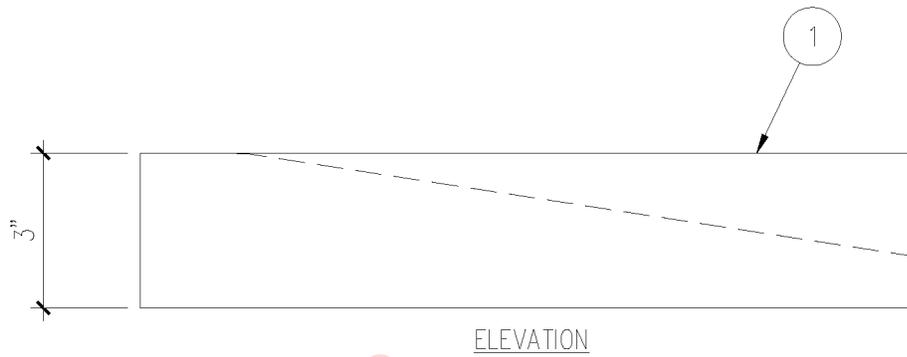
1. PRECAST TIRE STOP.
2. ASPHALTIC CONCRETE.
3. #4 REBAR - (2) PER TIRE STOP.



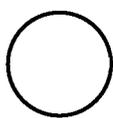
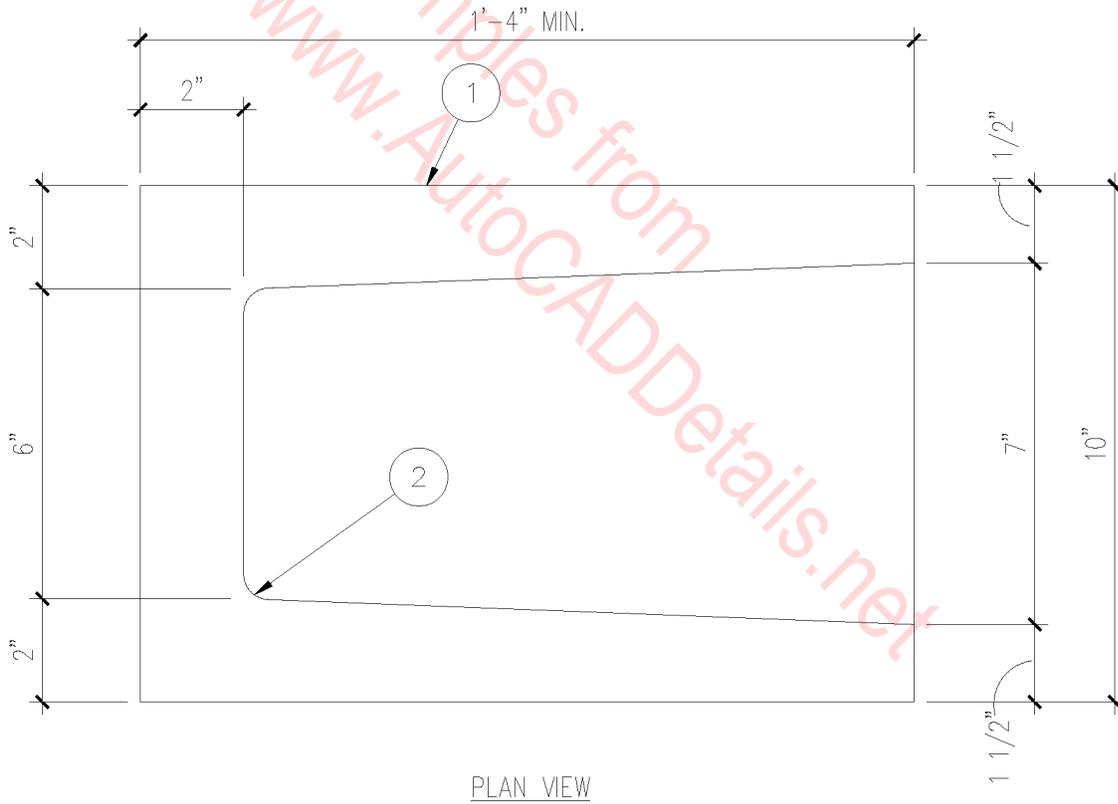
PRECAST TIRE STOP

1 1/2" = 1'-0"

02A-1001



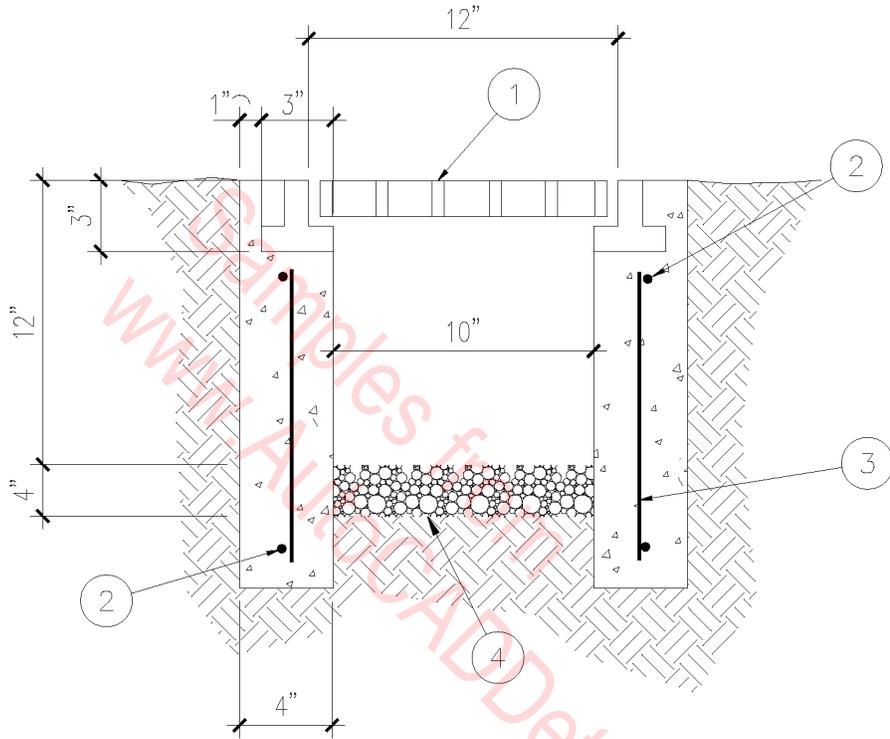
1. PRECAST CONCRETE.
2. 1" RADIUS ALL EDGES.



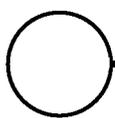
PRECAST SPLASH BLOCK

3" = 1'-0"

02A-1002



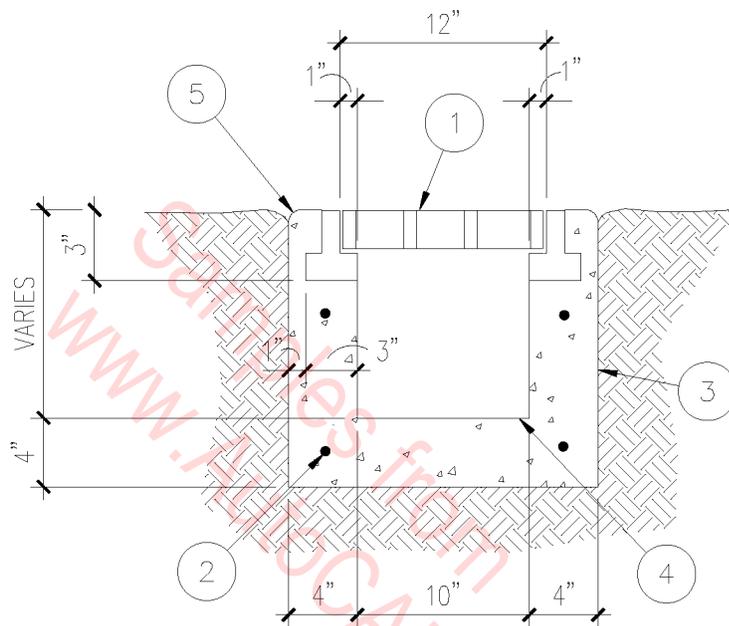
1. GRATING AND FRAME.
2. #4 REBAR ALL AROUND.
3. #4 REBAR AT EACH CORNER.
4. DRAINAGE FILL.



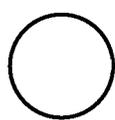
OPEN TRENCH DRAIN

1 1/2" = 1'-0"

02A-1004



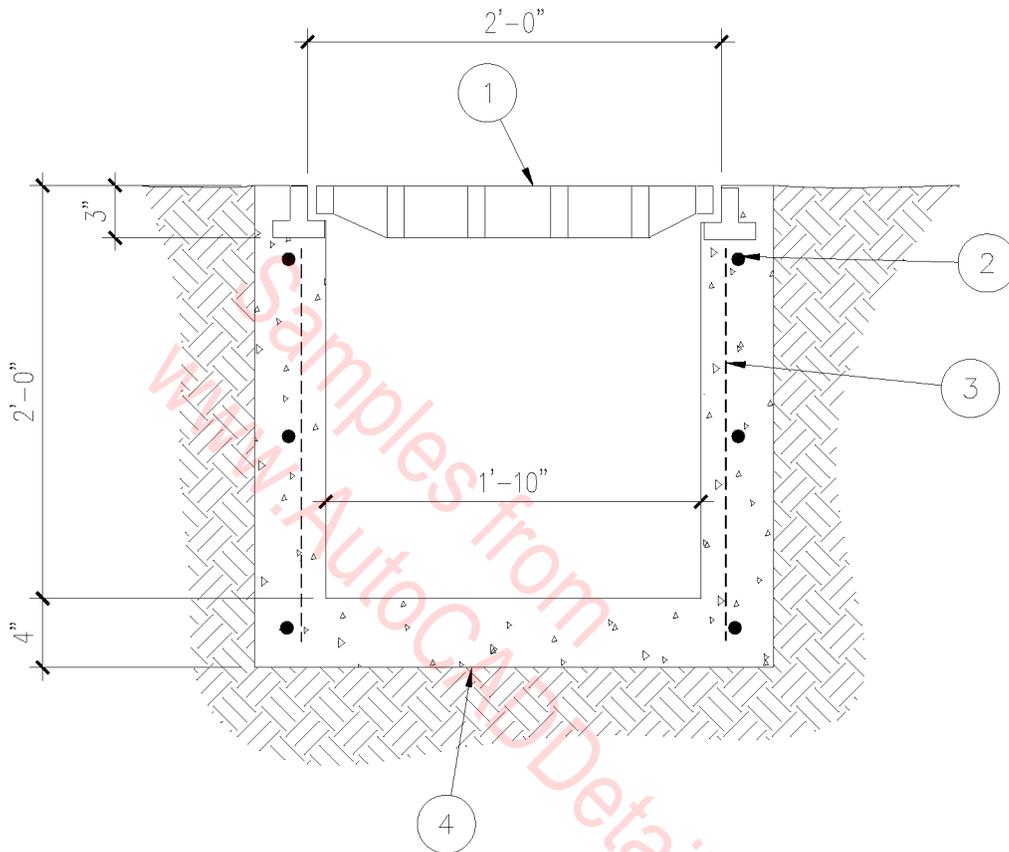
1. HEAVY DUTY GRATE & FRAME.
2. #4 REBAR CONTINUOUS TOP & BOTTOM.
3. C.I.P. CONCRETE TRENCH DRAIN.
4. CONSTRUCT END OF TRENCH DRAINS SIMILAR TO SIDE CONSTRUCTION.
5. 1" RADIUS.



TRENCH DRAIN

1" = 1'-0"

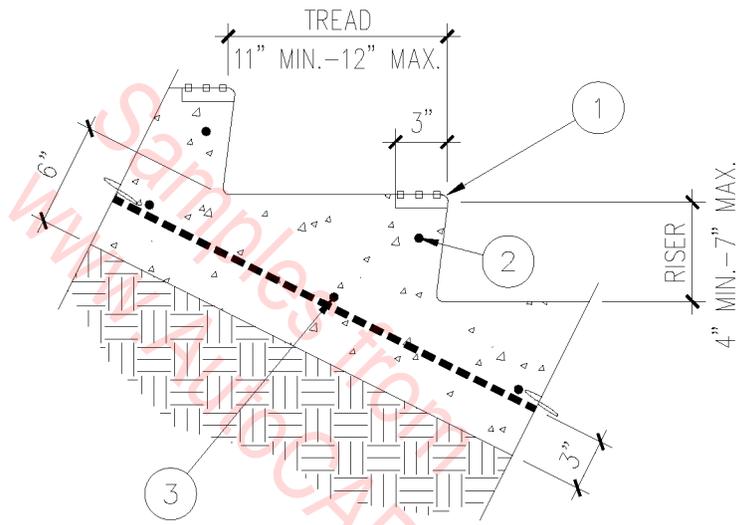
02A-1005



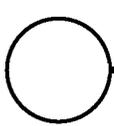
1. GRATING AND FRAME.
2. #4 REBAR AT 12" EACH WAY.
3. #4 REBAR AT EACH CORNER.
4. CONCRETE.

○ CATCH BASIN
 1" = 1'-0"

02A-1006



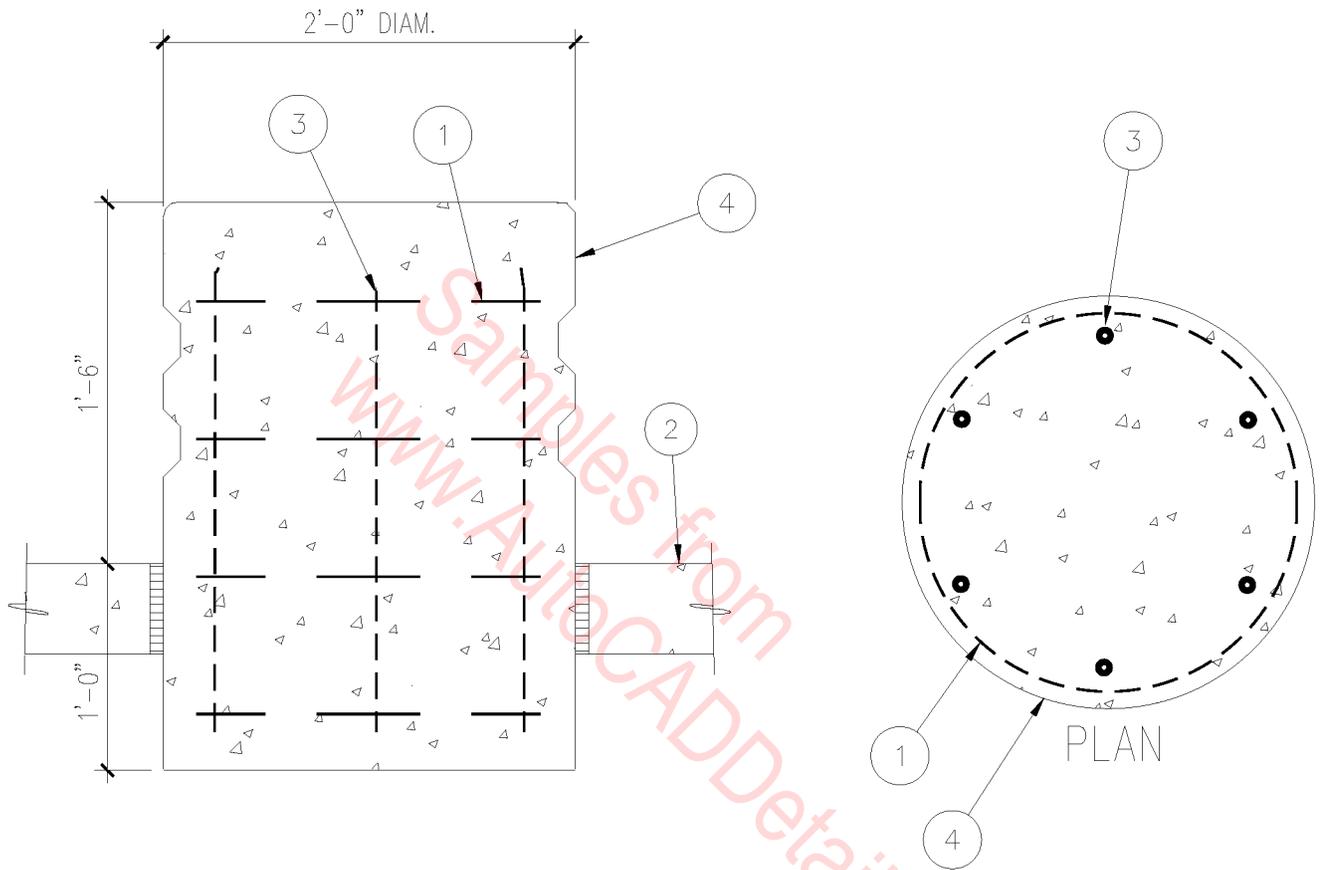
1. STAIR NOSING.
2. #4 REBAR CONTINUOUS.
3. #4 REBAR @ 12" O.C. EACH WAY.



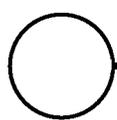
EXTERIOR STAIRS

1" = 1'-0"

02A-1007



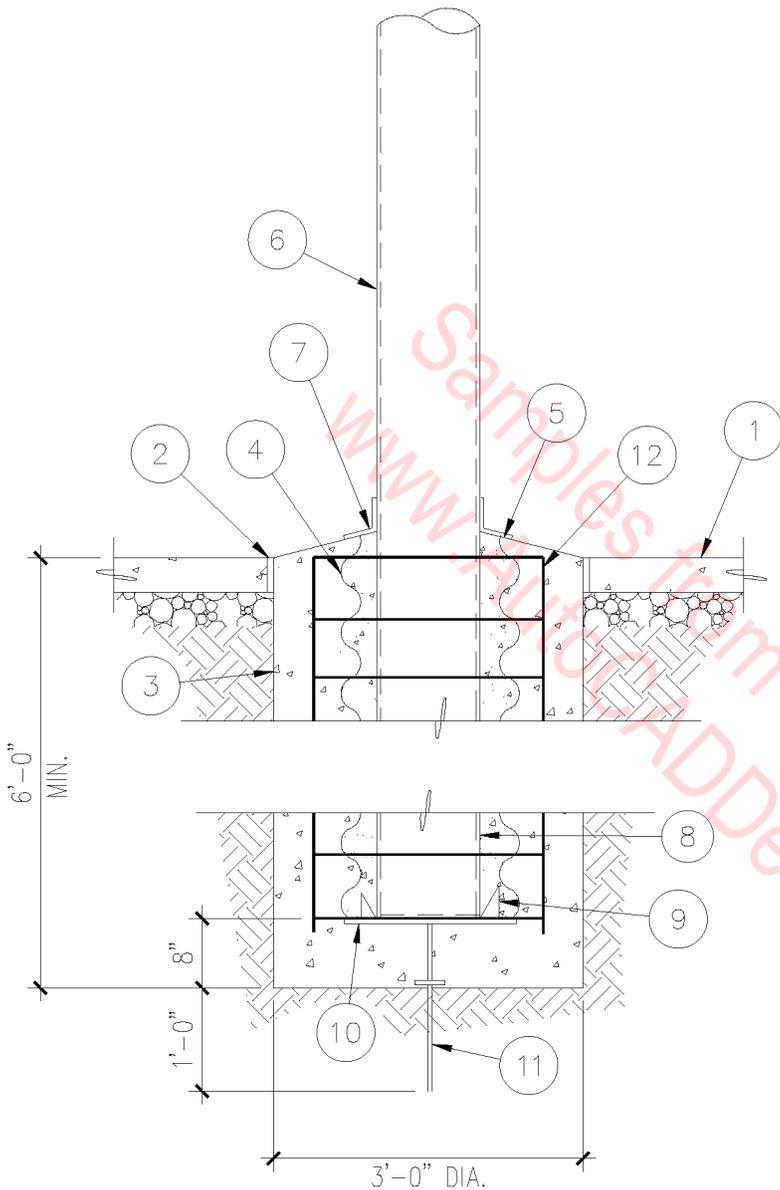
1. #2 TIES @ 8" O.C.
2. CONCRETE SLAB ON SUBGRADE.
3. (6) #4 REBARS.
4. SMOOTH FINISH.



CONCRETE SITE BENCH

1" = 1'-0"

02A-1008

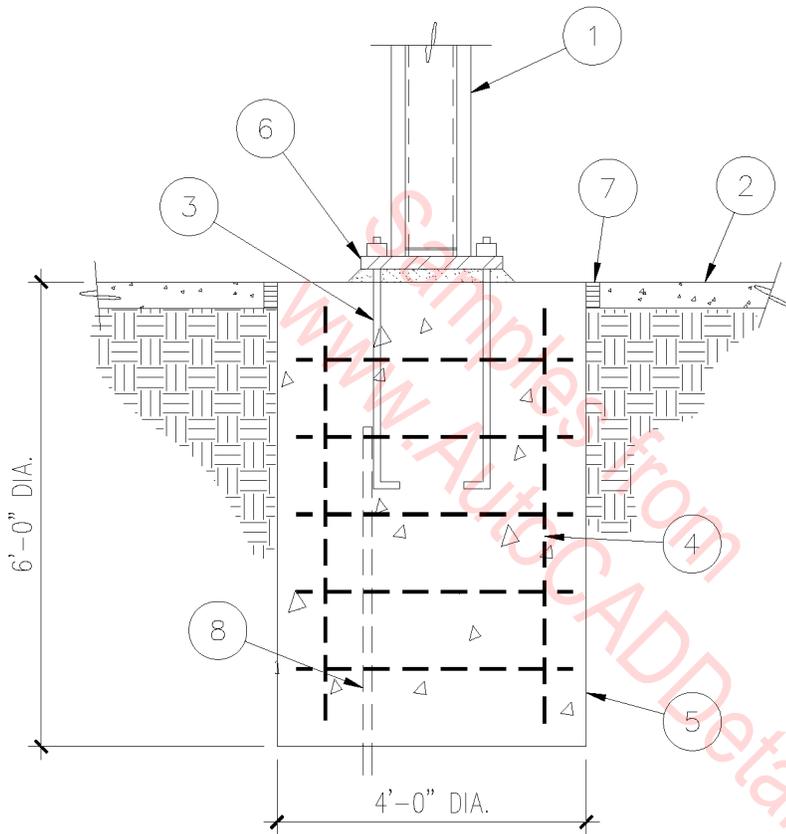


1. CONCRETE SLAB ON A.B.C. FILL.
2. 1/2" EXPANSION JOINT MATERIAL.
3. CONCRETE FOOTING.
4. PACK WITH CLEAN DRY SAND.
5. BITUMINOUS SEALANT.
6. 40'-0" TALL ALUMINUM FLAGPOLE.
7. FLASHING COLLAR.
8. G.I. SLEEVE - VERIFY SIZE WITH POLE MANUFACTURER.
9. STEEL WEDGES AS PART OF SLEEVE.
10. 1/4" STEEL PLATE AS PART OF SLEEVE.
11. LIGHTNING ROD AS PART OF SLEEVE.
12. (6) #7 REBARS & #3 TIES @ 16" O.C.

○ FLAGPOLE FOOTING

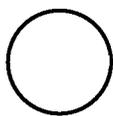
1/2" = 1'-0"

02A-1009



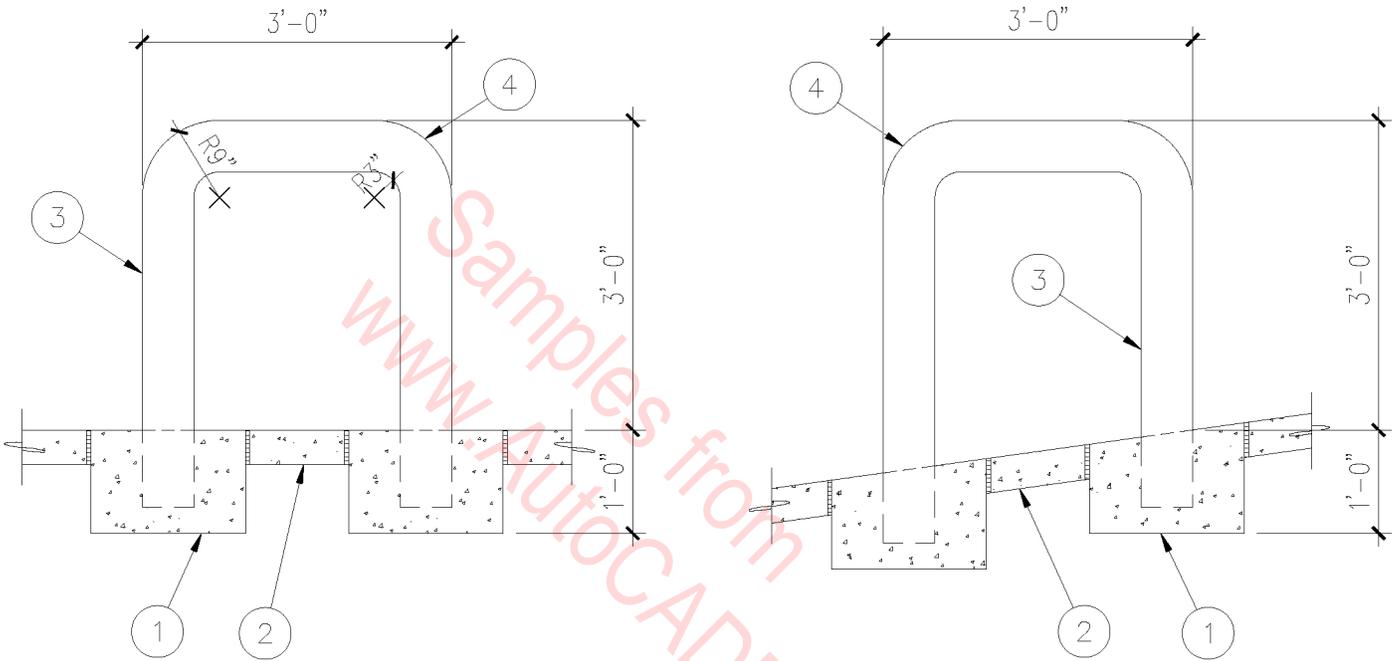
1. 40'-0" FLAGPOLE.
2. 4" CONCRETE SLAB ON PREPARED SUBGRADE.
3. (4) 1" DIA. x 36" ANCHOR BOLTS.
4. (6) #6 REBAR WITH #3 TIES @ 12" O.C.
5. CONCRETE FOOTING.
6. 1/2" x 20" SQ. STEEL PLATE ON 1/2" OF DRYPACK.
7. EXPANSION JOINT.
8. 3/4" GALVANIZED IRON GROUND ROD.

TYPICAL FLAGPOLE FOOTING



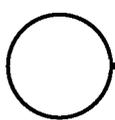
3/8" = 1'-0"

02A-1010



1. 18" SQ. X 12" DEEP CONCRETE FOOTING.
2. CONCRETE SLAB ON SUBGRADE.
3. 6" ϕ PIPE RAILING.
4. FLUSH WELD 6" STANDARD WEIGHT STEEL ELBOWS AT CORNERS.

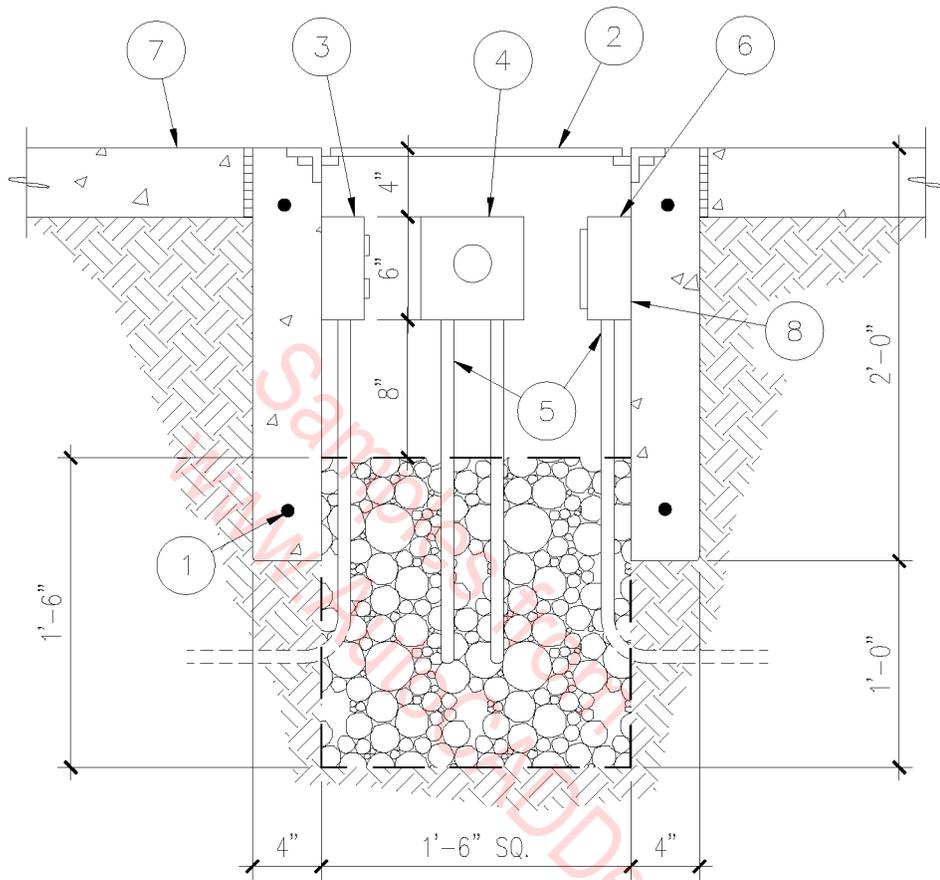
NOTE: INSTALL IN FIELD AT 30" O.C.



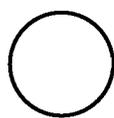
BIKE RACK

1/2" = 1'-0"

02A-1011



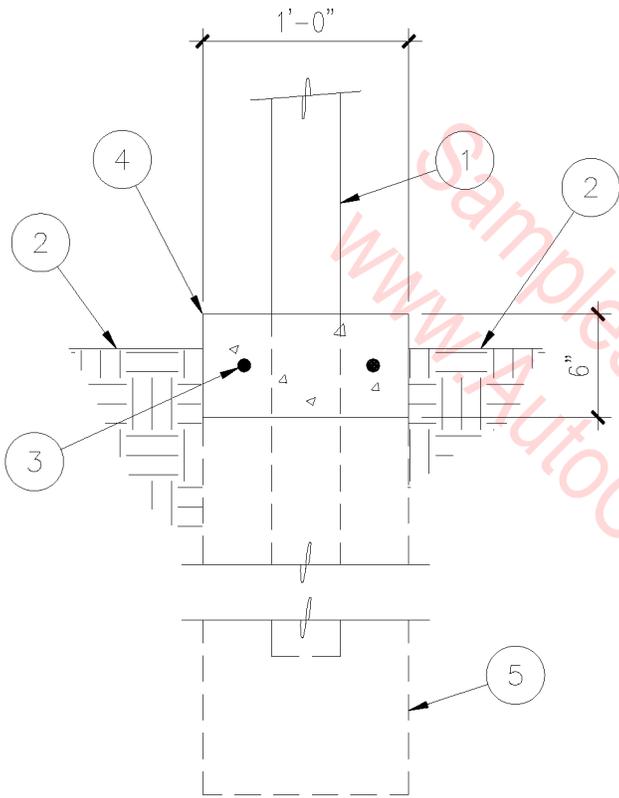
- | | |
|--|--|
| <ol style="list-style-type: none"> 1. #4 REBAR CONTINUOUS ALL AROUND. 2. 18" X 18" FLUSH HINGED MANHOLE COVER WITH PADLOCK. 3. DUPLEX OUTLET IN WATERPROOF BOX - SEE ELECTRICAL. 4. MIC OUTLET IN WATERPROOF BOX- SEE ELECTRICAL. 5. CONDUITS-SEE ELECTRICAL. | <ol style="list-style-type: none"> 6. WATERPROOF BOX WITH COVER FOR FIELD INTERCOM SYSTEM- SEE ELECTRICAL. 7. CONCRETE SLAB OVER SUB-GRADE. 8. SCOREBOARD CONTROL WIRES IN WATERPROOF J-BOX ON SIDE OF MANHOLE- SEE ELECTRICAL. |
|--|--|



ELECTRICAL PIT BOX

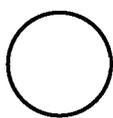
1" = 1'-0"

02A-1012



1. FENCE POST.
2. FINISH GRADE.
3. (2) #4 REBARS CONTINUOUS.
4. CONCRETE MOW STRIP.
5. FENCE POST FOOTING.

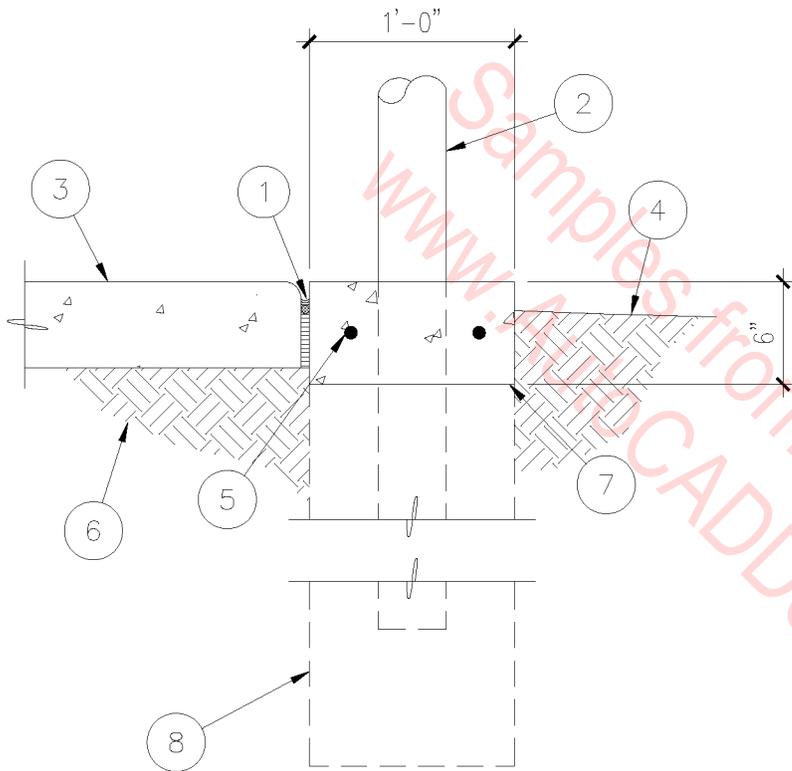
<u>FENCE HEIGHT</u>	<u>POST DEPTH</u>	<u>FTG. DEPTH</u>	<u>FTG. DIAM.</u>
3'-0" TO 6'-0"	24"	30"	12"
6'-1" TO 8'-0"	30"	42"	12"
8'-1" TO 12'-0"	36"	48"	12"



CHAINLINK FENCE FOOTING

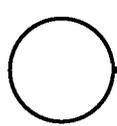
1" = 1'-0"

02A-1013



1. 1" EXPANSION JOINT.
2. FENCE POST – SEE TABLE.
3. CONCRETE SLAB WITH SYNTHETIC REINFORCING FIBERS.
4. FINISH GRADE.
5. (2) #4 REBARS CONTINUOUS.
6. SUBGRADE.
7. CONCRETE MOW STRIP – SCORE AT 48" O.C.
8. FENCE FOOTING – SEE TABLE BELOW.

FENCE HEIGHT	POST DEPTH	FTG. DEPTH	FTG. DIAM.
3'-0" TO 6'-0"	24"	30"	12"
6'-1" TO 8'-0"	30"	42"	12"
8'-1" TO 12'-0"	36"	48"	12"

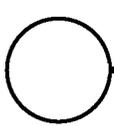
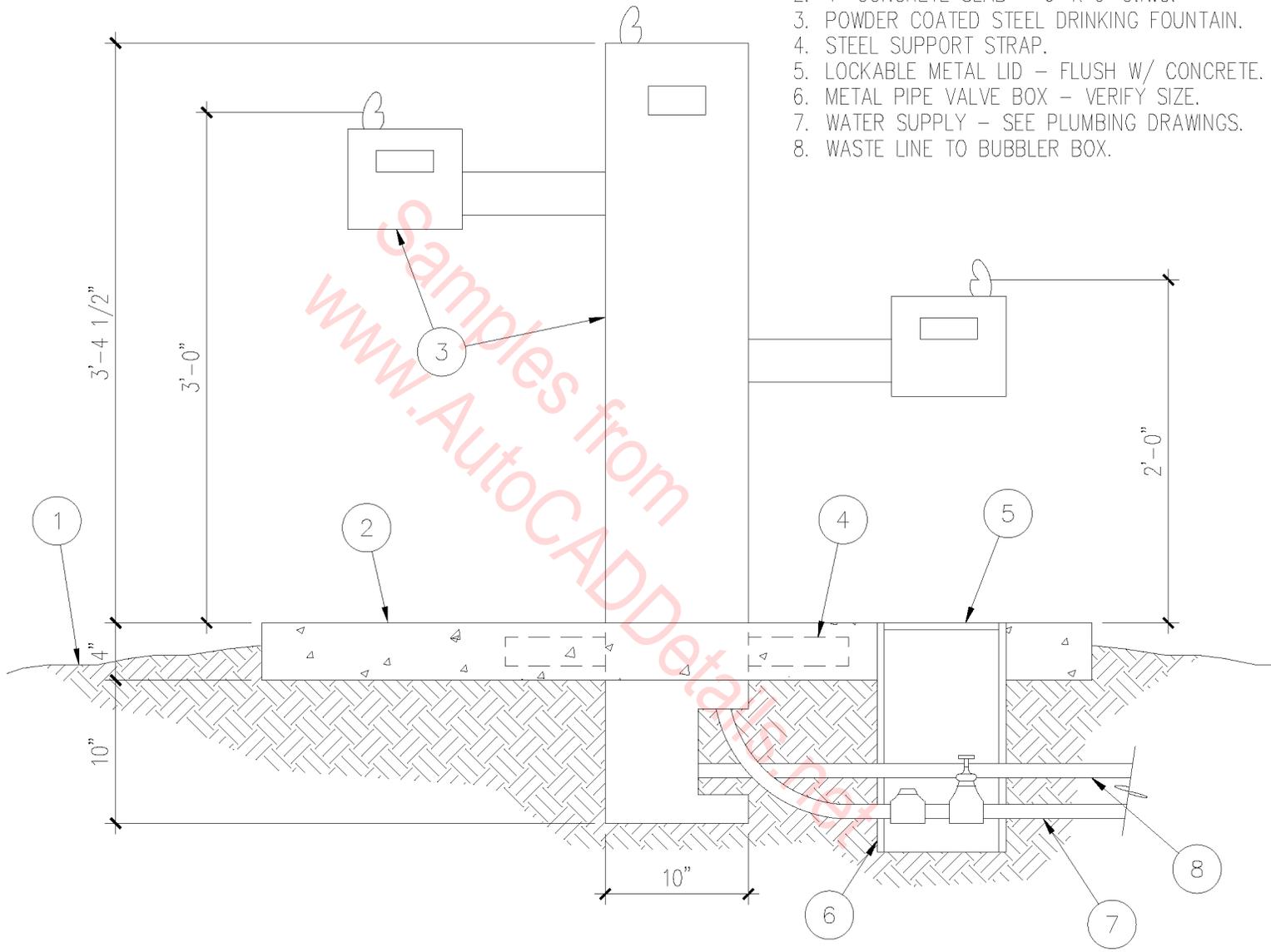


TYPICAL FENCE FOOTING

1" = 1'-0"

02A-1014

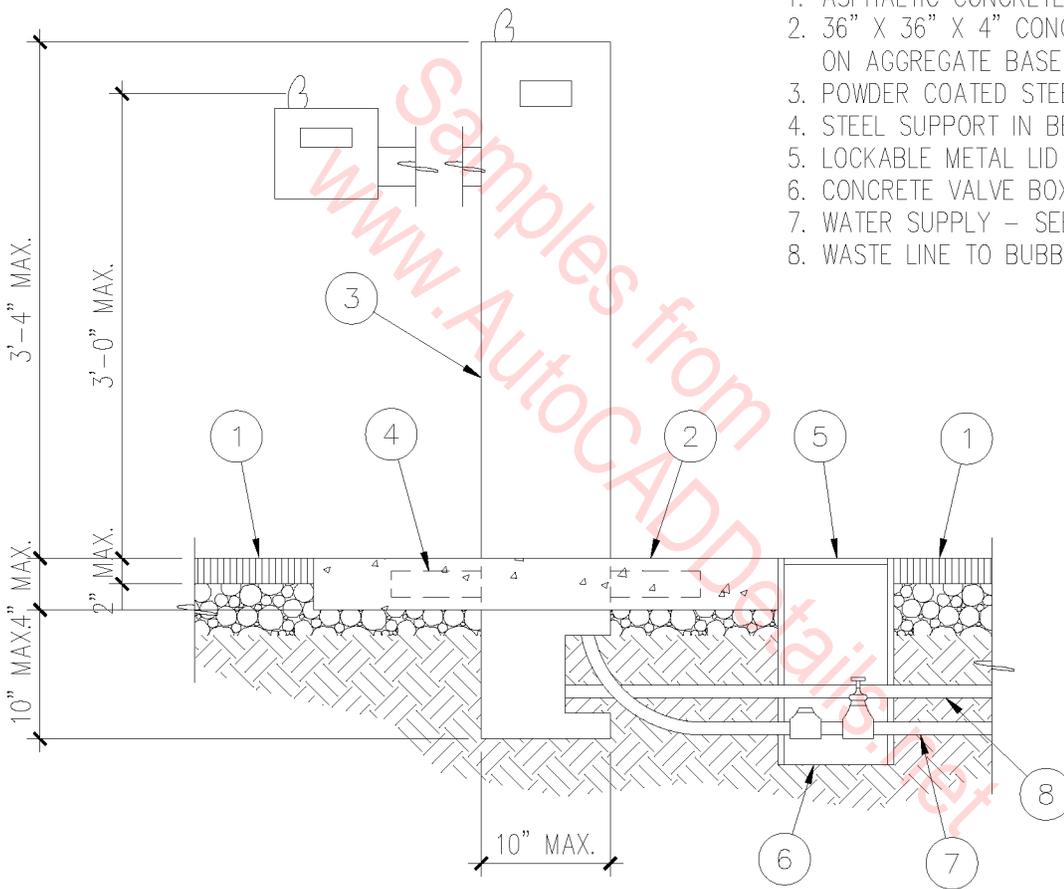
1. FINISHED GRADE - WHERE OCCURS.
2. 4" CONCRETE SLAB - 6' X 6' U.N.O.
3. POWDER COATED STEEL DRINKING FOUNTAIN.
4. STEEL SUPPORT STRAP.
5. LOCKABLE METAL LID - FLUSH W/ CONCRETE.
6. METAL PIPE VALVE BOX - VERIFY SIZE.
7. WATER SUPPLY - SEE PLUMBING DRAWINGS.
8. WASTE LINE TO BUBBLER BOX.



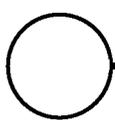
DRINKING FOUNTAINS

1" = 1'-0"

02A-1015



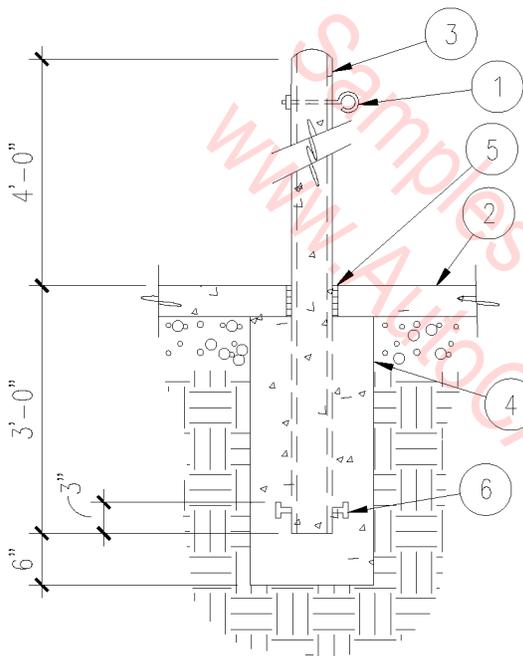
1. ASPHALTIC CONCRETE.
2. 36" X 36" X 4" CONCRETE SLAB ON AGGREGATE BASE COURSE.
3. POWDER COATED STEEL DRINKING FOUNTAIN.
4. STEEL SUPPORT IN BED.
5. LOCKABLE METAL LID – FLUSH WITH PAVEMENT.
6. CONCRETE VALVE BOX – VERIFY SIZE.
7. WATER SUPPLY – SEE PLUMBING.
8. WASTE LINE TO BUBBLER BOX.



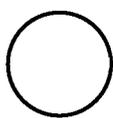
DRINKING FOUNTAINS

3/4" = 1'-0"

02A-1016



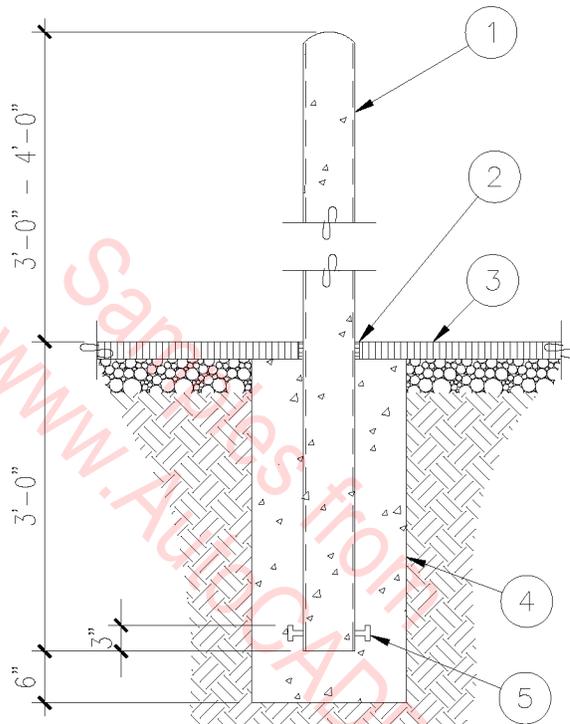
1. PROVIDE 1/2" ϕ EYE HOOKS AT DRIVEWAY & FIRE LANE.
2. CONCRETE SLAB ON A.B.C.
3. 6" ϕ SCHEDULE 40 STEEL PIPE, PAINTED & FILLED WITH CONCRETE.
4. 15" ϕ CONCRETE FOOTING.
5. 1/2" EXPANSION JOINT.
6. 1/2" ϕ X 4" STUDS.



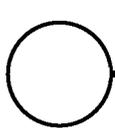
FIRELANE PIPE BOLLARD

1/2" = 1'-0"

02A-1017



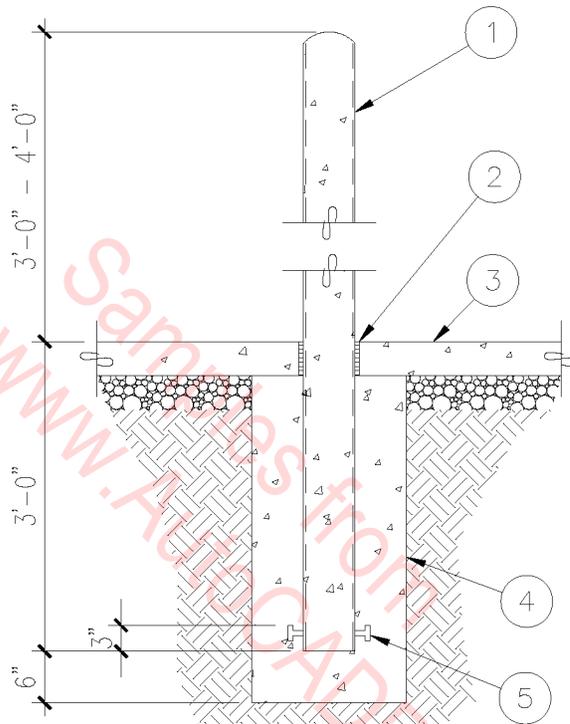
1. 6" ϕ STEEL PIPE
PAINTED & FILLED WITH
CONCRETE.
2. 1/2" EXPANSION JOINT.
3. ASPHALTIC CONCRETE PAVEMENT.
4. 18" ϕ CONCRETE FOOTING.
5. 1/2" ϕ X 4" STUDS.



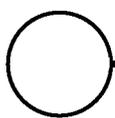
PIPE BOLLARD IN ASPHALT

1/2" = 1'-0"

02A-1018



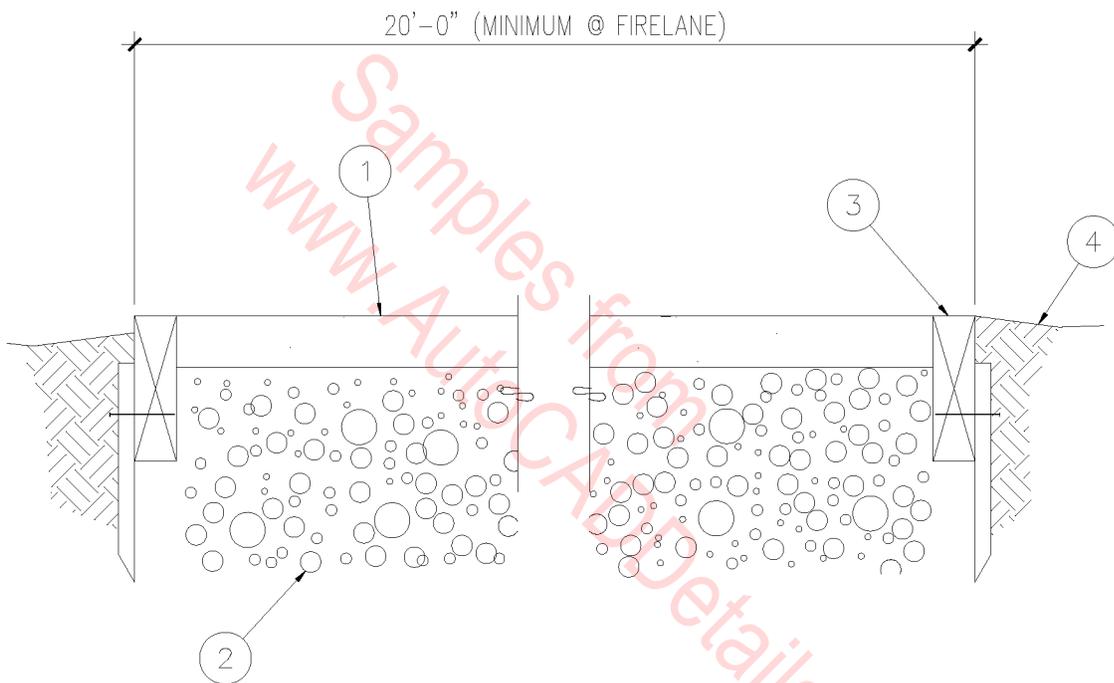
1. 6" ϕ STEEL PIPE
PAINTED & FILLED WITH
CONCRETE.
2. 1/2" EXPANSION JOINT.
3. CONCRETE SLAB ON A.B.C.
4. 18" ϕ CONCRETE FOOTING.
5. 1/2" ϕ X 4" STUDS.



PIPE BOLLARD IN CONC.

1/2" = 1'-0"

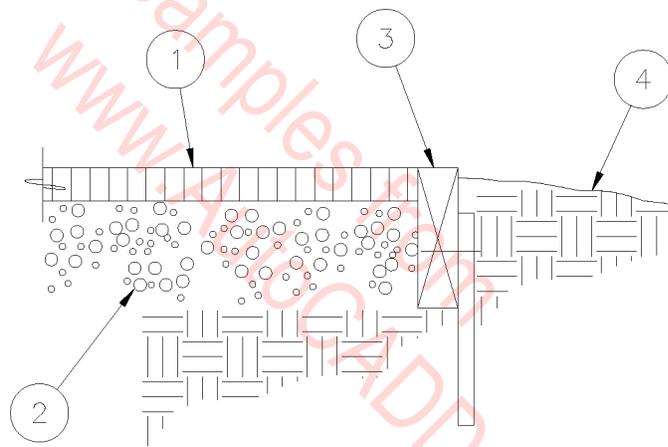
02A-1019



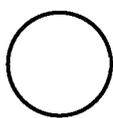
1. 2" STABILIZED DECOMPOSED GRANITE.
2. 8" A.B.C. (2) 4" LEVELS COMPACTED TO 95%.
3. 2 X 6 REDWOOD HEADER.
4. FINISH GRADE.

○ FIRELANE / PARKING LOT
 1 1/2" = 1'-0"

02A-1020



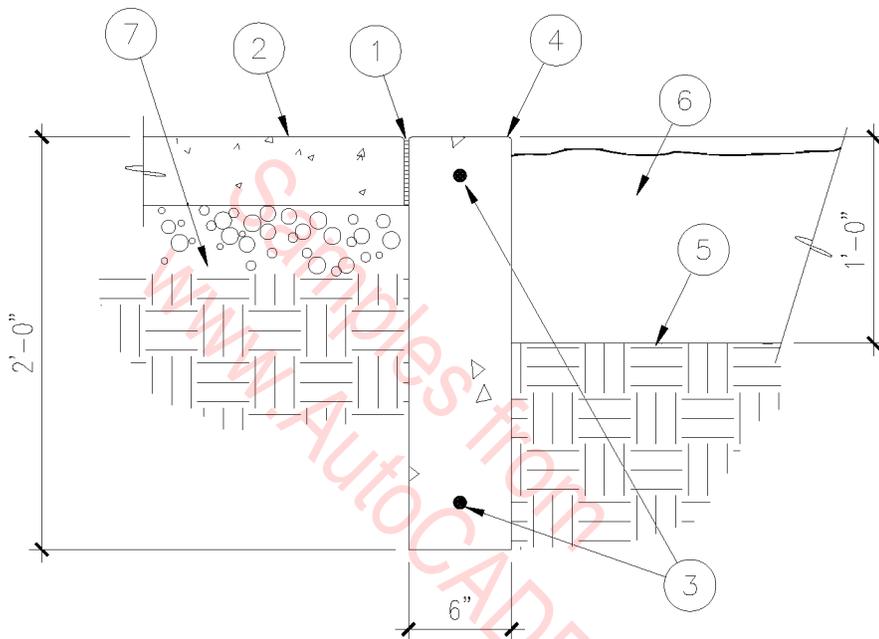
1. 2" ASPHALTIC CONCRETE.
2. 6" A.B.C.
3. 2 X 6 REDWOOD HEADER.
4. FINISH GRADE.



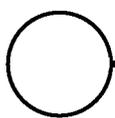
ASPHALT SIDEWALK

1" = 1'-0"

02A-1021



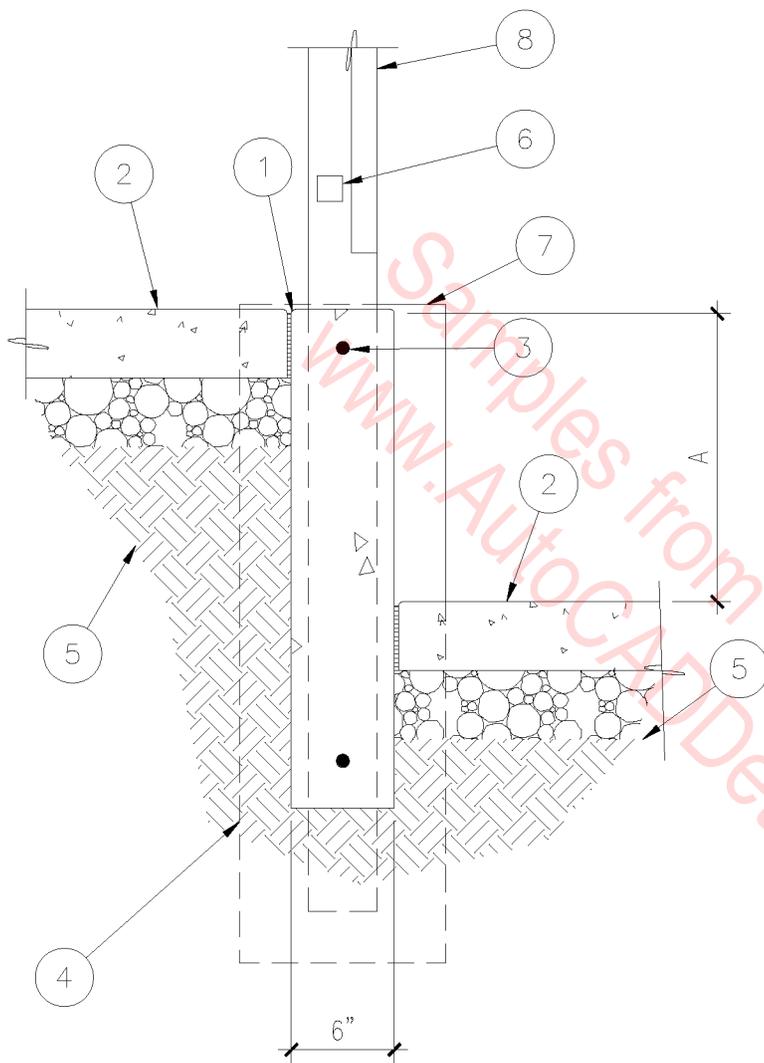
1. TOOLED EDGE.
2. CONCRETE SLAB ON A.B.C.
3. CONCRETE CURB REINFORCEMENT WITH (2) #4 REBARS CONTINUOUS.
4. RADIUS EDGE.
5. FINISH GRADE.
6. SAND.
7. SUB GRADE.



SIDEWALK CURB @ SAND

1" = 1'-0"

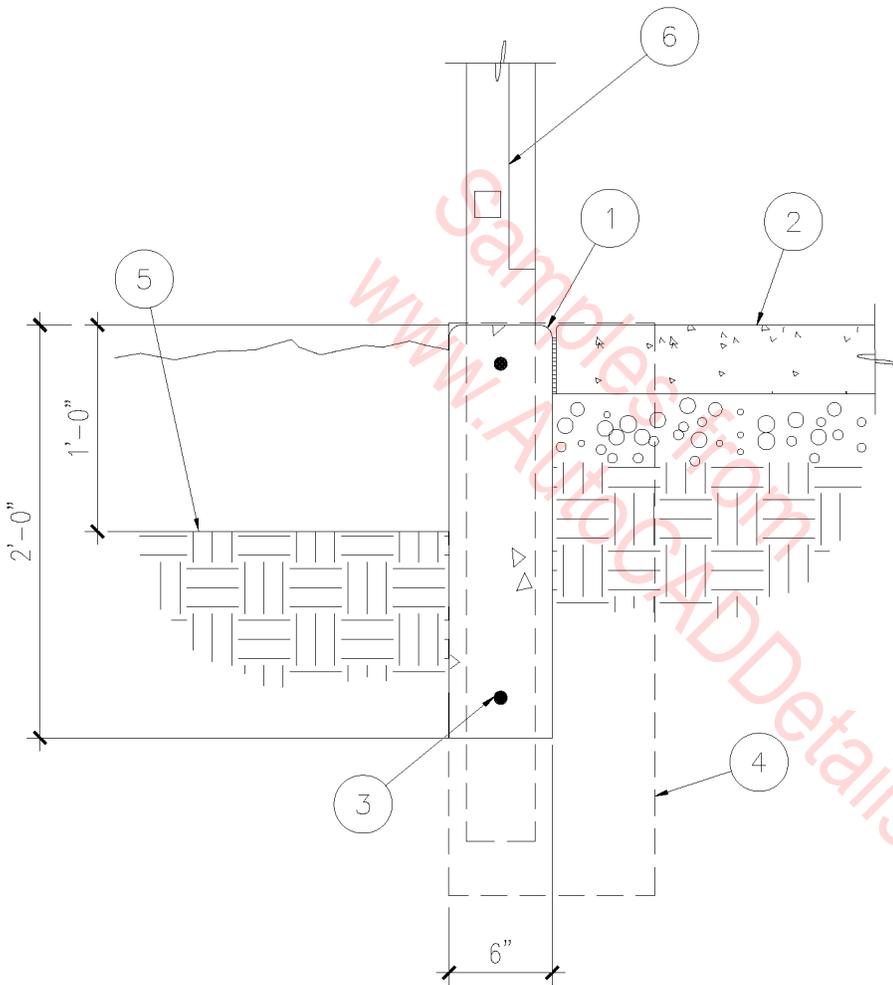
02A-1022



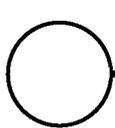
1. TOOLED EDGE.
2. CONCRETE SLAB ON A.B.C.
3. CONCRETE CURB WITH (2) #4 REBARS CONTINUOUS.
4. LINE OF 12" DIA. CONCRETE FOOTING @ FENCE POST (WHERE OCCURS).
5. SUB GRADE.
6. ORNAMENTAL IRON FENCE.
7. RADIUS EDGE.
8. FENCE REQUIRED IF DIMENSION "A" EQUALS OR IS GREATER THAN 30".

○ FENCE CURB
 1" = 1'-0"

02A-1023



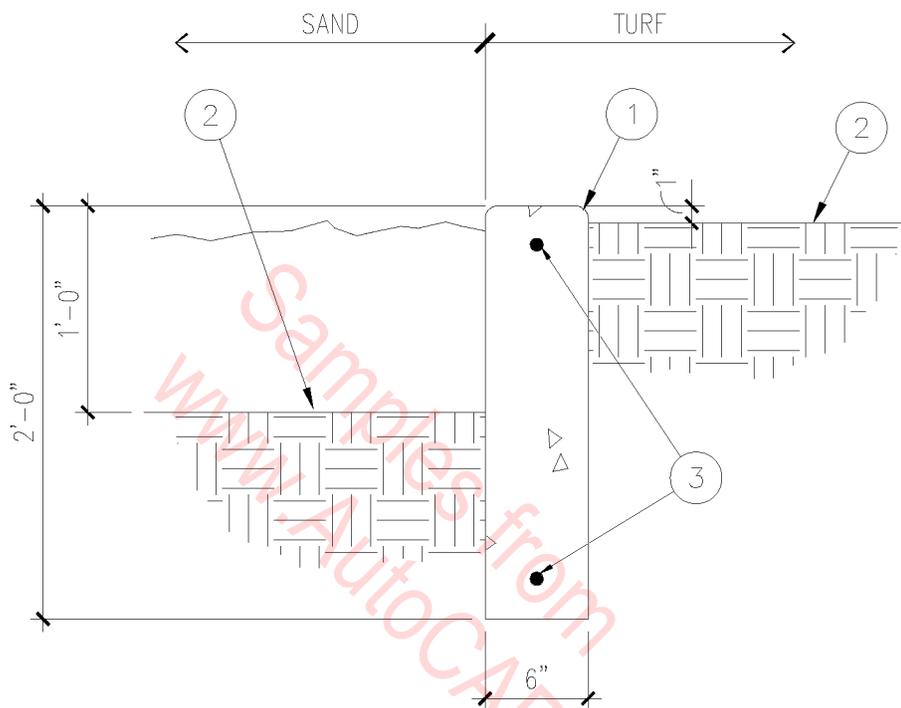
1. 3/4" TOOLED EDGE.
2. CONCRETE SLAB ON A.B.C.
3. CONCRETE CURB REINFORCEMENT WITH (2) #4 REBARS CONTINUOUS.
4. LINE OF 12" DIA. CONCRETE FOOTING @ FENCE POST WHERE OCCURS.
5. FINISH GRADE.
6. ORNAMENTAL IRON FENCE.



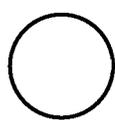
FENCE CURB @ SAND

1" = 1'-0"

02A-1024



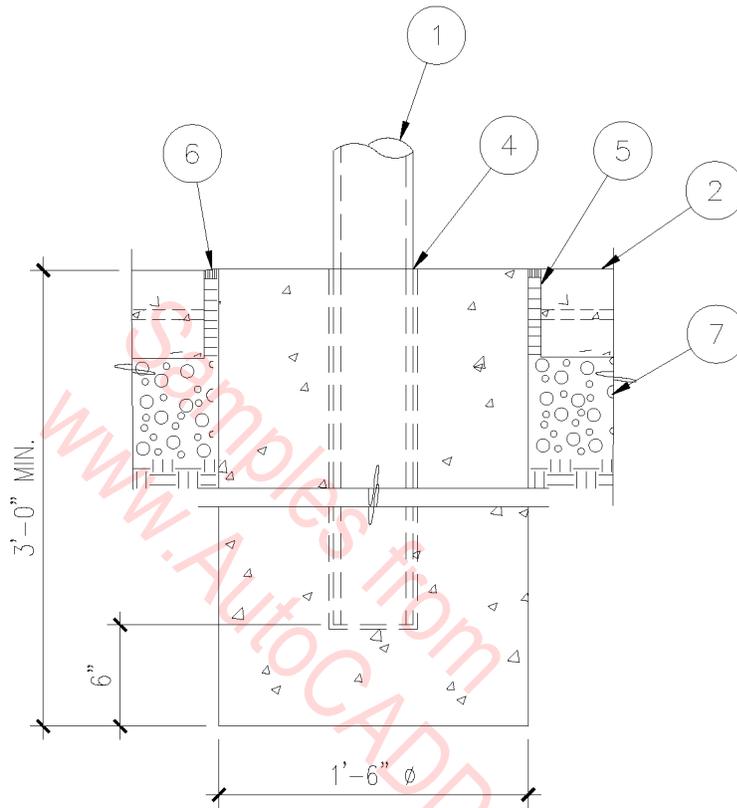
1. 3/4" TOOLED EDGE.
2. FINISH GRADE.
3. CONCRETE CURB REINFORCEMENT WITH (2) #4 REBARS CONTINUOUS.
4. SAND.
5. TURF.



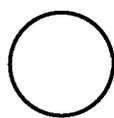
CURB @ SAND PIT

1" = 1'-0"

02A-1025



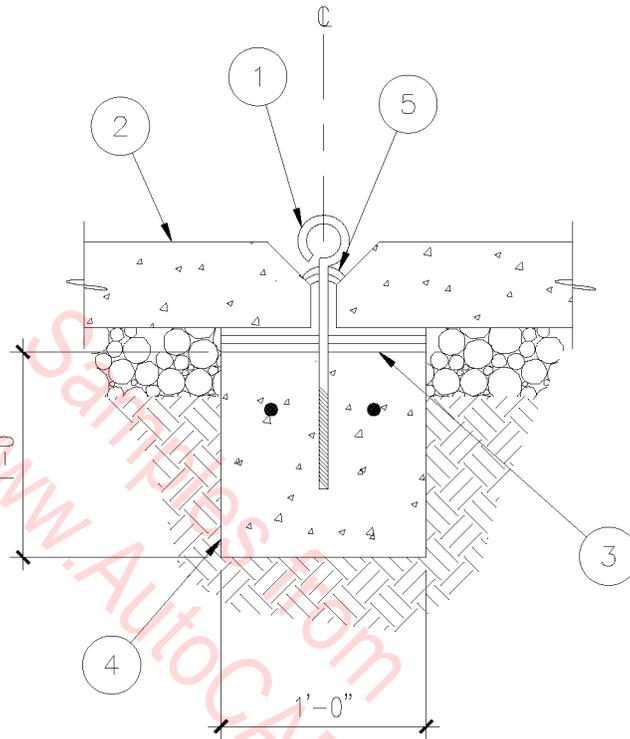
1. TENNIS NET POST & STEEL SLEEVE.
2. REINFORCED CONCRETE SLAB ON SUBGRADE.
3. CONCRETE FOOTING.
4. TACK WELD POST IN SLEEVE.
5. 1/2" WIDE CONTINUOUS EXPANSION JOINT.
6. CAULK LEVEL WITH TOP OF SLAB AT EXPANSION JOINT.
7. A.B.C.



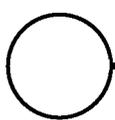
TENNIS NET FOOTING

1" = 1'-0"

02A-1026



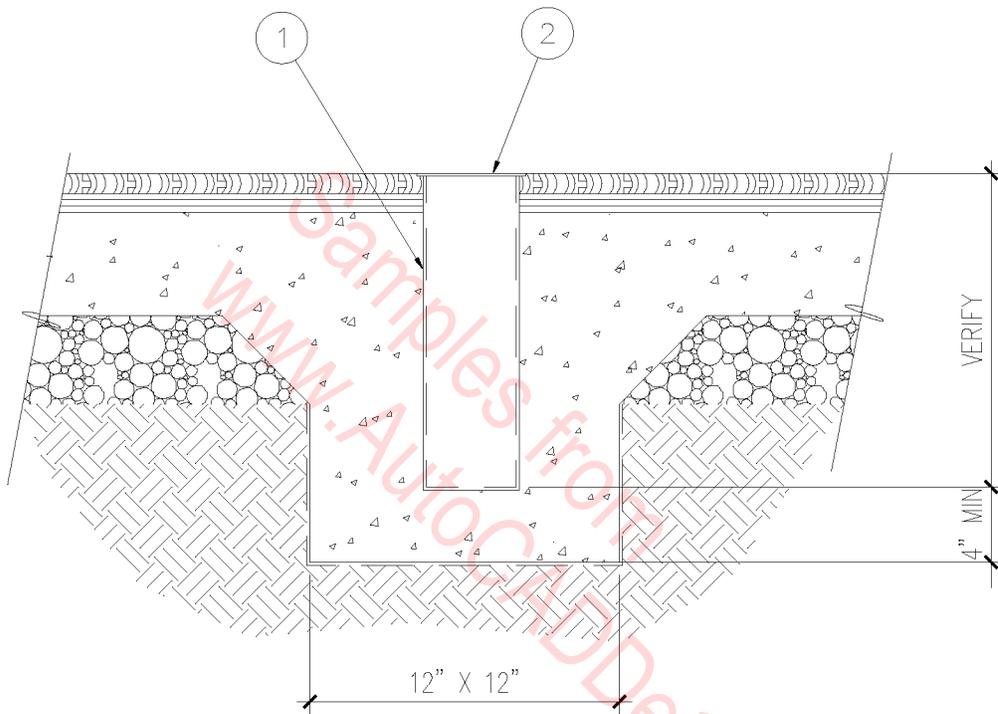
1. TENNIS NET CENTER COURT HOLD - DOWN EYE HOOK (3/4" EYE).
2. REINFORCED CONCRETE SLAB ON A.B.C.
3. (3) LAYERS 30# FELT AS CONTINUOUS BOND BREAKER BETWEEN COURT SLABS & CONTINUOUS FOOTING.
4. 12" X 12" X CONTINUOUS FOOTING CENTERLINE OF EACH TENNIS COURT.
5. CAULK AROUND EYE HOOK.



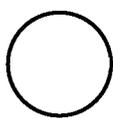
TENNIS NET TIEDOWN

1" = 1'-0"

02A-1027



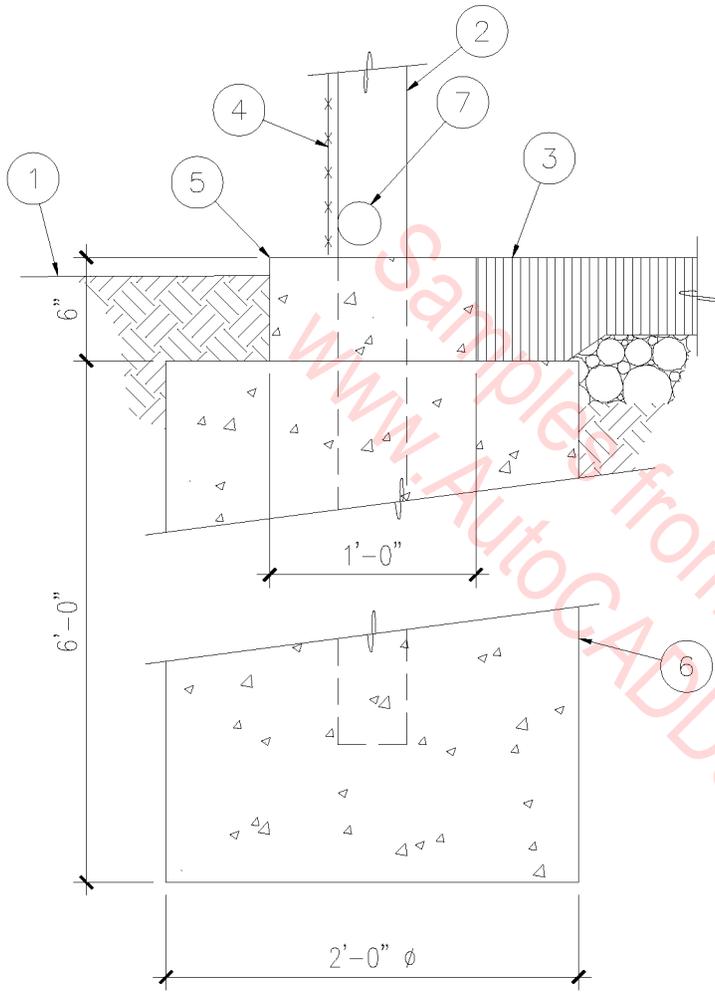
- 1. VOLLEYBALL STANDARD SLEEVE.
- 2. TRIM RING, LET INTO FLOORING.



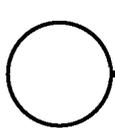
VOLLEYBALL ANCHOR

1 1/2" = 1'-0"

02A-1028



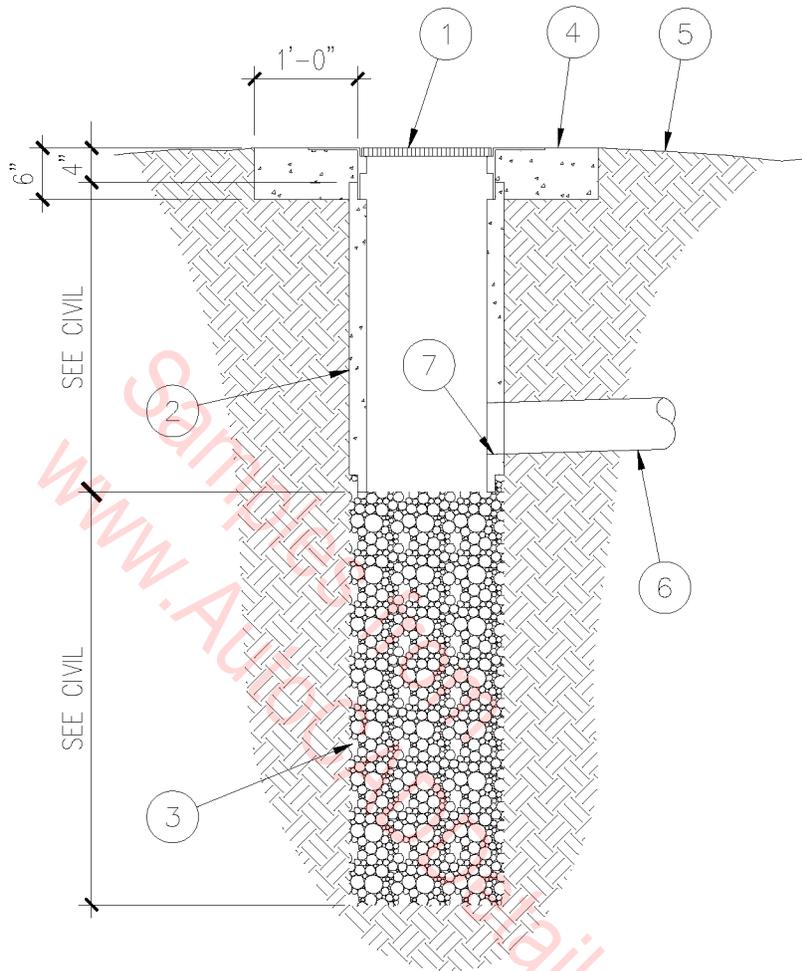
1. FINISH GRADE.
2. BACKSTOP POST.
3. ASPHALTIC CONCRETE ON PREPARED FILL.
4. WOVEN WIRE FABRIC TO TOP OF MOW STRIP.
5. CONTINUOUS CONCRETE MOW STRIP.
6. CONCRETE FOOTING BEYOND.
7. BOTTOM RAIL.



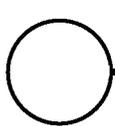
TURNDOWN @ BACKSTOP

1" = 1'-0"

02A-1029



- | | |
|---|--|
| 1. "NEENAH" #R-5901-D OPEN GRATE AND FRAME. | 5. FINISH GRADE. |
| 2. 18" DIAMETER CONCRETE PIPE. | 6. ROOF DRAIN - SEE PLUMBING AND CIVIL. CONDENSATION DRAIN - SEE MECHANICAL. STORM DRAIN - SEE CIVIL, SITE PLAN. |
| 3. 18" DIAMETER DRYWELL WITH 1 1/2" TO 3" GRAVEL. | 7. GROUT IN PLACE. |
| 4. 12" WIDE X 6" DEEP CONCRETE RING. | |



DRY WELL

1/2" = 1'-0"

02A-1030

SEE ARCHITECTURAL DRAWINGS

SEE ARCHITECTURAL DRAWINGS

#4 NOSING REBAR
1" CLEAR TYP.

#4 @ 24" O.C.
EACH WAY

#3 X 3'-0" @ 24" O.C.
AT SLAB ON GRADE

NOTE: REBAR HORIZONTAL SLAB BARS
INTO ADJACENT WALLS.

#3 X 4"
@ 24" O.C. AT
SLAB ON GRADE

10"

10"

24"

12"

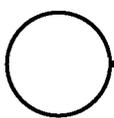
10"

LAP 32d

6" MIN.

3" CLEAR

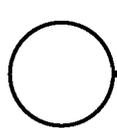
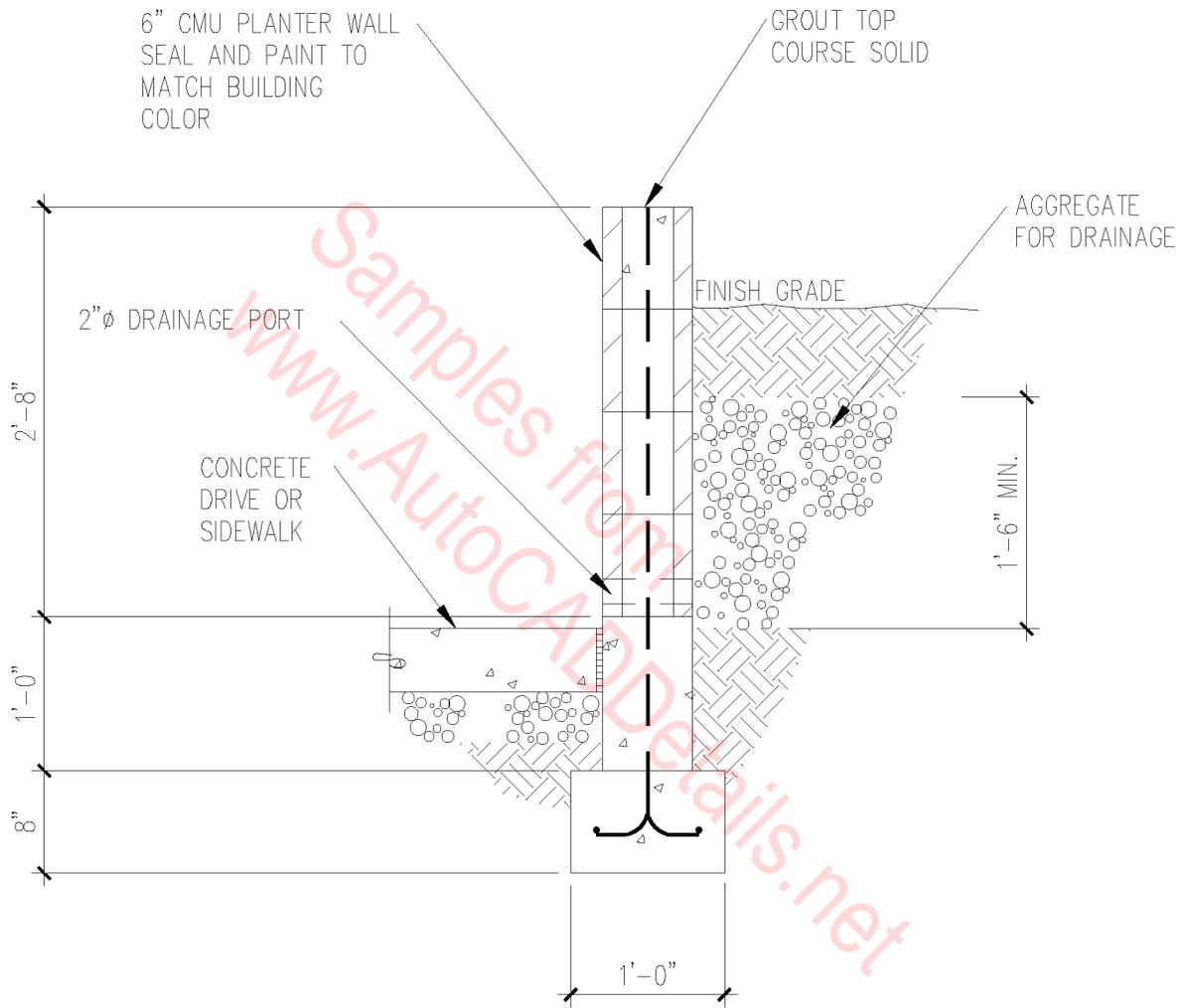
www.AutoCADDetails.net



CONC. STAIRS ON GRADE

N.T.S.

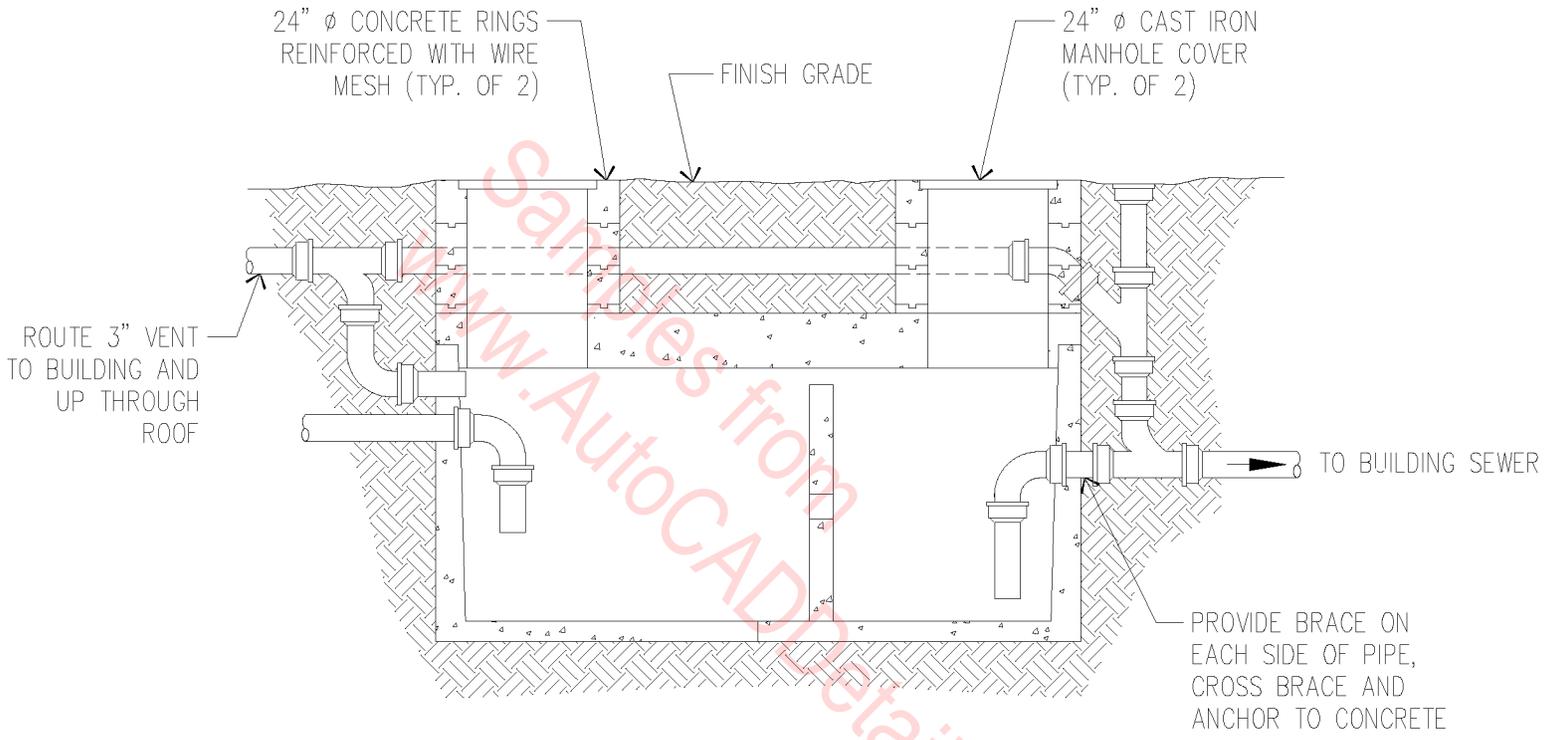
02A-1031



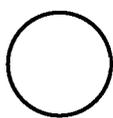
C.M.U. PLANTER SECTION

3/4" = 1'-0"

02A-1032



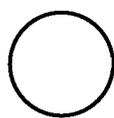
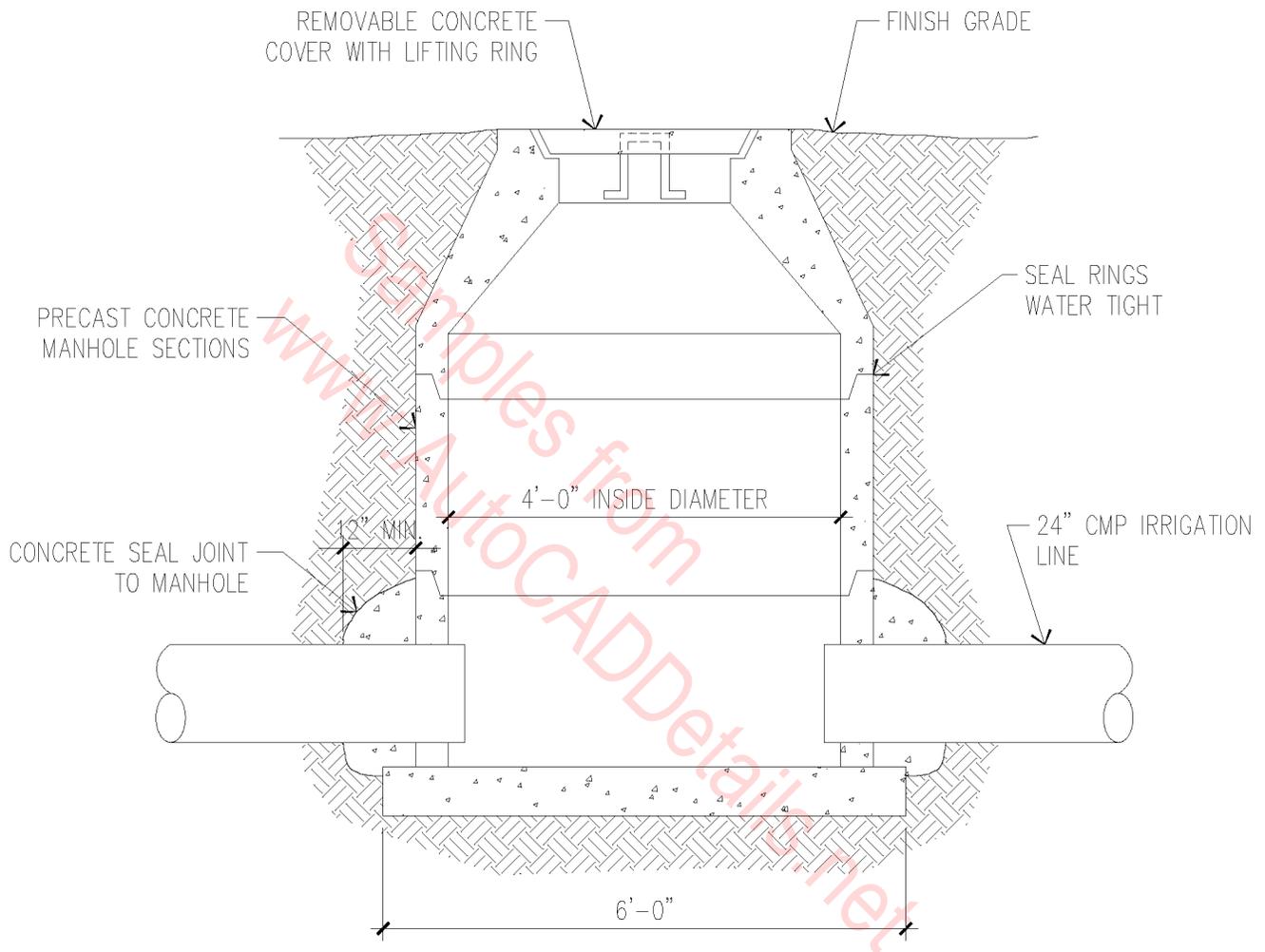
NOTE: ALL PIPING IS CAST IRON.



EXTERIOR GREASE TRAP

N.T.S.

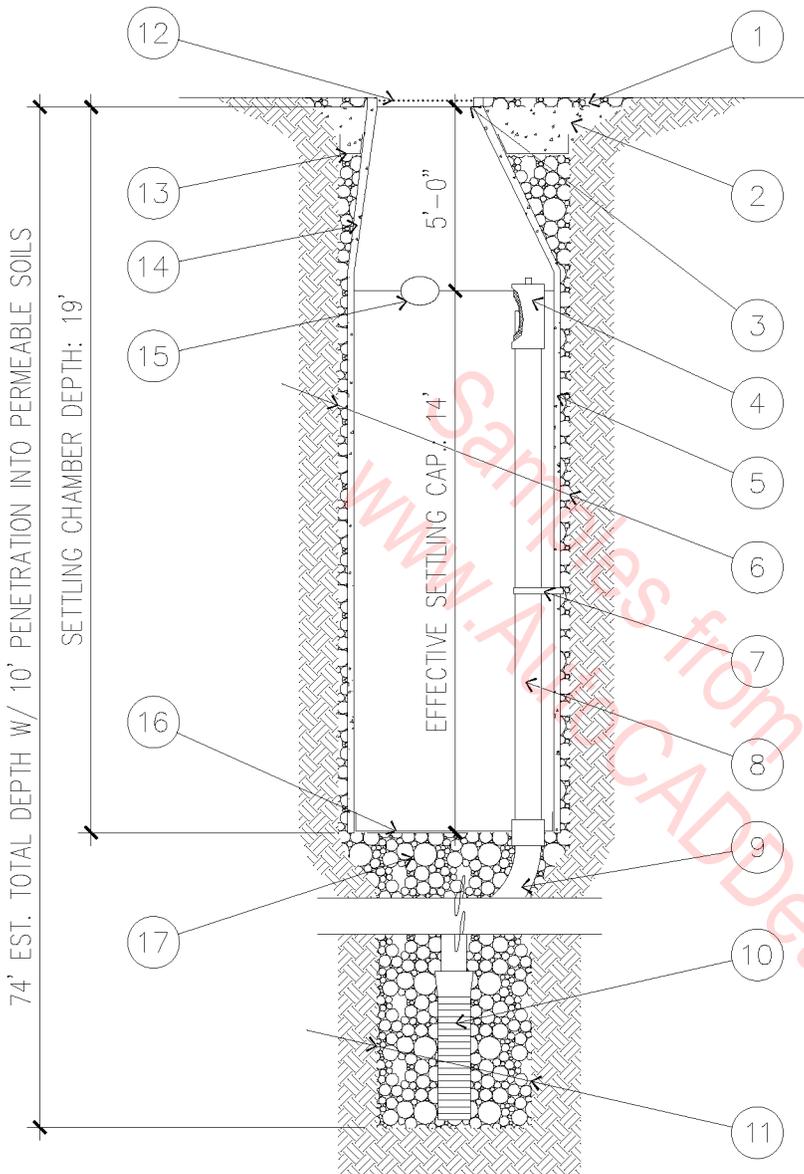
02A-1033



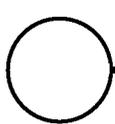
MANHOLE DETAIL

N.T.S.

02A-1034



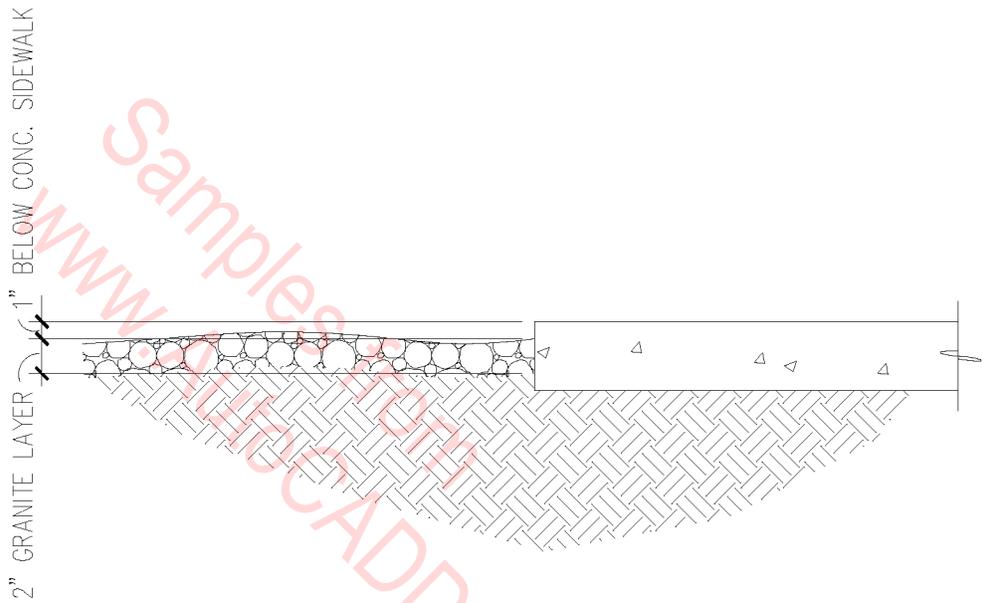
1. 1" TO 3" ROCK.
2. COMPACTED BASE MATERIAL.
3. FABRIC SEAL.
4. DEBRIS SHIELD.
5. PRECAST LINER.
6. MIN. 6' Ø DRILLED SHAFT.
7. SUPPORT BRACKET.
8. OVERFLOW PIPE.
9. 8" DIAMETER DRAIN PIPE.
10. DRAINAGE SCREEN.
11. MIN 4' Ø DRILLED SHAFT.
12. C.I. RING AND 30" GRATE
£ 2130-BOLT DOWN.
13. MOISTURE MEMBRANE MIN.
18" BELOW RIM.
14. MODIFIED MANHOLE CONE.
15. ABSORBENT.
16. DRAINAGE FABRIC.
17. 3/8" TO 1-1/2" WASHED ROCK.



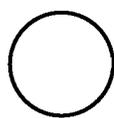
DRYWELL

3/16" = 1'-0"

02A-1035



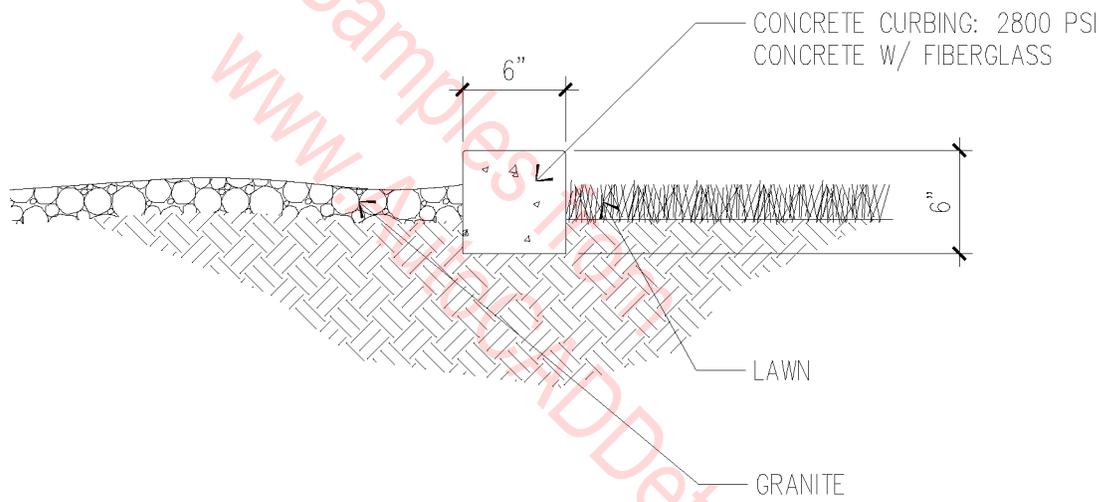
2" GRANITE LAYER
1" BELOW CONC. SIDEWALK



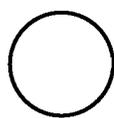
SIDEWALK DETAIL

1" = 1'-0"

02A-1036



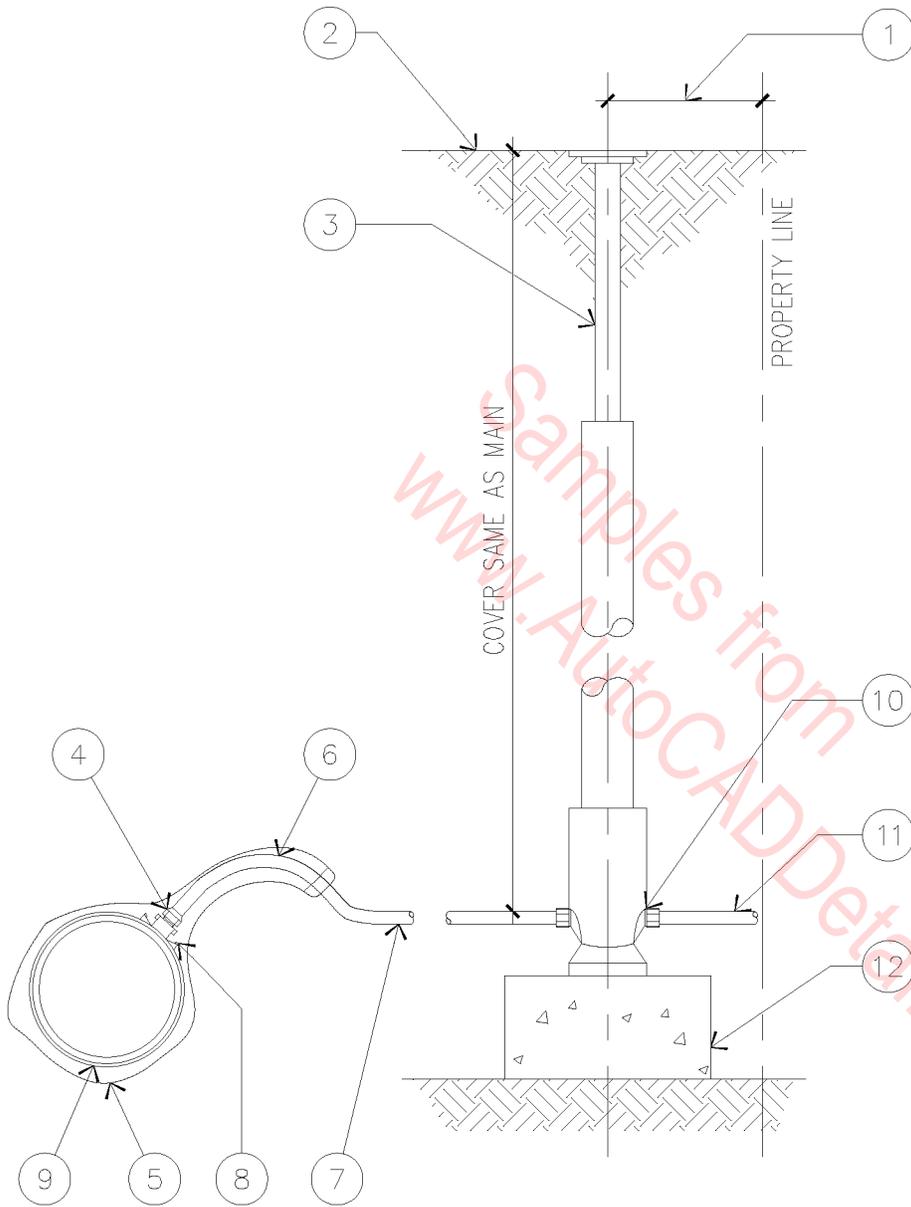
Samples.com
 www.Samples.com
 Details.net



CURBING DETAIL

1" = 1'-0"

02A-1037

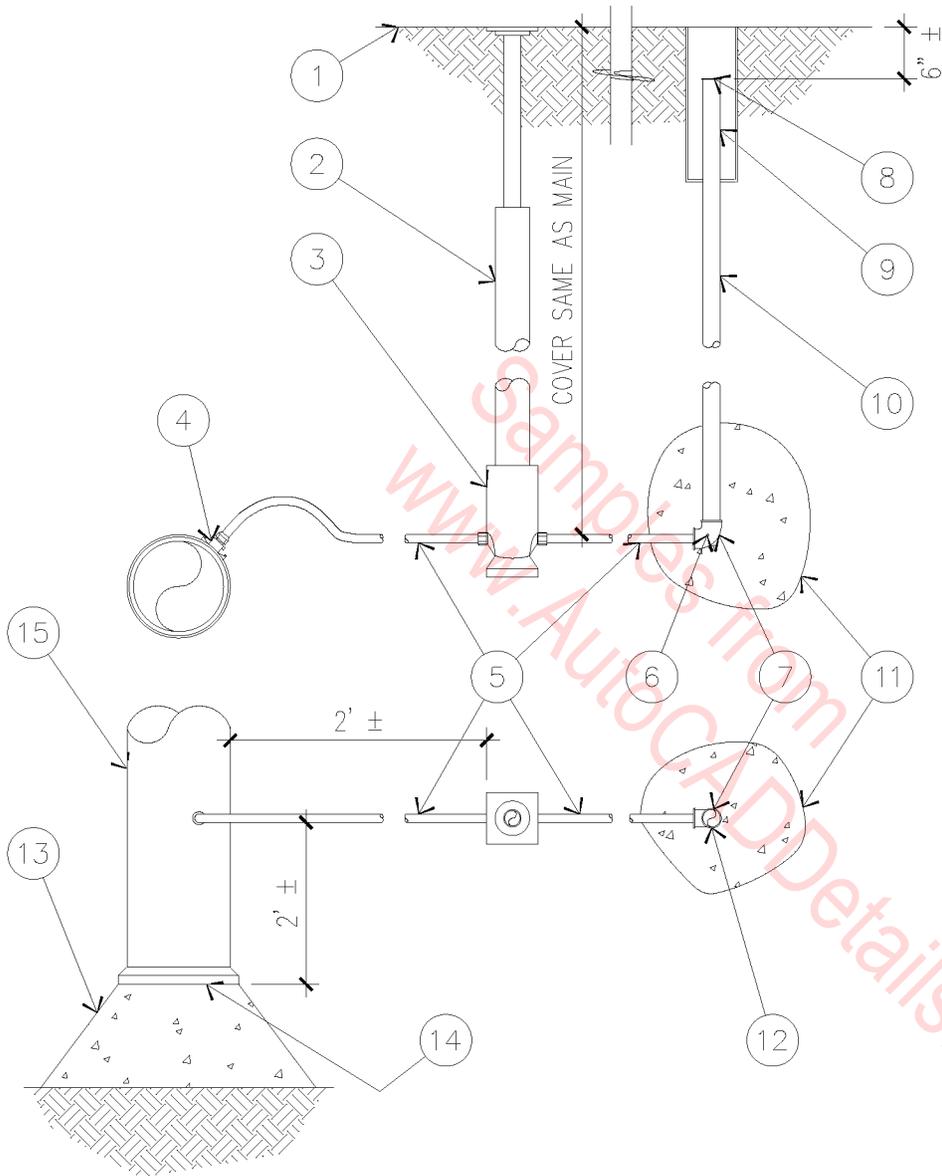


1. LOCATE NEW CURB BOX 12" ON STREET SIDE OF PROPERTY LINE EXCEPT WHERE SIDEWALK IS ON PROPERTY LINE. THEN LOCATE CURB STOP 12" BEHIND BACK OF WALK.
2. FINISH GRADE ELEVATION. ALL DISTURBED LANDSCAPED AREAS SHALL BE SODDED, OR REPLACED IN KIND.
3. CURB STOP ADJUSTABLE BOX ARCH PATTERN WITH FOOTPIECE.
4. CORPORATION STOP.
5. 8 MIL. POLYETHYLENE WRAP. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
6. PROVIDE GOOSENECK FOR EXPANSION AND CONTRACTION.
7. TYPE 'K' COPPER TUBING, CONTINUOUS.
8. ALL BRASS STRAP AND SADDLE.
9. WATER MAIN.
10. CURB STOP WITH FLARE CONNECTION ON STREET SIDE.
11. SERVICE LINE EXTENSION TO HOUSE OR EXTENSION METER AND VAULT, METER INSTALLATION BY OTHERS. USE DIELECTRIC UNION IF GALVANIZED IRON PIPE.
12. SET CURB STOP ON MASONRY SUPPORT.

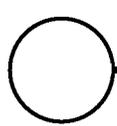
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE

02A-1038



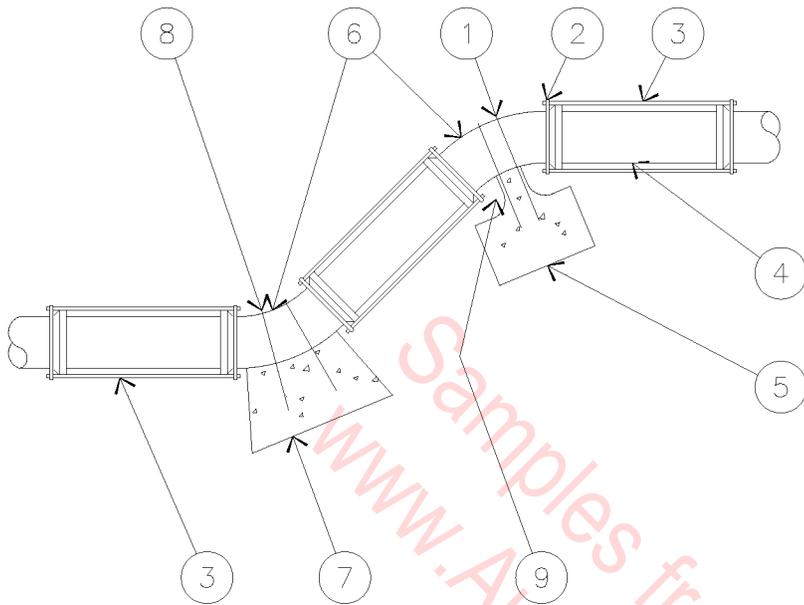
1. FINISH GRADE.
2. COMPLETE BOX AND ASSEMBLY ARCH PATTERN WITH FOOT PIECE.
3. 1" CURB STOP.
4. 1" CORPORATION STOP.
5. 1" COPPER PIPE.
6. 2- 1/4" Ø DRILL HOLES.
7. 90° BEND, NON-METALLIC INSULATED COUPLING.
8. GALVANIZED CAP.
9. 2" GALVANIZED COUPLING.
10. 2" GALVANIZED PIPE.
11. 2 CU. YD. OF GRAVEL.
12. EXTEND TO END OF CUL-DE-SAC.
13. THRUST BLOCK.
14. PLUG.
15. 12" PIPE AND SMALLER.



BLOWOFF DETAIL

NOT TO SCALE

02A-1039



1. MINIMUM 2- #6 REBARS, ASPHALT COATED.
2. STRAPS.
3. TIE RODS WHERE APPLIES, MINIMUM 2 REQUIRED.
4. ONE PIPE LENGTH (MINIMUM).
5. ANCHOR BLOCK (THRUST UPWARD, SEE TABLE FOR SIZE) EXTEND BLOCK INTO SIDES OF TRENCH.
6. 45° BEND.
7. THRUST BLOCK (SEE CHART FOR BEARING AREAS).
8. TIE DOWN RODS, MINIMUM 2- #6.
9. CLEARANCE AT HUB.

NOTES:

- A. USE CONCRETE THRUST BLOCKS AND ANCHOR BLOCK FOR PLASTIC PIPE (NO TIE RODS).
- B. FOR CAST IRON PIPE, USE EITHER TIE RODS OR CONCRETE BLOCKS.
- C. ANCHOR BLOCK WEIGHTS AND TIE ROD SIZE AND LENGTH BASED ON 200 P.S.I. PRESSURE AND 4'-6" OF COVER. WHERE WORKING PRESSURE EXCEEDS ABOVE, ANCHORS TO BE SPECIAL CONSTRUCTION.
- D. MEGA-LUG MAY BE USED PER MANUFACTURER'S REQUIREMENTS IN PLACE OF TIE RODS UPON APPROVAL OF ENGINEER.

MINIMUM WEIGHT OF ANCHOR BLOCK			
PIPE SIZE	90° BEND	45° BEND	22.5° BEND
2"	150#	150#	150#
3"	900#	450#	150#
4"	1590#	900#	450#
6"	6040#	2360#	680#
8"	12,280#	5740#	1960#

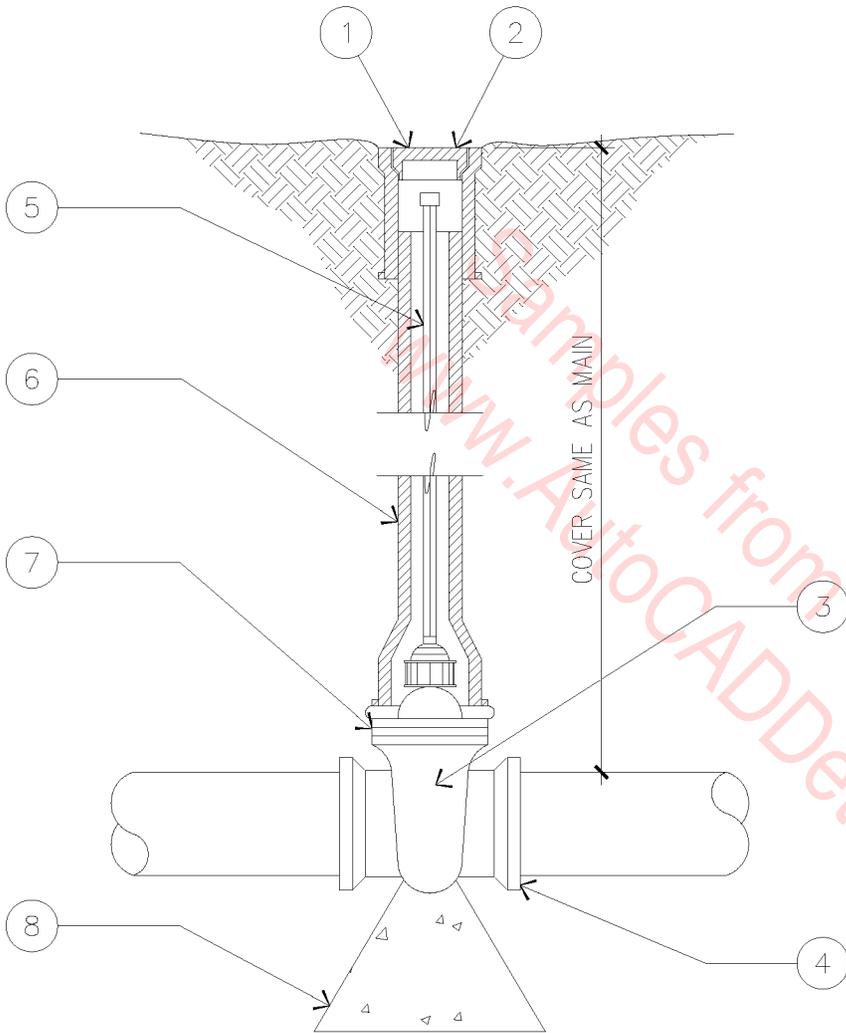
MINIMUM WEIGHT OF ANCHOR BLOCK			
PIPE SIZE	BEND	ROD DIA.	MIN. LENGTH OF ROD*
4"	90°	3/4"	22'
	45°	3/4"	7'
	22.5°	3/4"	2'
6"	90°	3/4"	35'
	45°	3/4"	10'
	22.5°	3/4"	3'
8"	90°	1"	48'
	45°	3/4"	14'
	22.5°	3/4"	4'
12"	90°	1-1/4"	78'
	45°	3/4"	22'
	22.5°	3/4"	6'

* ACTUAL LENGTH OF ROD TO BE SUCH THAT STRAP CAN BE PLACED BEYOND FIRST COLLAR OR HUB AT OR BEYOND THE MINIMUM LENGTH SHOWN.

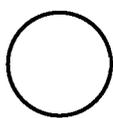
VERTICAL BEND ANCHOR DETAIL

NOT TO SCALE

02A-1040



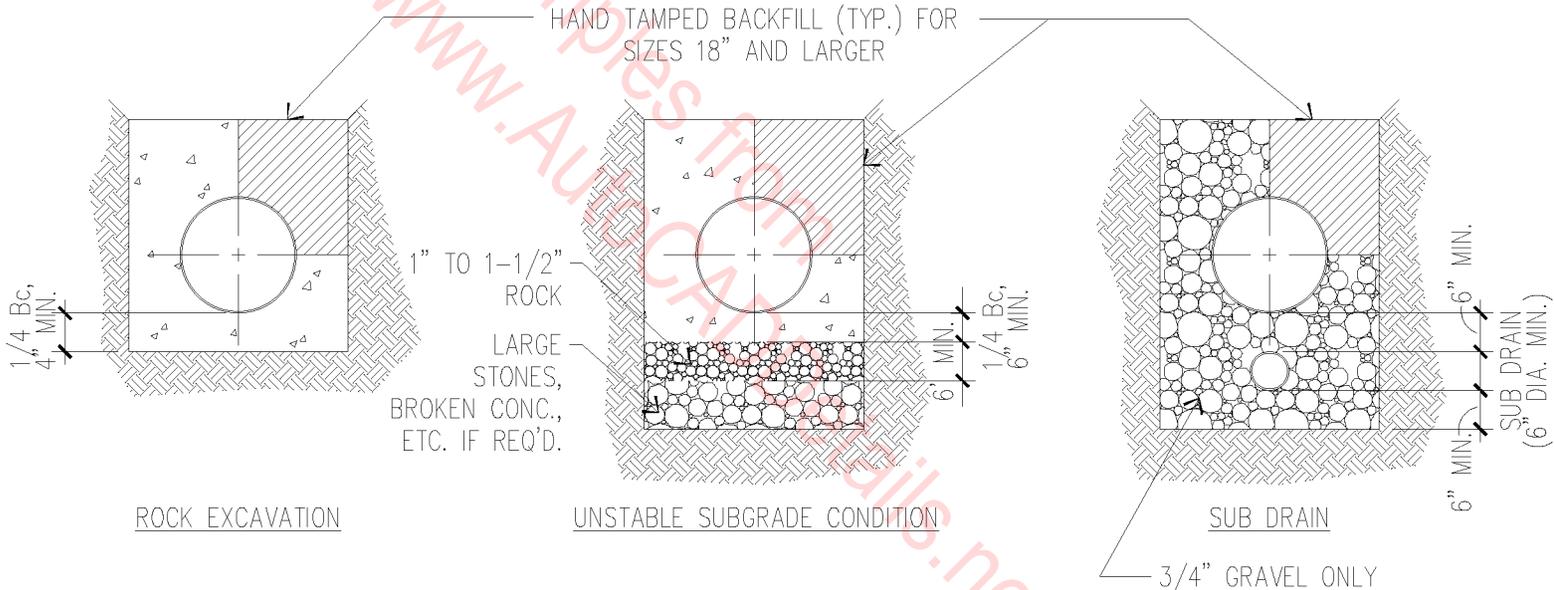
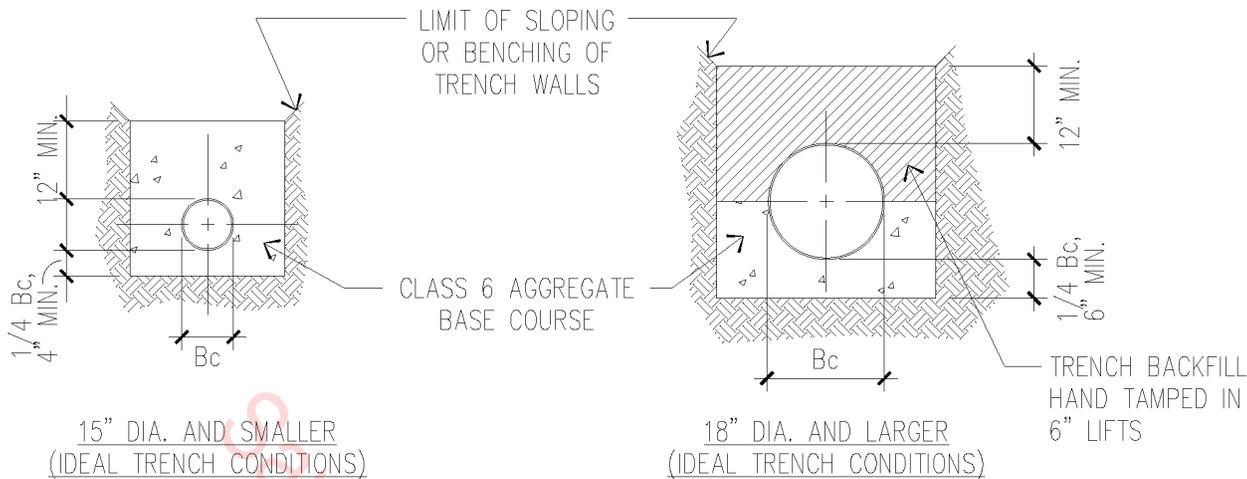
1. WORD "WATER" ON COVER.
2. RECESS TOP OF VALVE BOX 1/8" TO 1/4" BELOW FINISH GRADE.
3. GATE VALVE CLASS 250.
4. MAIN LINE GATE VALVES TO HAVE JOINTS SAME AS WATER MAIN OR AS SPECIFIED FOR MAIN LINE FITTINGS.
5. PROVIDE 5'-0" STEM IF CALLED FOR IN THE SPECIFICATIONS.
6. ADJUSTABLE C.I. VALVE BOX, 5" BARREL.
7. 2" COMPRESSION MATERIAL TO PREVENT ROADWAY SHOCK FROM BEING TRANSMITTED TO VALVE.
8. SEE THRUST BLOCK DETAIL.



GATE VALVE DETAIL

NOT TO SCALE

02A-1041



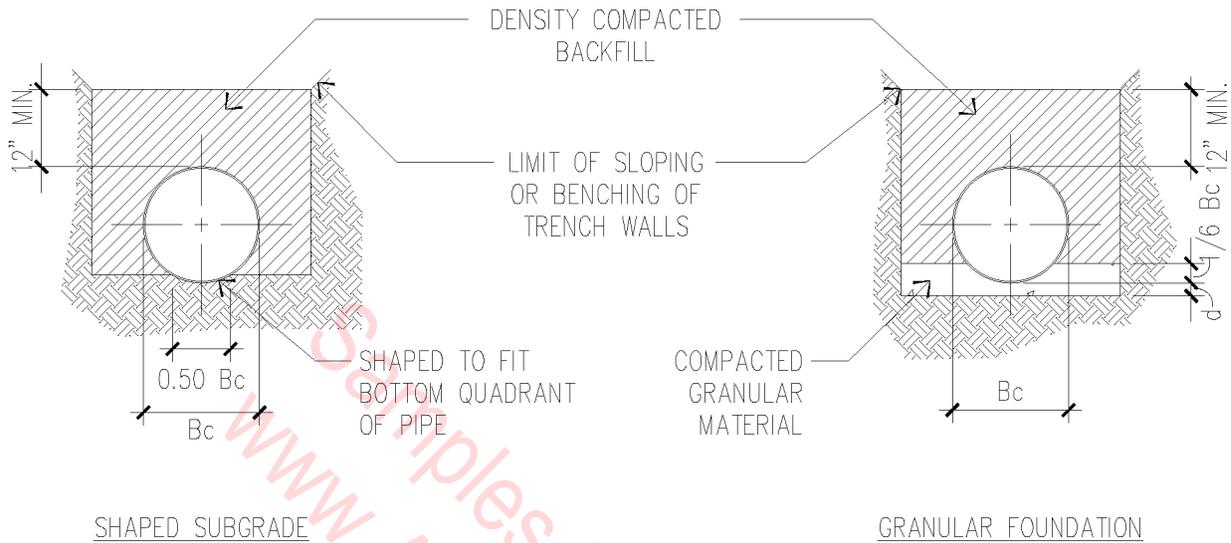
NOMINAL DIAMETER	MAXIMUM TRENCH WIDTH AT A POINT 12" ABOVE PIPE
33" AND SMALLER	$B = Bc + 16"$
36" AND LARGER	$B = Bc + 30"$

NOTE: BELL HOLES SHALL BE EXCAVATED AT ALL BELL AND SPIGOT JOINTS.

CLASS 'B' BEDDING REQMTS.
WATER OR SEWER MAIN

NOT TO SCALE

02A-1043



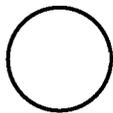
NOMINAL DIAMETER	MAXIMUM TRENCH WIDTH AT A POINT 12" ABOVE PIPE
33" AND SMALLER	$B = B_c + 16"$
36" AND LARGER	$B = B_c + 30"$

NOMINAL DIAMETER	MINIMUM d
18" AND SMALLER	2"
21" TO 36"	3"
42" AND LARGER	4"

NOTES:

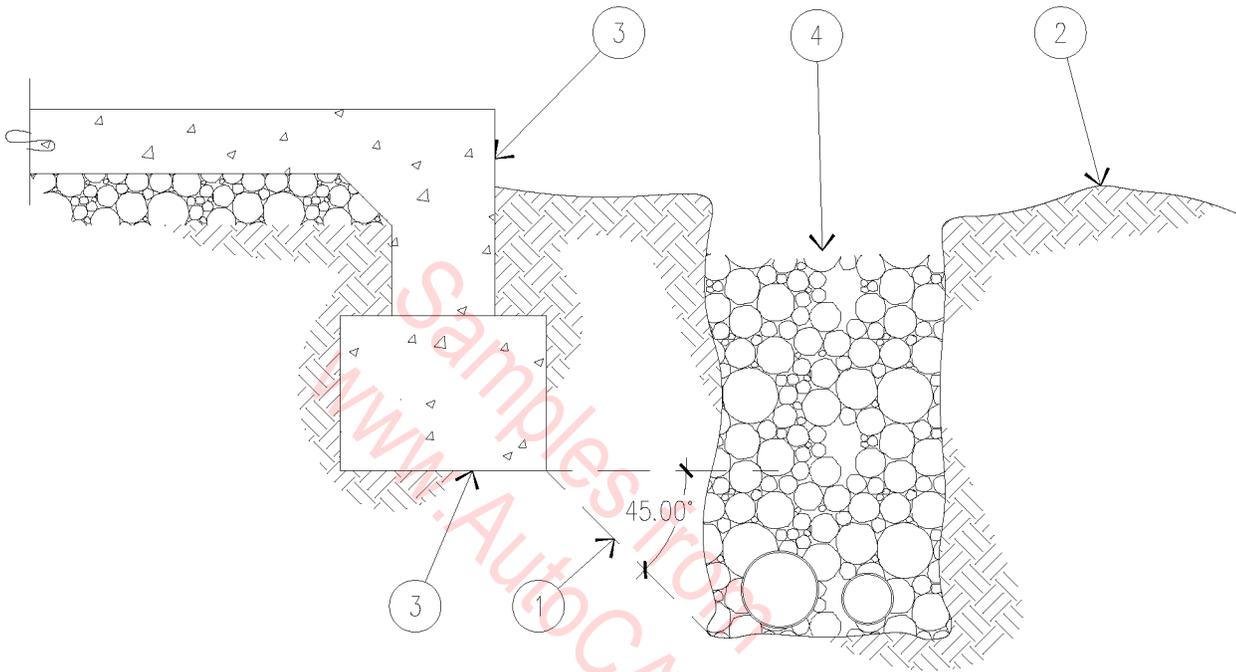
- A. BELL HOLES SHALL BE EXCAVATED AT ALL BELL AND SPIGOT JOINTS.
- B. CLASS 'C' BEDDING MAY ONLY BE USED UPON APPROVAL OF CHIEF ENGINEER OR THE ENGINEER'S APPOINTED REPRESENTATIVE.

CLASS 'C' BEDDING RQMQTS. WATER OR SEWER MAIN



NOT TO SCALE

02A-1044

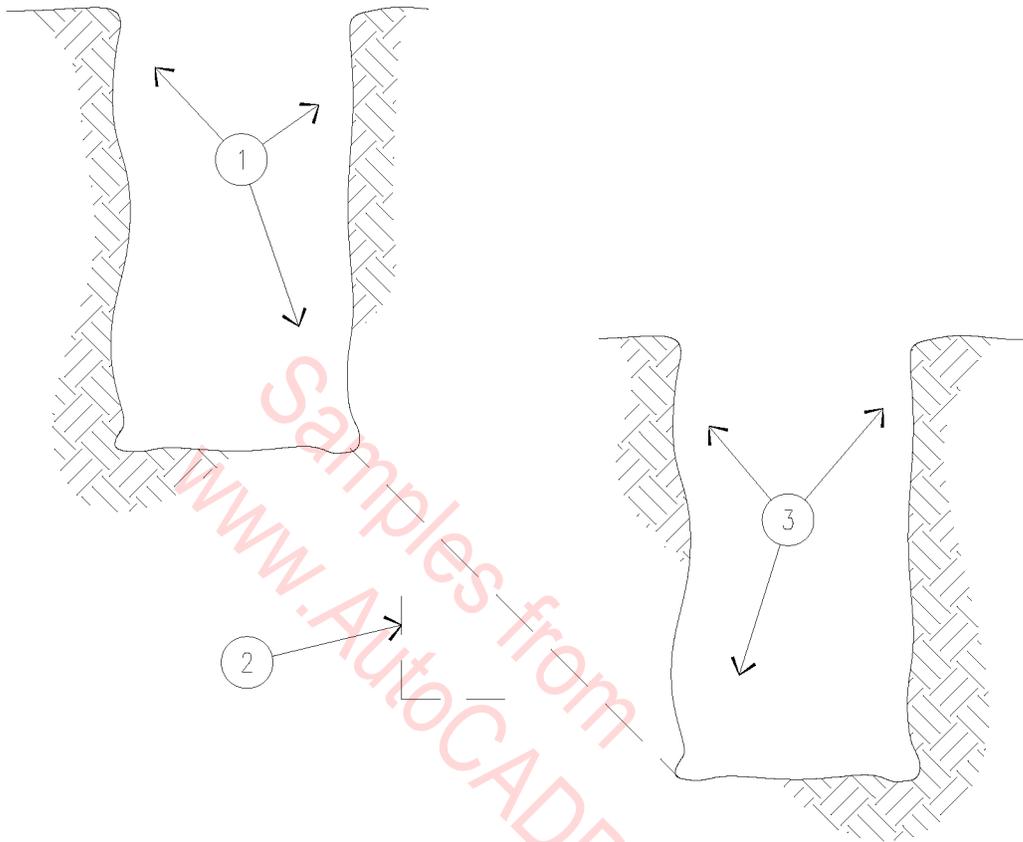


1. DO NOT EXCAVATE A TRENCH CLOSER THAN A 45° ANGLE THE BOTTOM OF A FOOTING OR FOUNDATION.
2. FINISHED GRADE.
3. FOOTING OR FOUNDATION.
4. EXCAVATED TRENCH.

TRENCH PARALLEL TO FOUNDATION

NOT TO SCALE

02A-1045

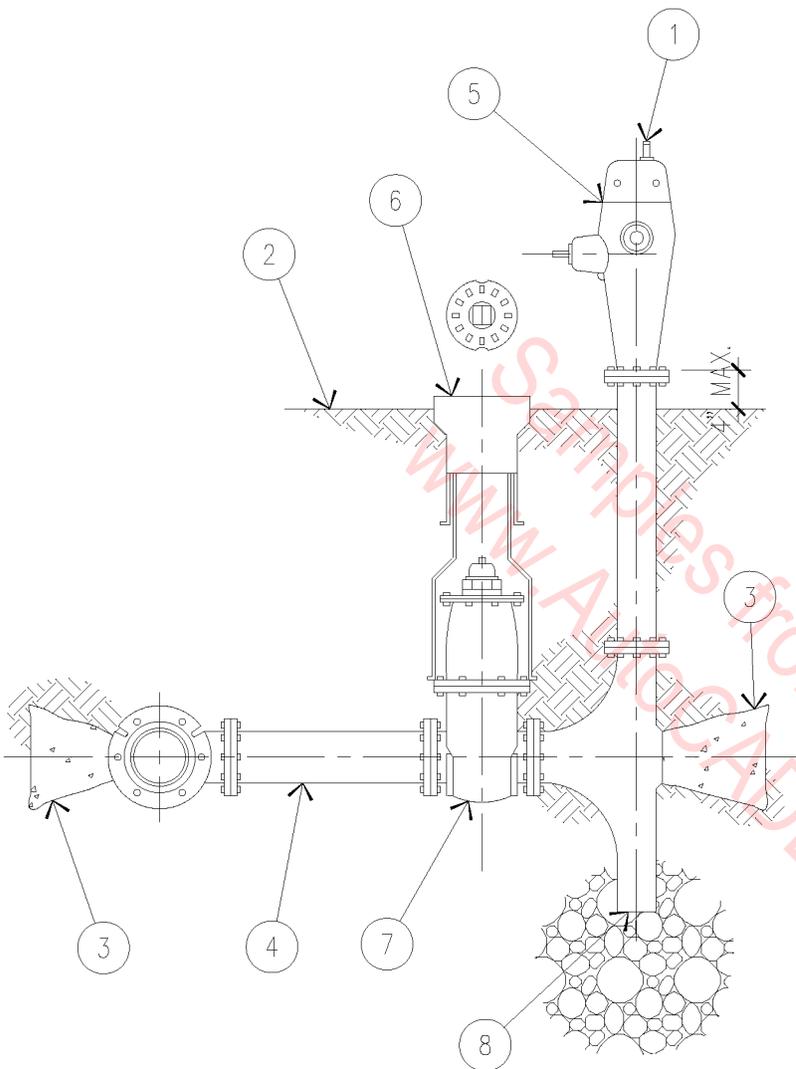


1. ISOLATED OR CONTINUOUS FOOTING.
2. THIS SLOPE SHALL NOT EXCEED 1 VERTICAL TO 1 HORIZONTAL, IF EXCAVATIONS CAN STAND VERTICALLY WITHOUT SHORING, AND 1 VERTICAL TO 1-1/2 HORIZONTAL IF EXCAVATIONS NEED TO SLOPE OR BE SHORED.
3. ISOLATED OR CONTINUOUS FOOTING PIT OR PIPE TRENCH UNDERMINING FOOTING ABOVE.

MAXIMUM SLOPES BETWEEN ADJACENT EXCAVATIONS

NOT TO SCALE

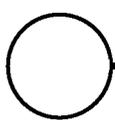
02A-1046



1. 1 1/2" PENTAGON OPERATING NUT (OPENS LEFT).
2. FINISH GRADE.
3. THRUST BLOCK.
4. STEEL SPOOL.
5. FIRE HYDRANT.
6. (2) PIECE CAST IRON VALVE BOX.
7. GATE VALVE WITH 2" X 2" OPERATING NUT (DOUBLE DISK RESILIENT WEDGE GATE VALVE TO MEET A.W.W.A. SPECIFICATIONS).
8. DRAIN HOLE.

NOTES:

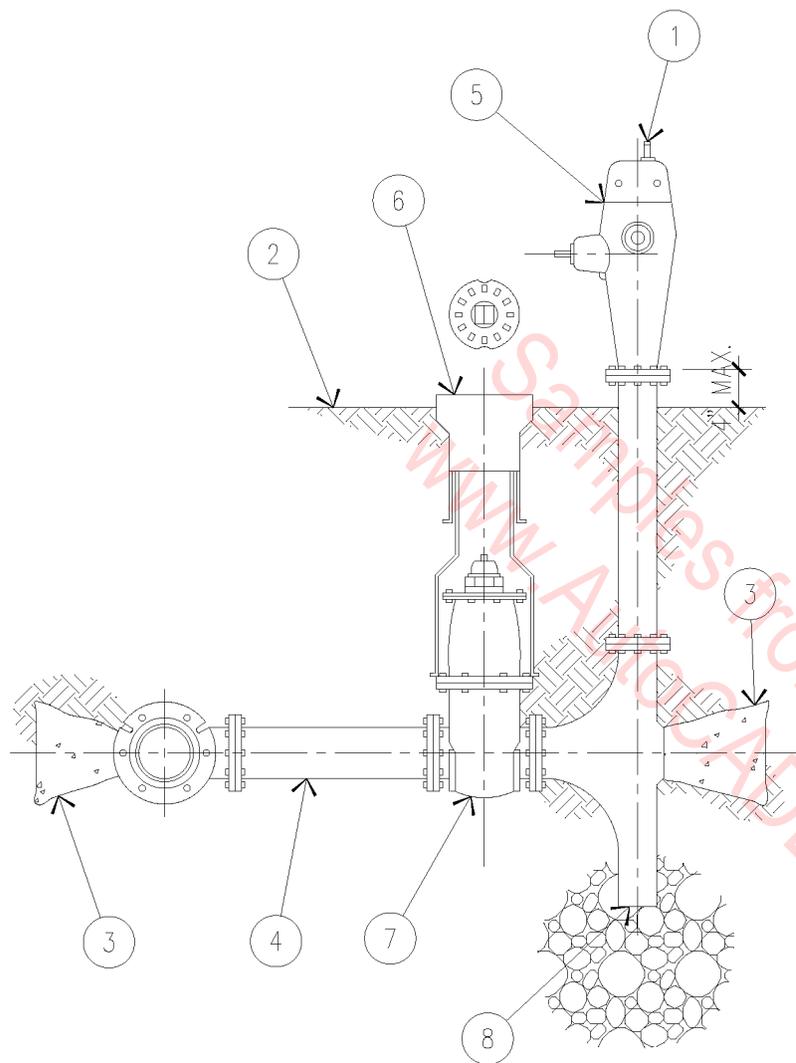
- A. ALL WORK MUST BE INSPECTED PRIOR TO BACKFILL.
- B. THRUST BLOCKS ARE REQUIRED WITH A MINIMUM OF FOUR (4) SQUARE FEET BEARING ON UNDISTURBED SOIL.
- C. DRAIN HOLES AT BASE OF HYDRANT TO REMAIN CLEAR WITH A MINIMUM OF ONE (1) CUBIC YARD OF CLEAN 2" MINUS GRAVEL PLACED AROUND THE HOLE TO FACILITATE DRAINAGE. TAR PAPER OR PLASTIC REQUIRED OVER GRAVEL TO MINIMIZE SILTING.
- D. THE 4 1/2" STEAMER NOZZLE TO FACE THE STREET OR PARKING LOT.
- E. FIRE HYDRANTS SHALL BE INSTALLED IN SUCH A MANNER THAT THE SIDEWALK FLANGE IS EVEN WITH OR LESS THAN 4" ABOVE GRADE.
- F. THE AUTHORITIES HAVING JURISDICTION SHALL BE NOTIFIED AS SOON AS A HYDRANT IS PLACED IN SERVICE.
- G. THE BURIED PORTION OF THE HYDRANT SHALL BE PAINTED WITH TWO (2) COATS OF C.A. 50 COAL TAR ENAMEL. THE HYDRANT BARREL AND CAPS SHALL BE PAINTED YELLOW WITH BAKELITE BASE PAINT AND TONGUE OIL THINNER. THE PAINT SHALL BE TROPICAL INDUSTRIAL ENAMEL WITH ONE (1) COAT OF A.C.B. PRIMER NO. 535-14 AND ONE (1) COAT OF LEMON YELLOW F-68Y2 SHERWIN-WILLIAMS OR EQUAL.
- H. ALL BOLTS BELOW GROUND SHALL BE COATED WITH POLY FM GREASE I AND WRAPPED WITH 8 MIL. POLYETHYLENE.
- I. ALL CONNECTIONS FROM MAIN SHALL BE FLANGED AND DRILLED TO AMERICAN STANDARD A.N.S.I. B16.1.
- J. HYDRANT SPOOL TO BE STEEL PIPE, SCHEDULE 40, AND TAPE WRAPPED.



FIRE HYDRANTS

N.T.S.

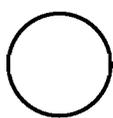
02A-1047



1. 1 1/2" PENTAGON OPERATING NUT (OPENS LEFT).
2. FINISH GRADE.
3. THRUST BLOCK.
4. STEEL SPOOL.
5. FIRE HYDRANT.
6. (2) PIECE CAST IRON VALVE BOX.
7. GATE VALVE WITH 2" X 2" OPERATING NUT (DOUBLE DISK RESILIENT WEDGE GATE VALVE TO MEET A.W.W.A. SPECIFICATIONS).
8. DRAIN HOLE.

NOTES:

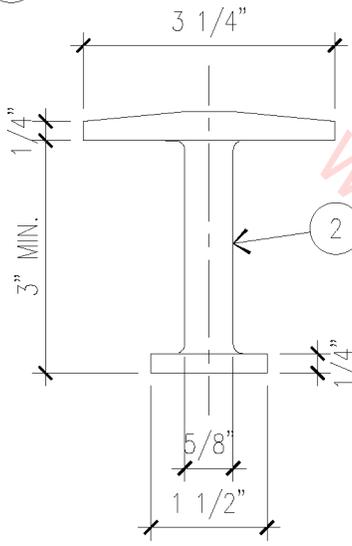
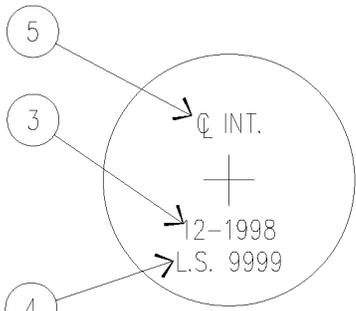
- A. ALL WORK MUST BE INSPECTED PRIOR TO BACKFILL.
- B. THRUST BLOCKS ARE REQUIRED WITH A MINIMUM OF FOUR (4) SQUARE FEET BEARING ON UNDISTURBED SOIL.
- C. DRAIN HOLES AT BASE OF HYDRANT TO REMAIN CLEAR WITH A MINIMUM OF ONE (1) CUBIC YARD OF CLEAN 2" MINUS GRAVEL PLACED AROUND THE HOLE TO FACILITATE DRAINAGE. TAR PAPER OR PLASTIC REQUIRED OVER GRAVEL TO MINIMIZE SILTING.
- D. THE 4 1/2" STEAMER NOZZLE TO FACE THE STREET OR PARKING LOT.
- E. FIRE HYDRANTS SHALL BE INSTALLED IN SUCH A MANNER THAT THE SIDEWALK FLANGE IS EVEN WITH OR LESS THAN 4" ABOVE GRADE.
- F. THE AUTHORITIES HAVING JURISDICTION SHALL BE NOTIFIED AS SOON AS A HYDRANT IS PLACED IN SERVICE.
- G. THE BURIED PORTION OF THE HYDRANT SHALL BE PAINTED WITH TWO (2) COATS OF C.A. 50 COAL TAR ENAMEL. THE HYDRANT BARREL AND CAPS SHALL BE PAINTED YELLOW WITH BAKELITE BASE PAINT AND TONGUE OIL THINNER. THE PAINT SHALL BE TROPICAL INDUSTRIAL ENAMEL WITH ONE (1) COAT OF A.C.B. PRIMER NO. 535-14 AND ONE (1) COAT OF LEMON YELLOW F-68Y2 SHERWIN-WILLIAMS OR EQUAL.
- H. ALL BOLTS BELOW GROUND SHALL BE COATED WITH POLY FM GREASE I AND WRAPPED WITH 8 MIL. POLYETHYLENE.
- I. ALL CONNECTIONS FROM MAIN SHALL BE FLANGED AND DRILLED TO AMERICAN STANDARD A.N.S.I. B16.1.
- J. HYDRANT SPOOL TO BE STEEL PIPE, SCHEDULE 40, AND TAPE WRAPPED.



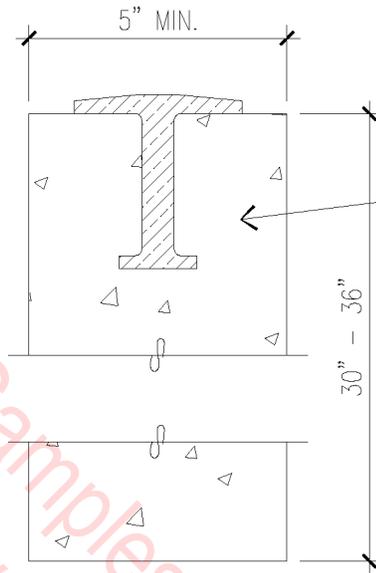
FIRE HYDRANTS

N.T.S.

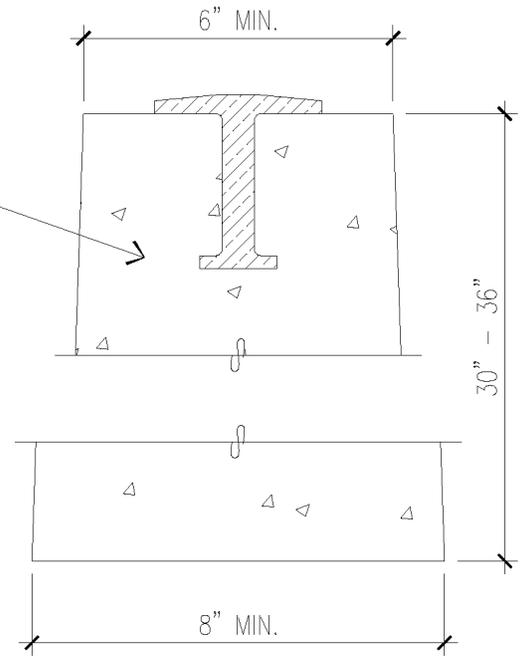
02A-1047



MONUMENT CAP



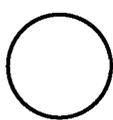
CAST-IN PLACE
MONUMENT BASE



PRE-CAST
MONUMENT BASE

1. CONCRETE AS PER SPECIFICATIONS.
2. USE MONUMENT CAP (PLATE) OF BRASS OR BRONZE.
3. SHOW MONTH AND YEAR WHEN CAP IS INSTALLED.
4. SHOW LICENSE NUMBER OF LAND SURVEYOR WHO SET THE CAP.
5. SHOW THE TYPE OF MONUMENT ON THE CAP. THE FOLLOWING IS A LIST OF COMMONLY USED ABBREVIATIONS:

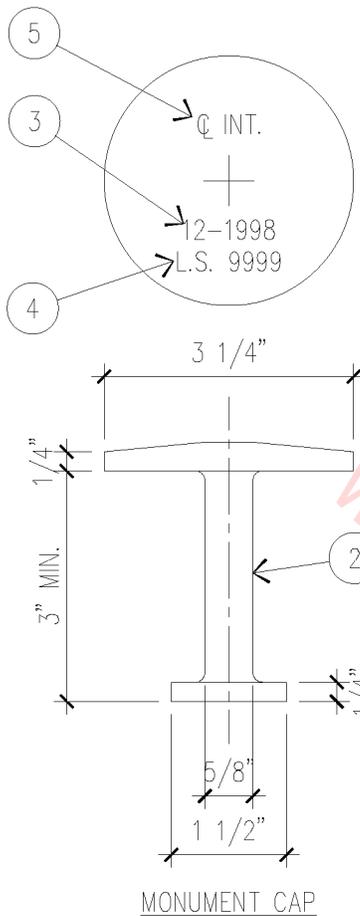
A.P.	ANGLE POINT
Q. INT.	CENTERLINE INTERSECTION
INT.	INTERSECTION LINE
ML. INT.	MONUMENT LINE INTERSECTION
P.C.	POINT OF CURVATURE
P.C.C.	POINT OF COMPOUND CURVE
P.I.	POINT OF INTERSECTION
P.O.C.	POINT OF CURVE
P.O.T.	POINT OF TANGENT
P.R.C.	POINT OF REVERSE CURVE
P.T.	POINT OF TANGENCY
S.C.	SECTION CORNER
W.C.	WITNESS CORNER



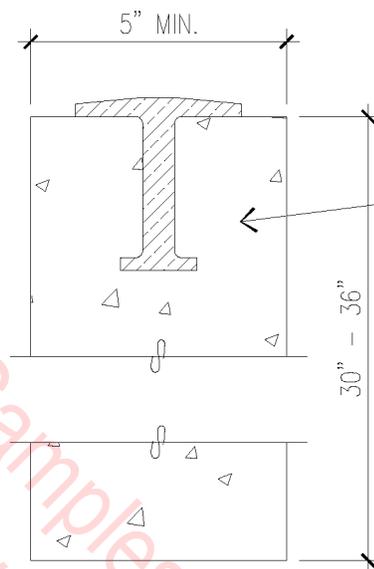
MONUMENT CAP & BASE

N.T.S.

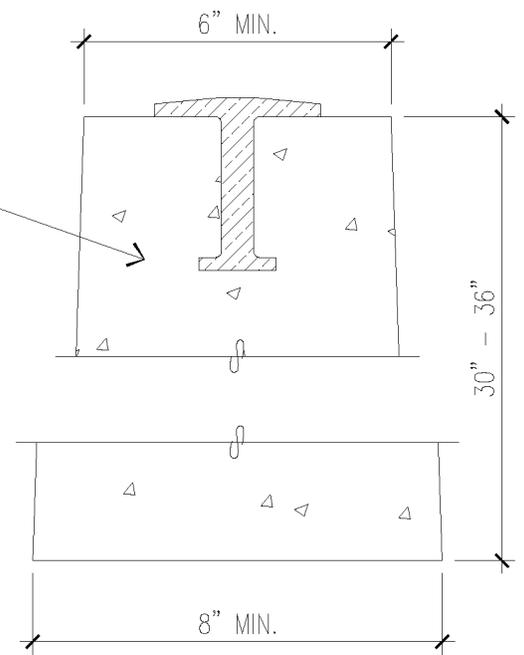
02A-1048



MONUMENT CAP



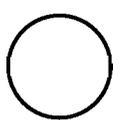
CAST-IN PLACE
MONUMENT BASE



PRE-CAST
MONUMENT BASE

1. CONCRETE AS PER SPECIFICATIONS.
2. USE MONUMENT CAP (PLATE) OF BRASS OR BRONZE.
3. SHOW MONTH AND YEAR WHEN CAP IS INSTALLED.
4. SHOW LICENSE NUMBER OF LAND SURVEYOR WHO SET THE CAP.
5. SHOW THE TYPE OF MONUMENT ON THE CAP. THE FOLLOWING IS A LIST OF COMMONLY USED ABBREVIATIONS:

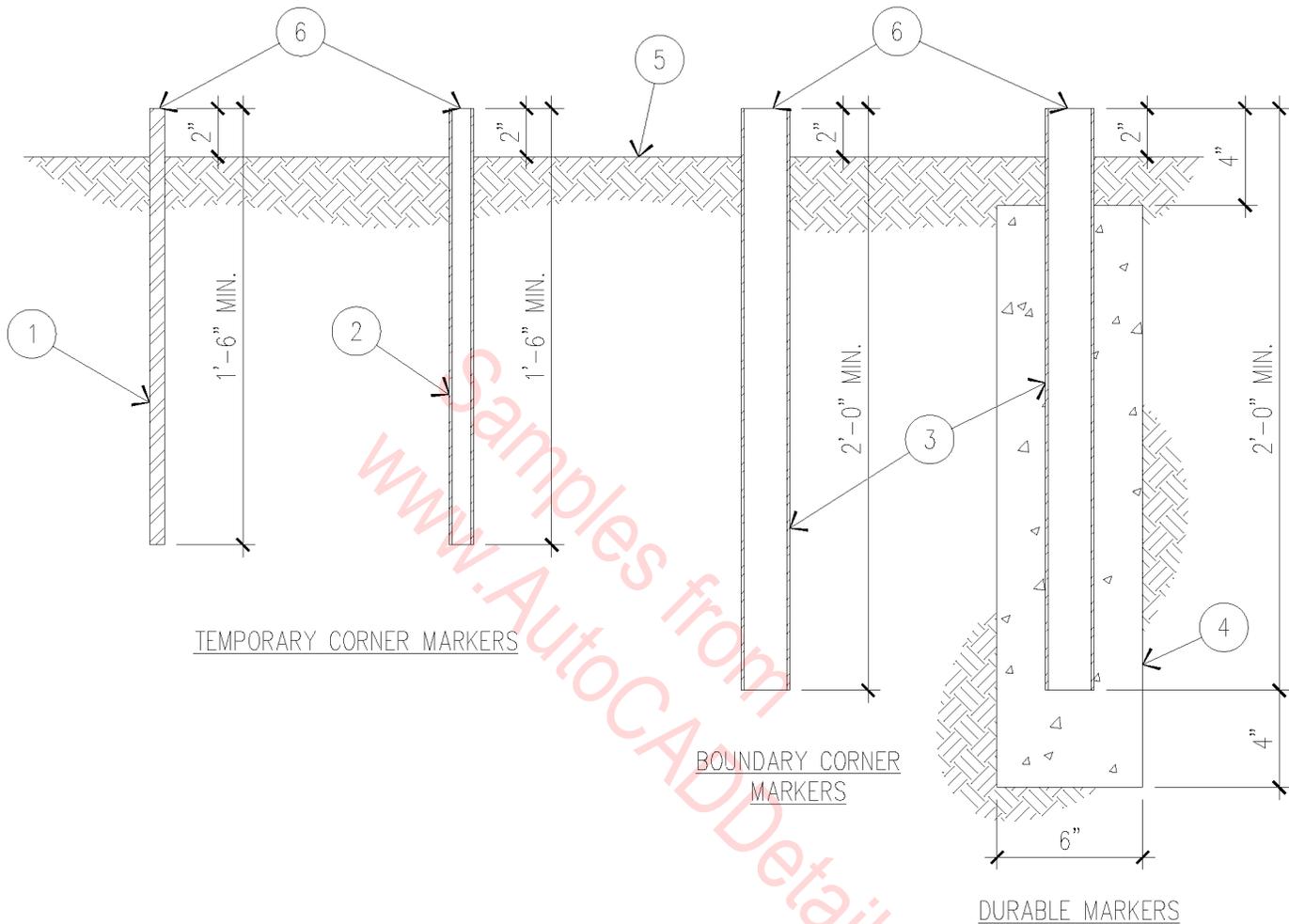
A.P.	ANGLE POINT
Q INT.	CENTERLINE INTERSECTION
INT.	INTERSECTION LINE
ML. INT.	MONUMENT LINE INTERSECTION
P.C.	POINT OF CURVATURE
P.C.C.	POINT OF COMPOUND CURVE
P.I.	POINT OF INTERSECTION
P.O.C.	POINT OF CURVE
P.O.T.	POINT OF TANGENT
P.R.C.	POINT OF REVERSE CURVE
P.T.	POINT OF TANGENCY
S.C.	SECTION CORNER
W.C.	WITNESS CORNER



MONUMENT CAP & BASE

N.T.S.

02A-1048



TEMPORARY CORNER MARKERS

BOUNDARY CORNER MARKERS

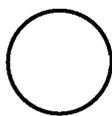
DURABLE MARKERS

1. NO. 5 REBAR.
2. 1" PIPE.
3. 2" PIPE.
4. CONCRETE.
5. GROUND SURFACE.
6. ALL CORNERS TO BE TAGGED WITH SURVEYOR NUMBER.

NOTES:

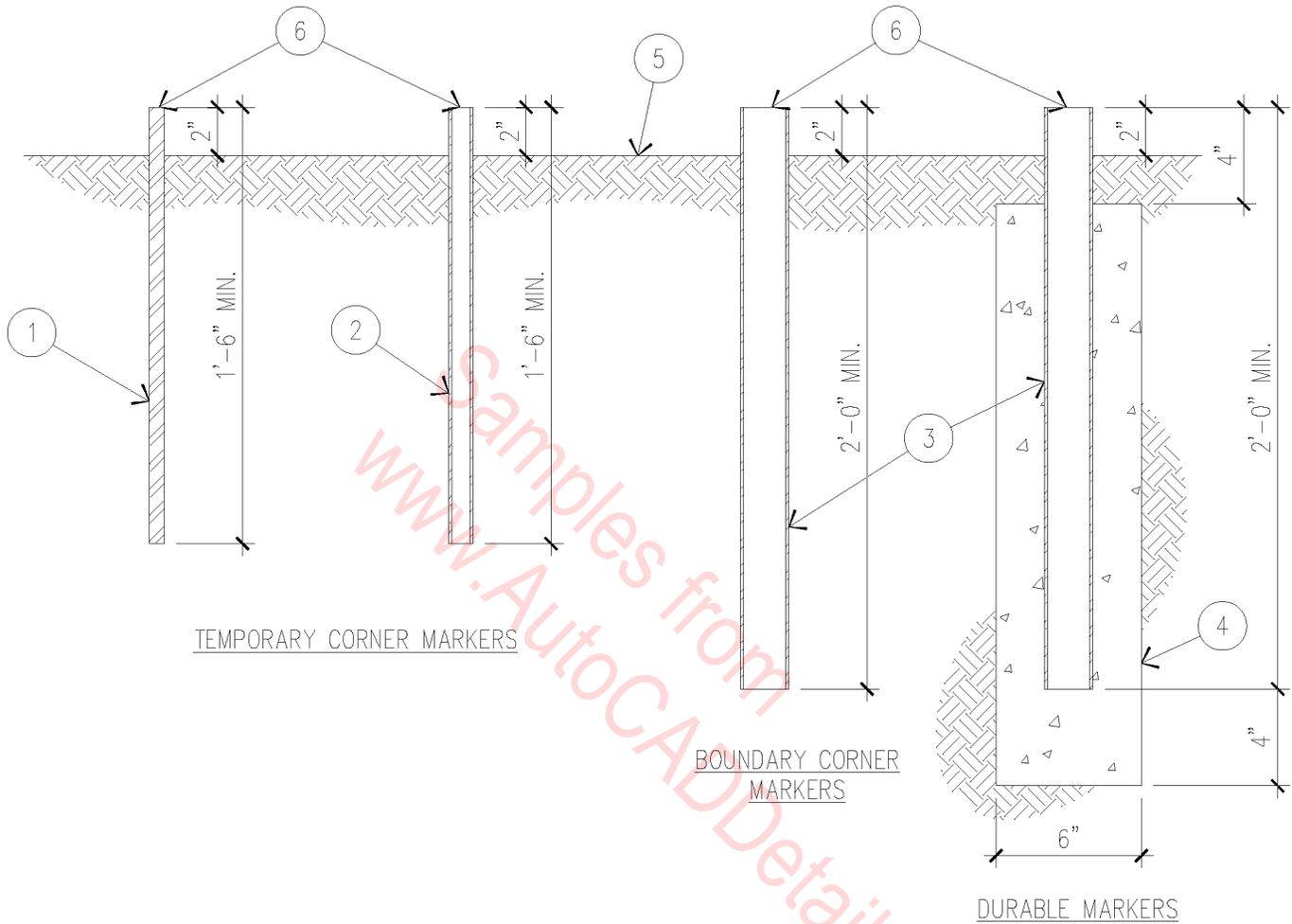
- A. ALL BOUNDARIES, UNLESS OTHERWISE MARKED WITH A DURABLE MARKER, SHALL BE MARKED WITH BOUNDARY CORNER MARKERS.
- B. MONUMENTS SHALL BE MARKED WITH DURABLE MARKERS.
- C. ALUMINUM OR PLASTIC "PERMAMARK" CAPS OR APPROVED EQUAL.

CORNER & BOUNDARY MARKER DETAILS



1 1/2" = 1'-0"

02A-1049



TEMPORARY CORNER MARKERS

BOUNDARY CORNER MARKERS

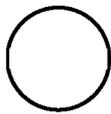
DURABLE MARKERS

1. NO. 5 REBAR.
2. 1" PIPE.
3. 2" PIPE.
4. CONCRETE.
5. GROUND SURFACE.
6. ALL CORNERS TO BE TAGGED WITH SURVEYOR NUMBER.

NOTES:

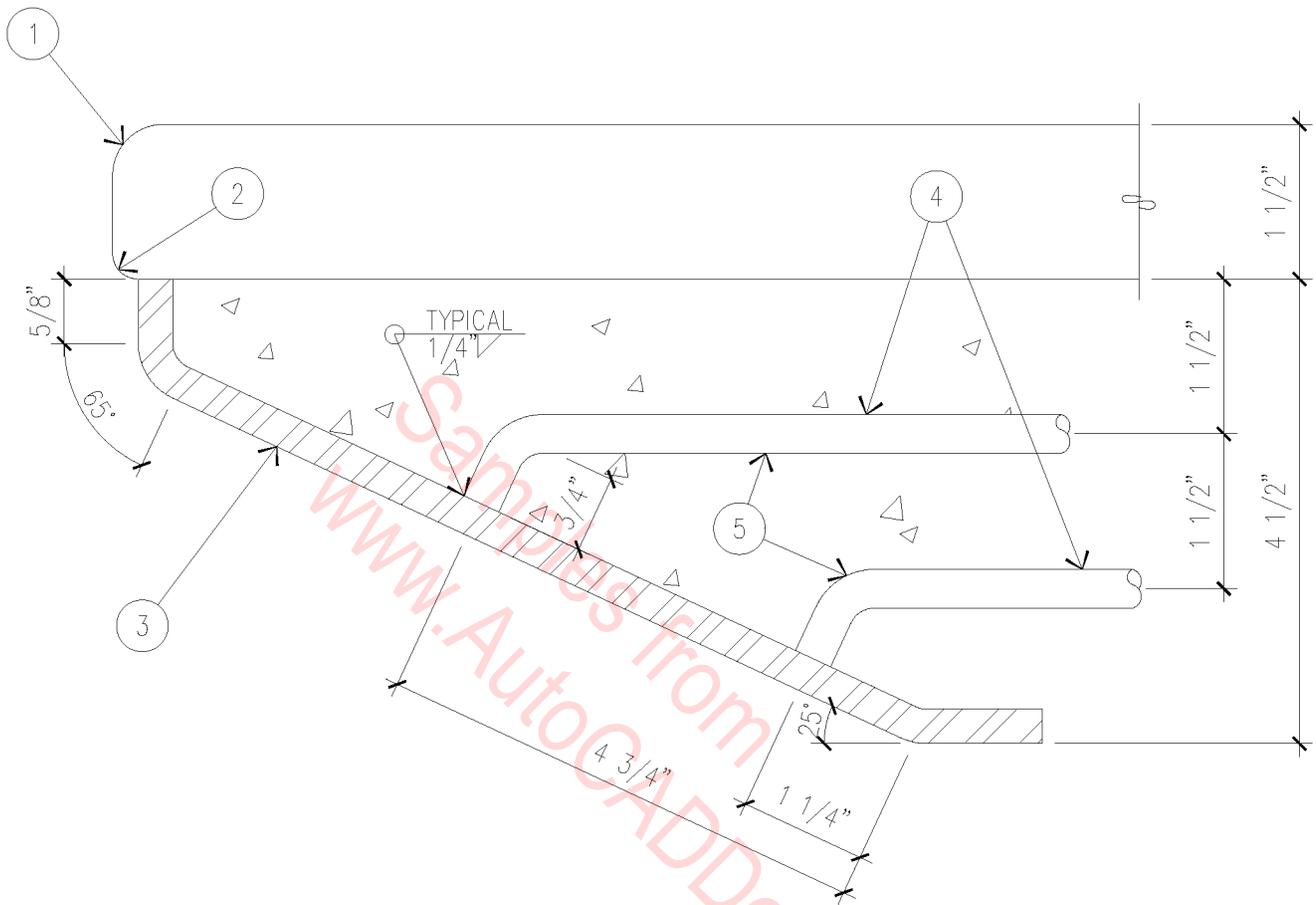
- A. ALL BOUNDARIES, UNLESS OTHERWISE MARKED WITH A DURABLE MARKER, SHALL BE MARKED WITH BOUNDARY CORNER MARKERS.
- B. MONUMENTS SHALL BE MARKED WITH DURABLE MARKERS.
- C. ALUMINUM OR PLASTIC "PERMAMARK" CAPS OR APPROVED EQUAL.

CORNER & BOUNDARY MARKER DETAILS



1 1/2" = 1'-0"

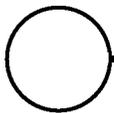
02A-1049



1. 1/2" RADIUS.
2. 1/4" RADIUS
3. 5/16" X 10" PLATE (ASTM A36),
BENT AS SHOWN.
4. #3 X 9" AT 24" O.C.
5. STAGGER ANCHORS.

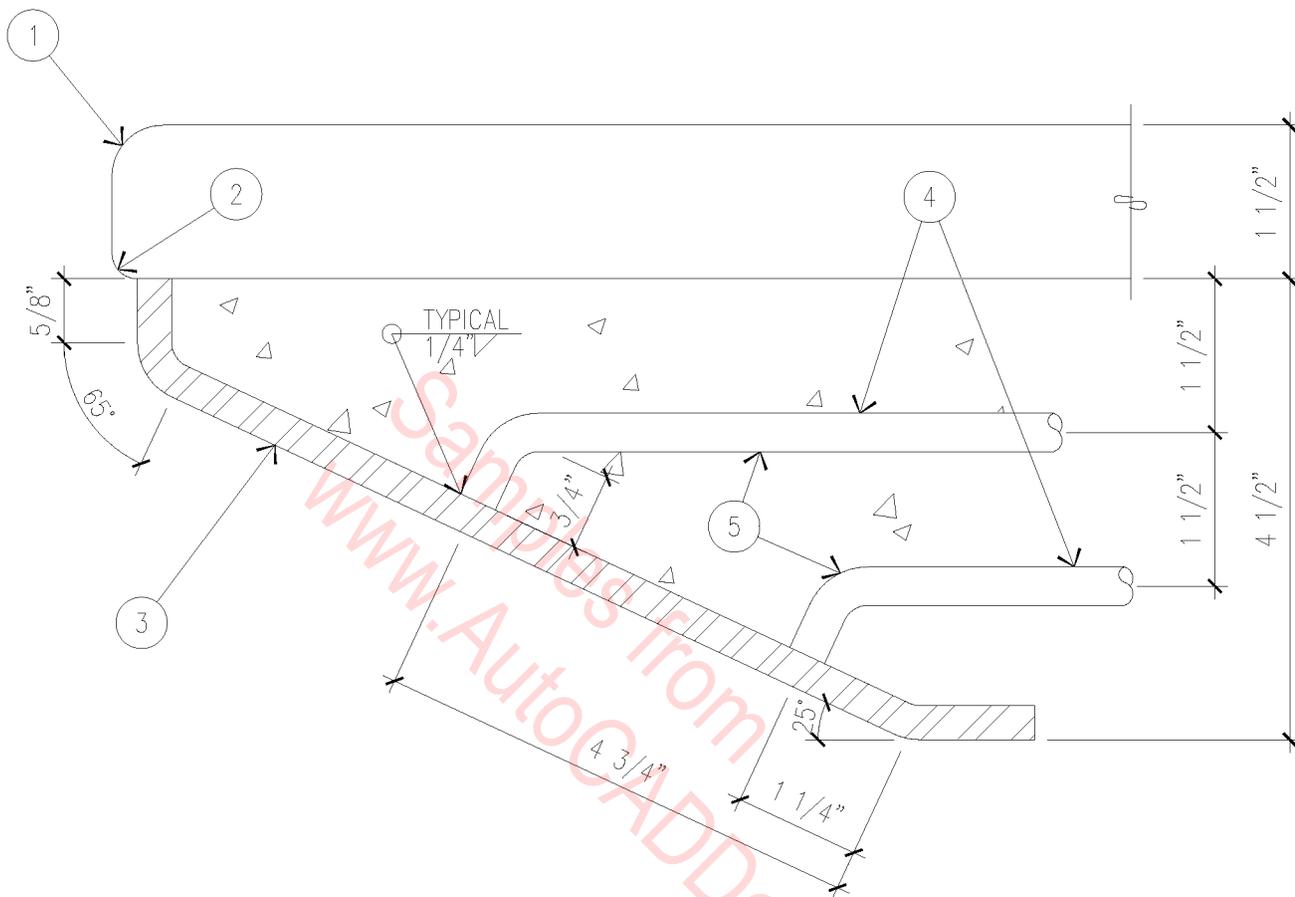
NOTE: HOT DIP GALVANIZE AFTER FABRICATION.

CURB OPENING INLET FACE PLATE



6" = 1'-0"

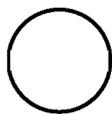
02A-1050



1. 1/2" RADIUS.
2. 1/4" RADIUS
3. 5/15" X 10" PLATE (ASTM A36),
BENT AS SHOWN.
4. #3 X 9" AT 24" O.C.
5. STAGGER ANCHORS.

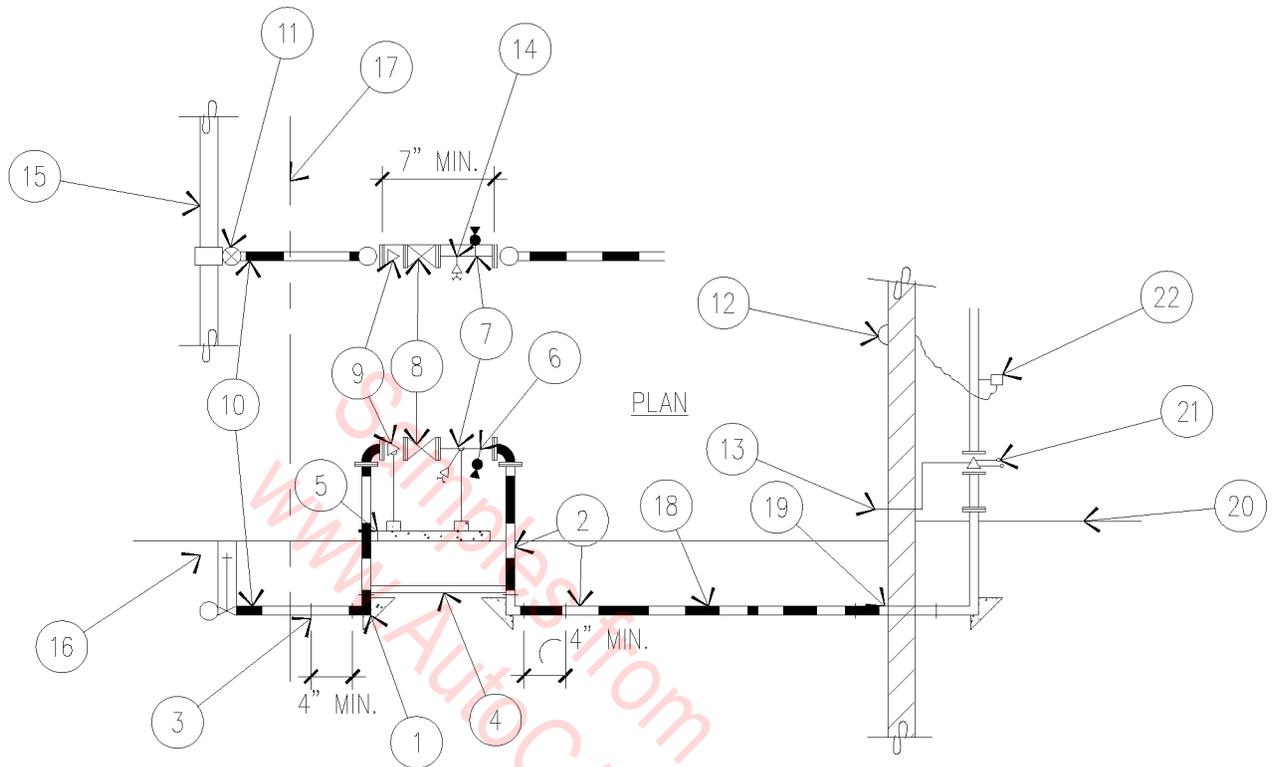
NOTE: HOT DIP GALVANIZE AFTER FABRICATION.

CURB OPENING INLET FACE PLATE

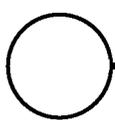


6" = 1'-0"

02A-1050



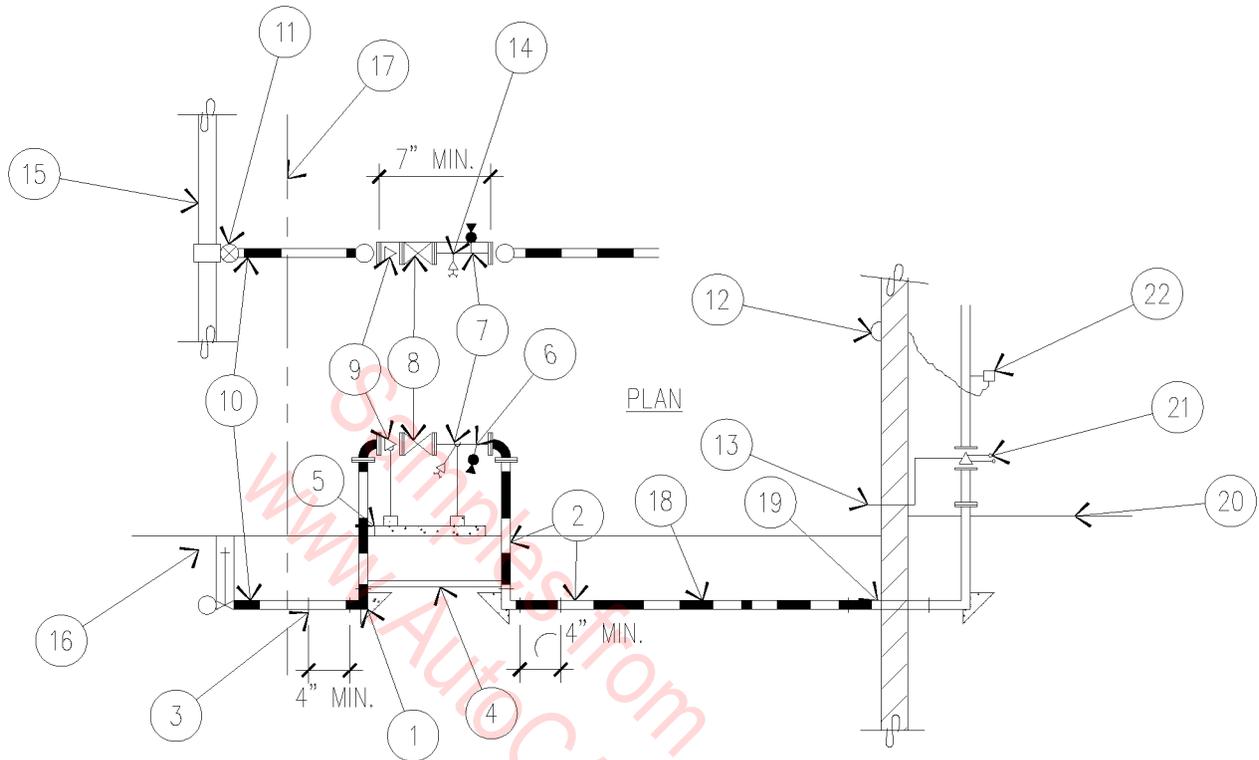
1. 90° ELBOW (FLANGED DIP 3" THROUGH 10" OR TYPE "K" COPPER THROUGH 2 1/2").
2. PIPE SPOOL (FLANGED DIP 3" THROUGH 10" OR TYPE "K" THROUGH 2 1/2").
3. FLANGED ADAPTER (WHEN REQUIRED).
4. 3" X 3" X 1/4" STEEL ANGLE (FOR 4" OR LARGER ASSEMBLY ONLY) BOLT TO FLANGE EACH END WITH ONE BOLT, COAT WITH COAL TAR EPOXY (16 MLS).
5. CONCRETE SUPPORT AND PAD (4" AND LARGER).
6. 1/2 BALL VALVE AND PLUG.
7. SPOOL PIECE WITH FDC.
8. OS&Y OR BUTTERFLY.
9. SWING CHECK.
10. "K" COPPER (2" - 2 1/2"), DIP (3" - 10").
11. 3" - 10" STAINLESS STEEL TAPPING SLEEVE AND VALVE.
12. ELECTRIC BELL.
13. 2" MAIN DRAIN.
14. 2 1/2 X 2 1/2 X 4 FDC AND CHECK VALVE (SINGLE 2 1/2 ON 2 1/2" OR SMALLER SYSTEM).
15. TOWN WATER MAIN.
16. ROAD BOX.
17. PROPERTY LINE.
18. "L" COPPER (2" - 2 1/2") PVC OR DIP (3" - 10").
19. DIP.
20. FINISHED FLOOR.
21. READY RISER, CHECK VALVE, PRESSURE GAUGES.
22. FLOW SWITCH.



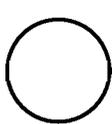
FIRELINE

N.T.S.

02A-1051



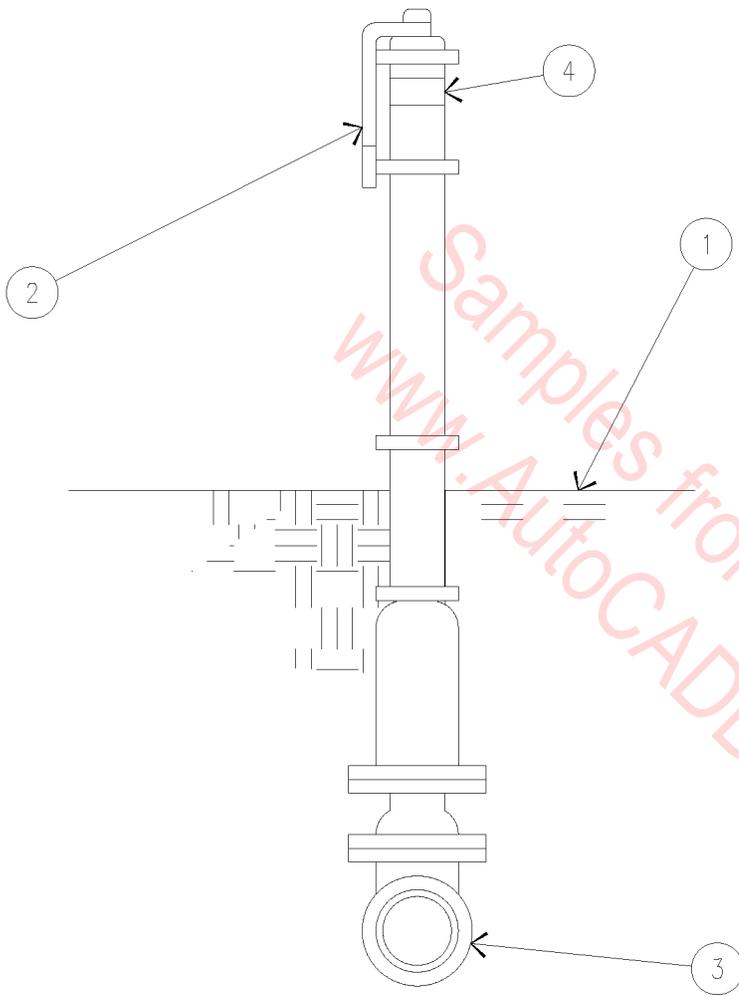
1. 90° ELBOW (FLANGED DIP 3" THROUGH 10" OR TYPE "K" COPPER THROUGH 2 1/2").
2. PIPE SPOOL (FLANGED DIP 3" THROUGH 10" OR TYPE "K" THROUGH 2 1/2").
3. FLANGED ADAPTER (WHEN REQUIRED).
4. 3" X 3" X 1/4" STEEL ANGLE (FOR 4" OR LARGER ASSEMBLY ONLY) BOLT TO FLANGE EACH END WITH ONE BOLT, COAT WITH COAL TAR EPOXY (16 MLS).
5. CONCRETE SUPPORT AND PAD (4" AND LARGER).
6. 1/2 BALL VALVE AND PLUG.
7. SPOOL PIECE WITH FDC.
8. OS&Y OR BUTTERFLY.
9. SWING CHECK.
10. "K" COPPER (2" - 2 1/2"), DIP (3" - 10").
11. 3" - 10" STAINLESS STEEL TAPPING SLEEVE AND VALVE.
12. ELECTRIC BELL.
13. 2" MAIN DRAIN.
14. 2 1/2 X 2 1/2 X 4 FDC AND CHECK VALVE (SINGLE 2 1/2 ON 2 1/2" OR SMALLER SYSTEM).
15. TOWN WATER MAIN.
16. ROAD BOX.
17. PROPERTY LINE.
18. "L" COPPER (2" - 2 1/2") PVC OR DIP (3" - 10").
19. DIP.
20. FINISHED FLOOR.
21. READY RISER, CHECK VALVE, PRESSURE GAUGES.
22. FLOW SWITCH.



FIRELINE

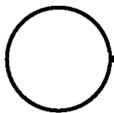
N.T.S.

02A-1051



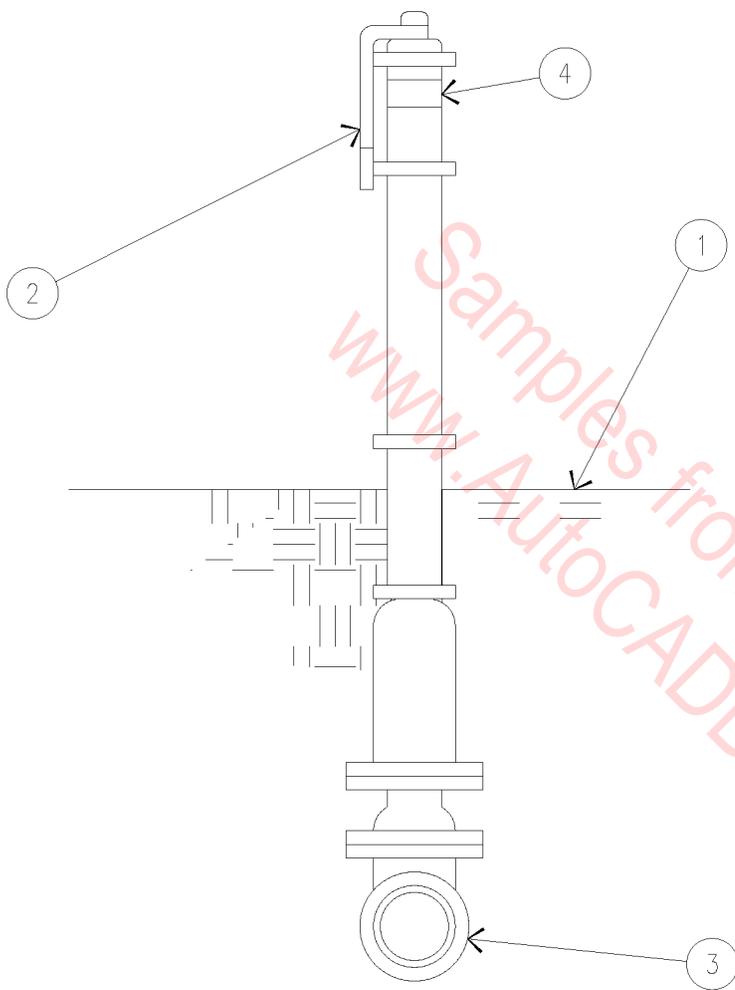
1. FINISH GRADE.
2. OPERATING WRENCH, PADLOCK, AND LOCKING STAPLE.
3. WATER LINE.
4. OPEN.

GATE VALVE WITH INDICATOR POST



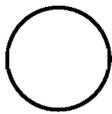
N.T.S.

02A-1052



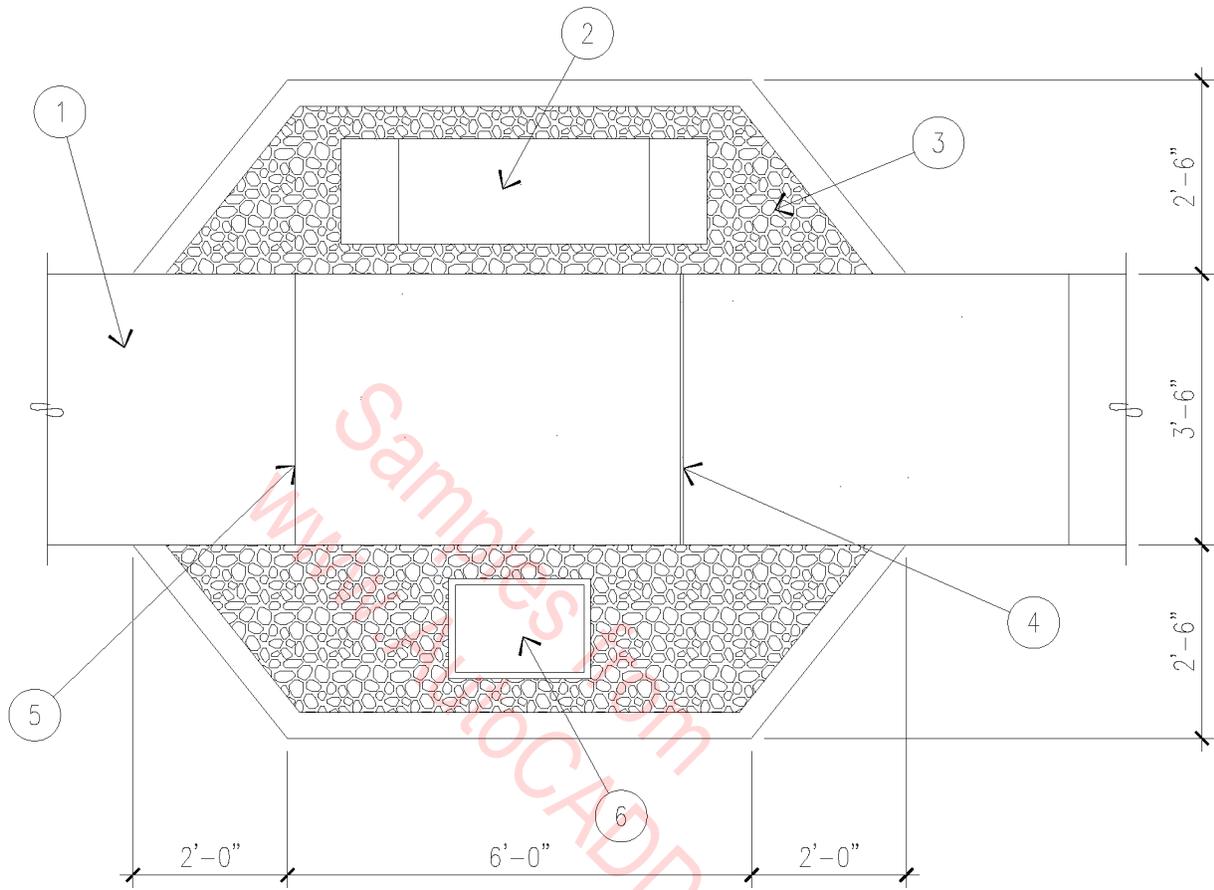
1. FINISH GRADE.
2. OPERATING WRENCH, PADLOCK, AND LOCKING STAPLE.
3. WATER LINE.
4. OPEN.

GATE VALVE WITH INDICATOR POST



N.T.S.

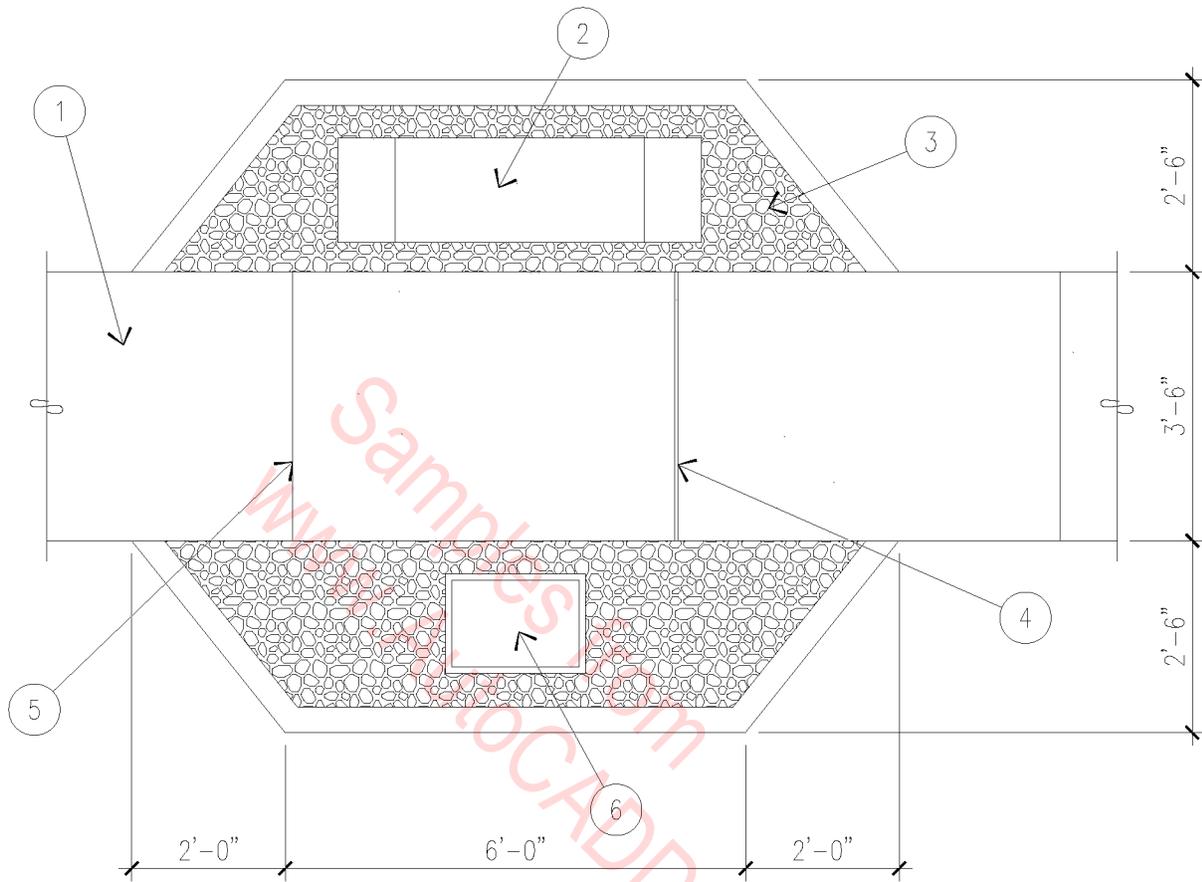
02A-1052



1. 4" CONCRETE WALK WITH MEDIUM ROCK SALT FINISH.
2. PRECAST CONCRETE BENCH.
3. DECOMPOSED GRANITE - SEE LANDSCAPE PLAN.
4. EXPANSION JOINT AT 25'-0" O.C.
5. CONTROL JOINT SET AT 5'-0" O.C.
6. CHARCOAL BAR-B-QUE.

○ BAR-B-QUE AREA
 3/8" = 1'-0"

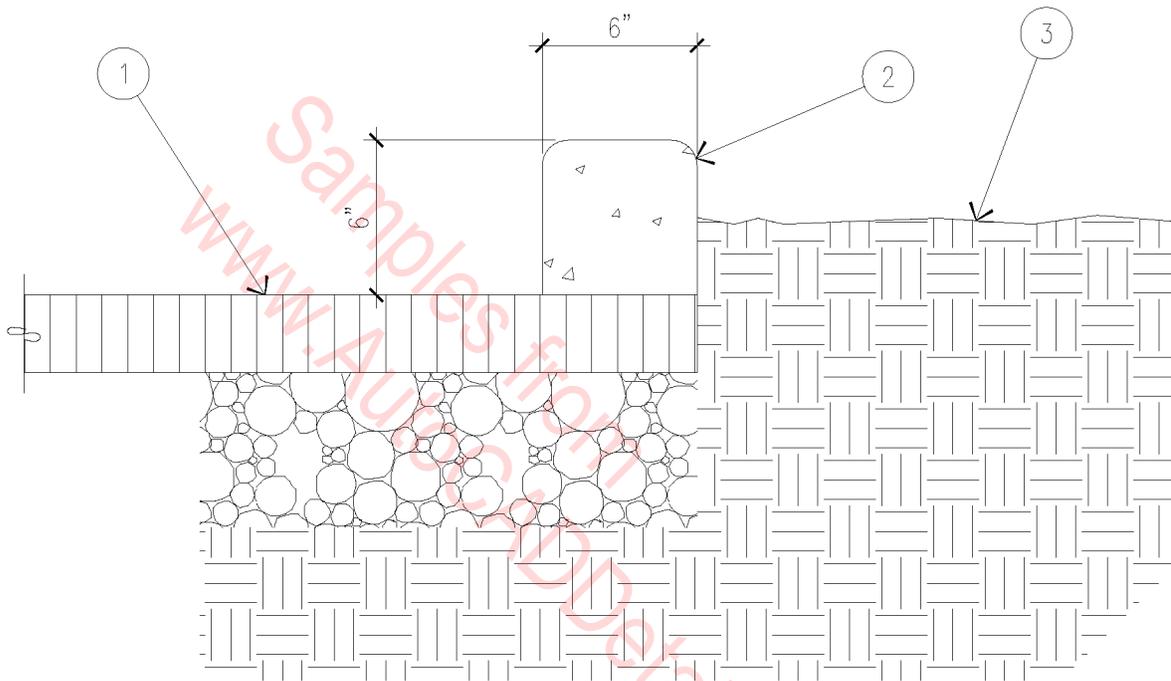
02A-1053



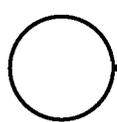
1. 4" CONCRETE WALK WITH MEDIUM ROCK SALT FINISH.
2. PRECAST CONCRETE BENCH.
3. DECOMPOSED GRANITE - SEE LANDSCAPE PLAN.
4. EXPANSION JOINT AT 25'-0" O.C.
5. CONTROL JOINT SET AT 5'-0" O.C.
6. CHARCOAL BAR-B-QUE.

○ BAR-B-QUE AREA
 3/8" = 1'-0"

02A-1053



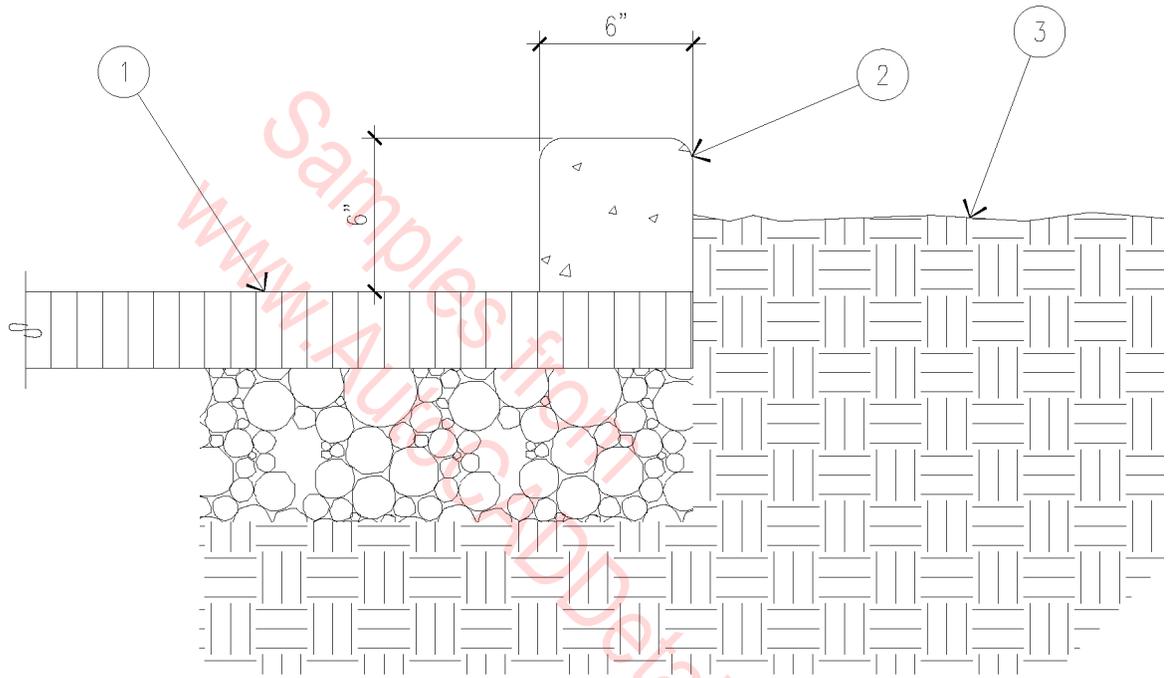
1. ASPHALT PAVEMENT ON BASE COURSE.
2. 6" EXTRUDED CURB ON ASPHALT.
3. FINISHED GRADE.



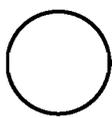
EXTRUDED CURB

1 1/2" = 1'-0"

02A-1054



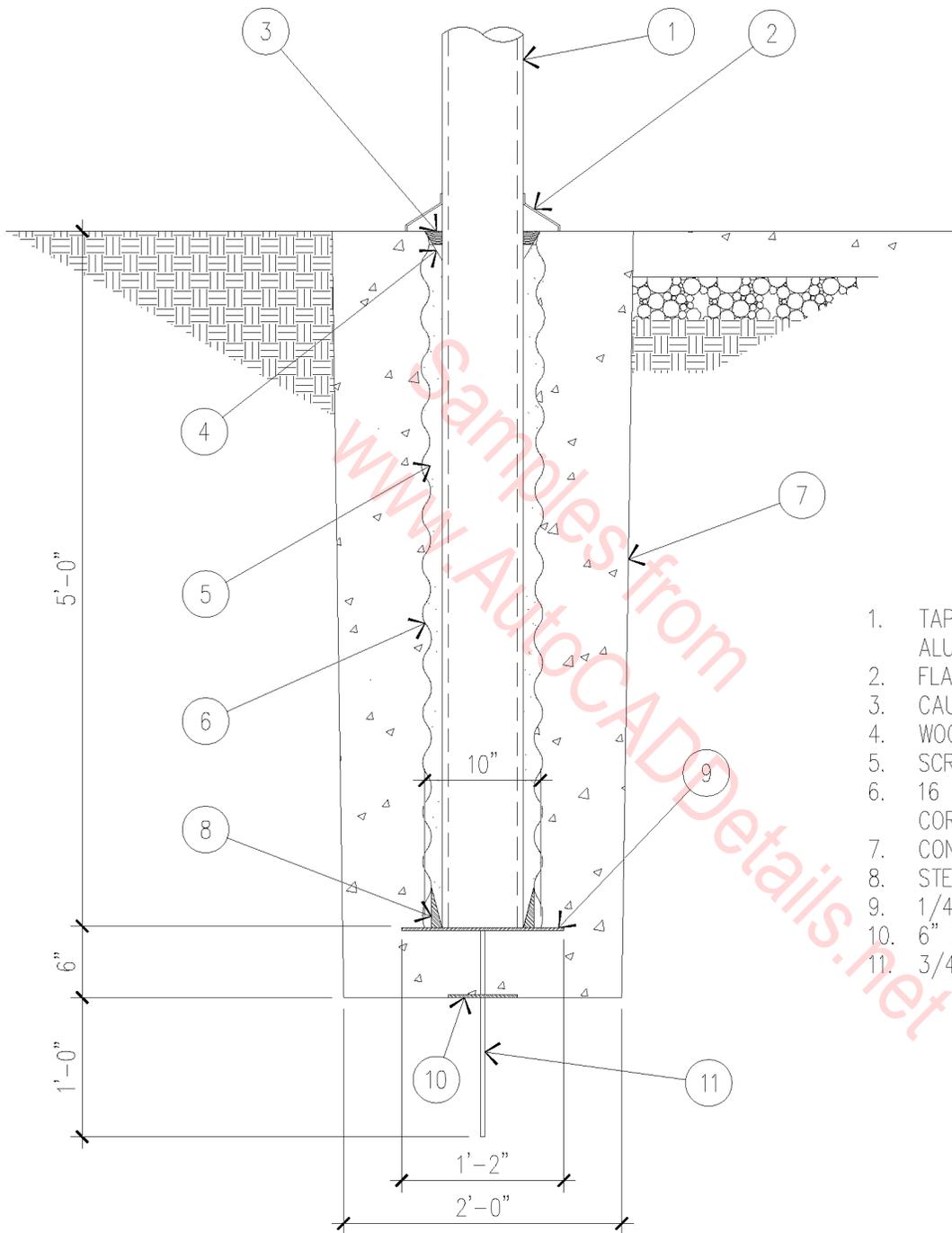
1. ASPHALT PAVEMENT ON BASE COURSE.
2. 6" EXTRUDED CURB ON ASPHALT.
3. FINISHED GRADE.



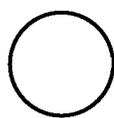
EXTRUDED CURB

1 1/2" = 1'-0"

02A-1054



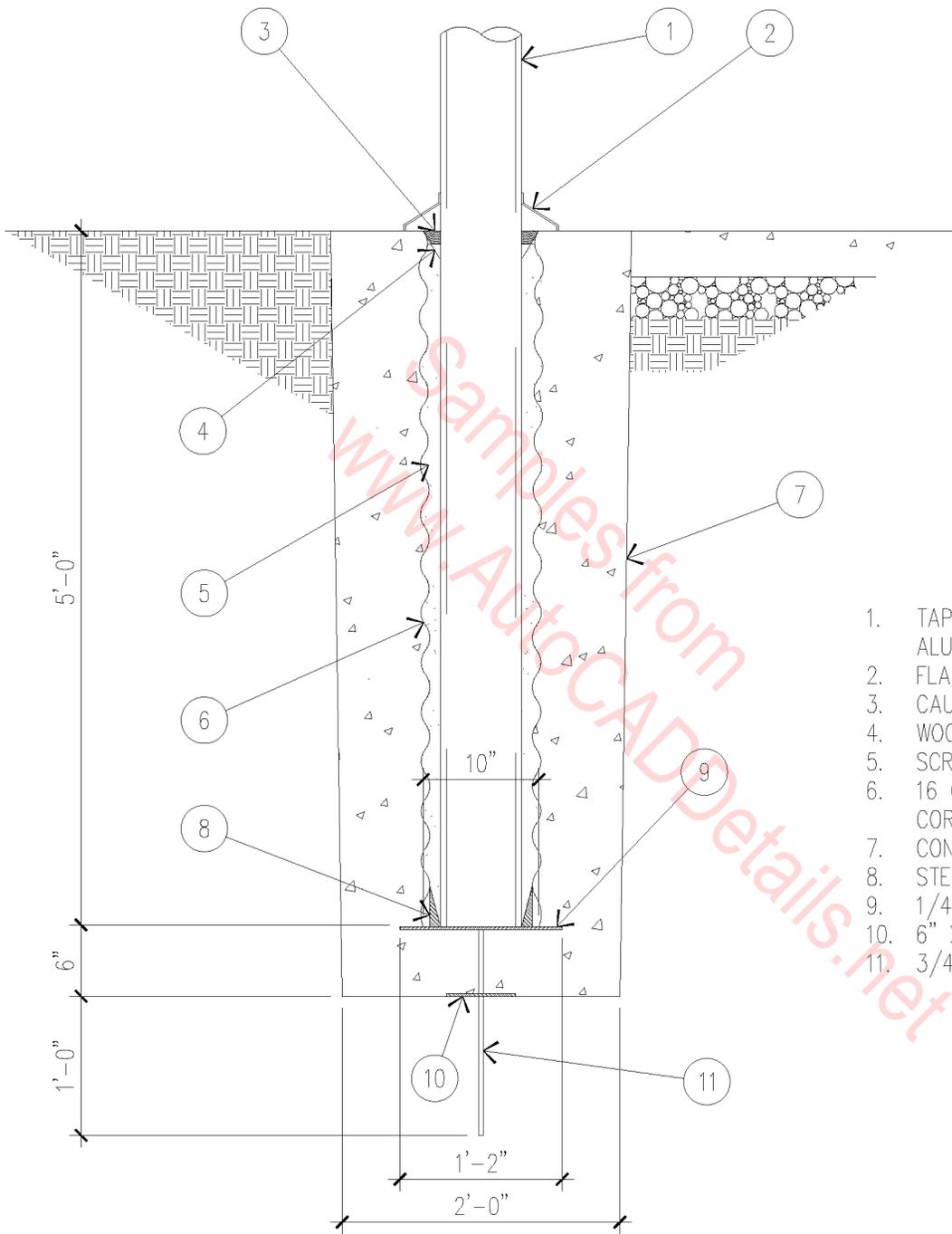
1. TAPERED CONE BRONZE ANODIZED ALUMINUM FLAGPOLE.
2. FLASHING COLLAR.
3. CAULKING COMPOUND.
4. WOOD WEDGES.
5. SCREENED SAND.
6. 16 GAUGE GALVANIZED CORRUGATED SLEEVE.
7. CONCRETE FOOTING.
8. STEEL CENTERING WEDGES.
9. 1/4" STEEL PLATE.
10. 6" X 6" X 1/4" STEEL PLATE.
11. 3/4" Ø LIGHTNING ARRESTOR SPIKE.



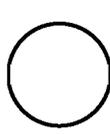
FLAGPOLE BASE

3/4" = 1'-0"

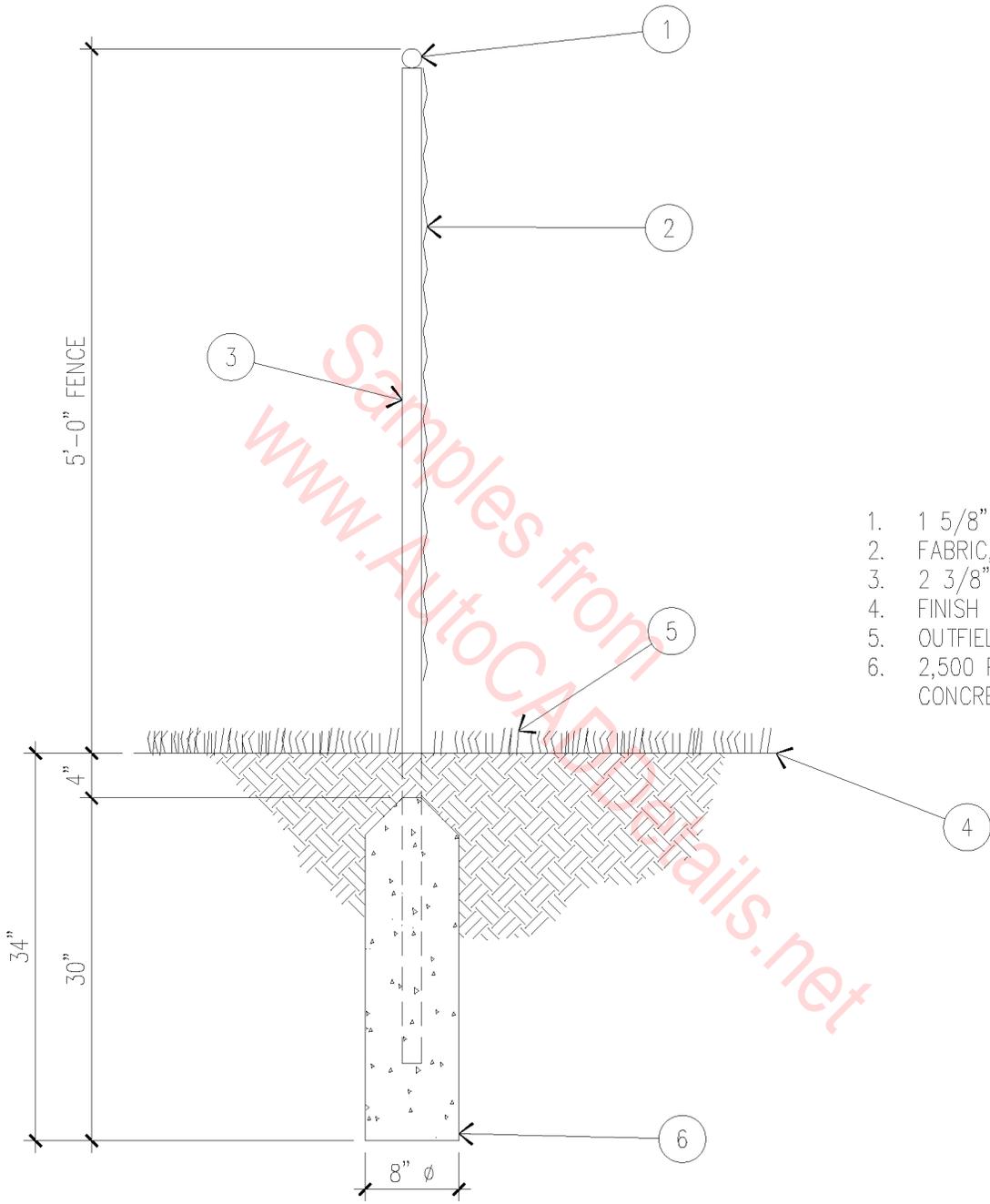
02A-1055



1. TAPERED CONE BRONZE ANODIZED ALUMINUM FLAGPOLE.
2. FLASHING COLLAR.
3. CAULKING COMPOUND.
4. WOOD WEDGES.
5. SCREENED SAND.
6. 16 GAUGE GALVANIZED CORRUGATED SLEEVE.
7. CONCRETE FOOTING.
8. STEEL CENTERING WEDGES.
9. 1/4" STEEL PLATE.
10. 6" X 6" X 1/4" STEEL PLATE.
11. 3/4" Ø LIGHTNING ARRESTOR SPIKE.


FLAGPOLE BASE
 3/4" = 1'-0"

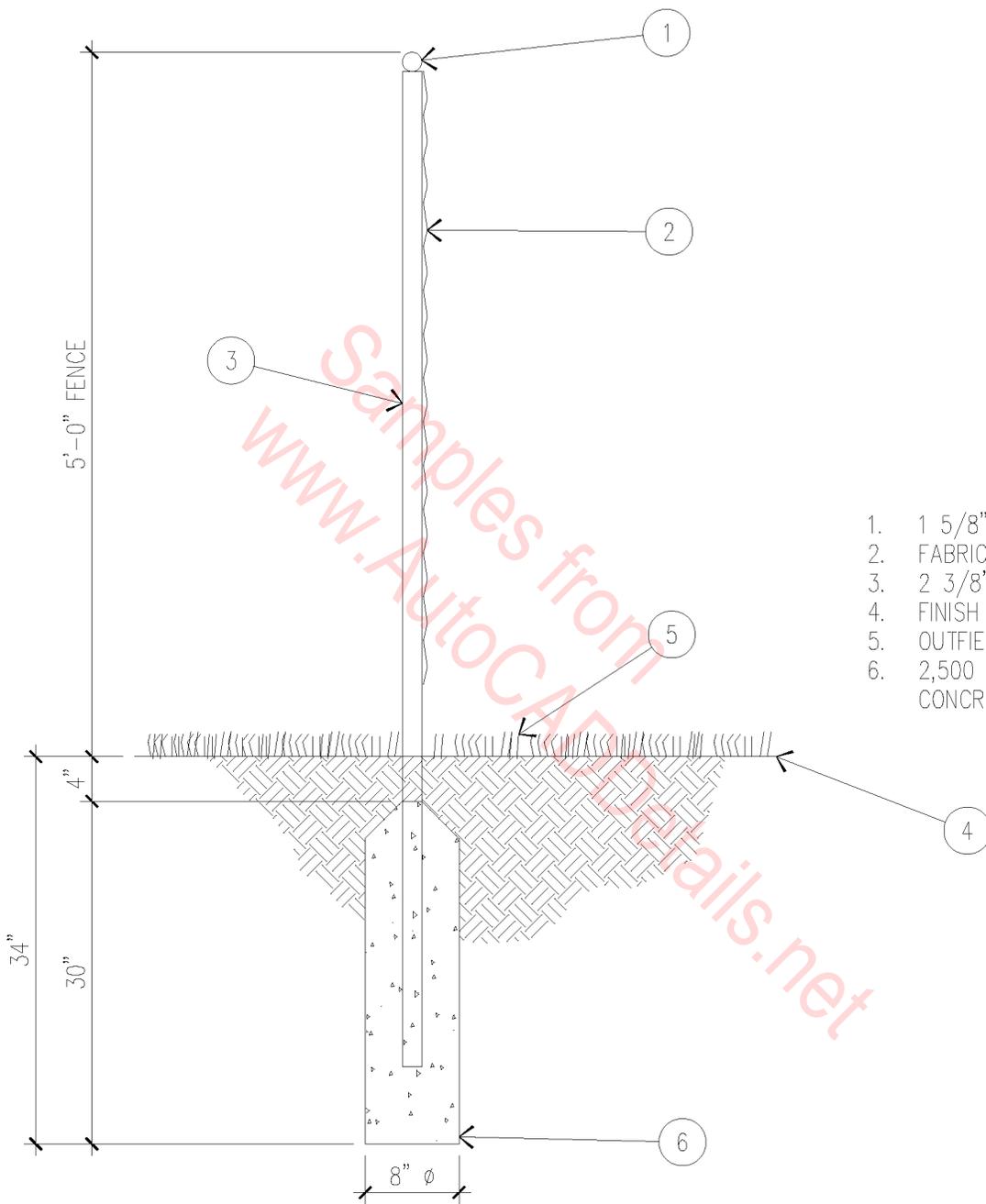
02A-1055



1. 1 5/8" ϕ TOP RAIL.
2. FABRIC, #9 GAUGE 2" WIRE.
3. 2 3/8" ϕ LINE POSTS.
4. FINISH GRADE.
5. OUTFIELD GRASS.
6. 2,500 PSI CLASS 'B' CONCRETE FOOTING.

OUTFIELD FENCE
 3/4" = 1'-0"

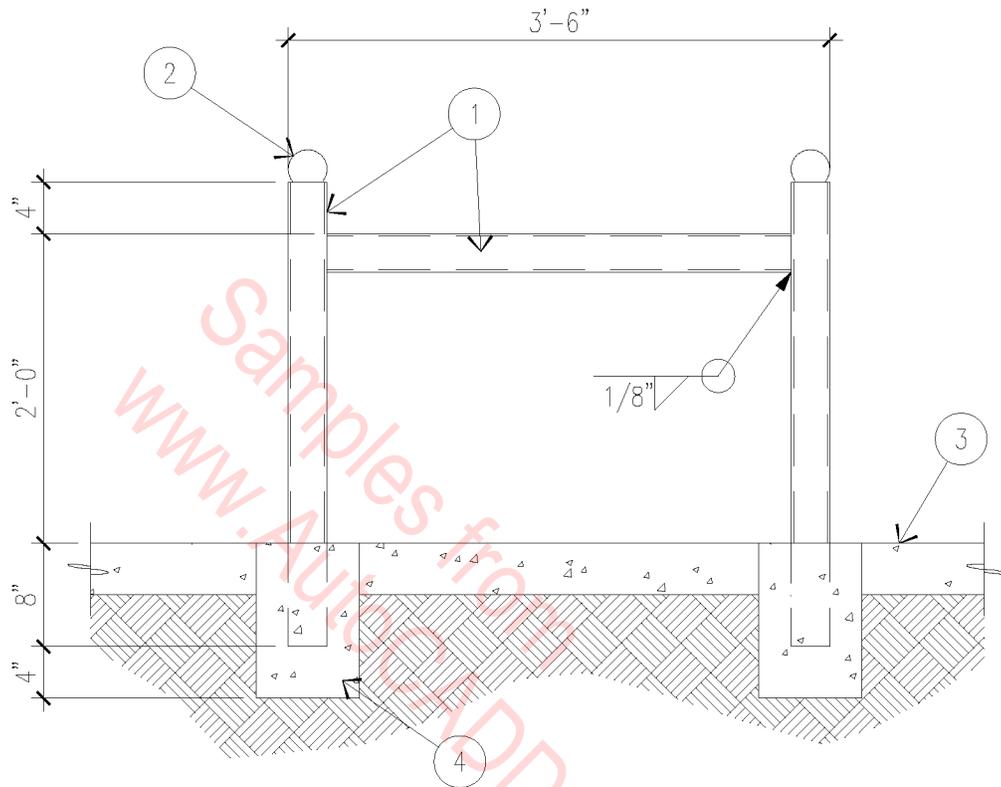
02A-1056



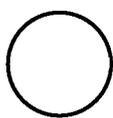
1. 1 5/8" ϕ TOP RAIL.
2. FABRIC, #9 GAUGE 2" WIRE.
3. 2 3/8" ϕ LINE POSTS.
4. FINISH GRADE.
5. OUTFIELD GRASS.
6. 2,500 PSI CLASS 'B' CONCRETE FOOTING.

○ OUTFIELD FENCE
 3/4" = 1'-0"

02A-1056



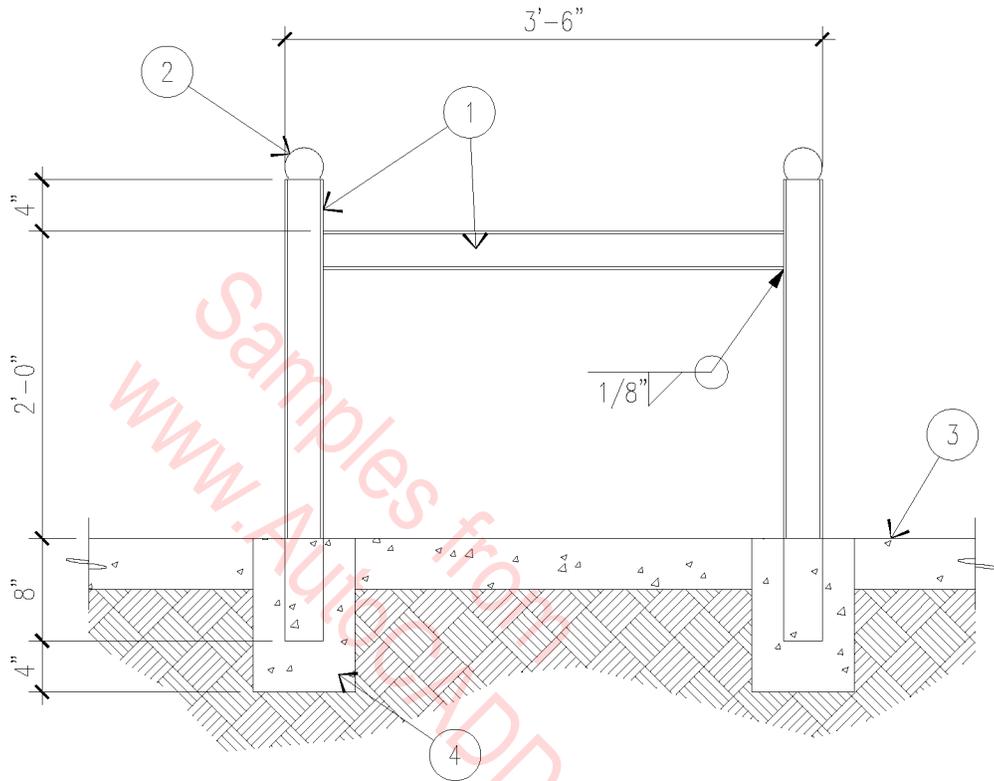
1. 3" X 3" X 3/16" TUBE STEEL.
2. 3" Ø BALL CAP.
3. 4" CONCRETE SIDEWALK.
4. 8" Ø X 12" FOOTING.



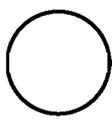
BIKE RACK

3/4" = 1'-0"

02A-1057



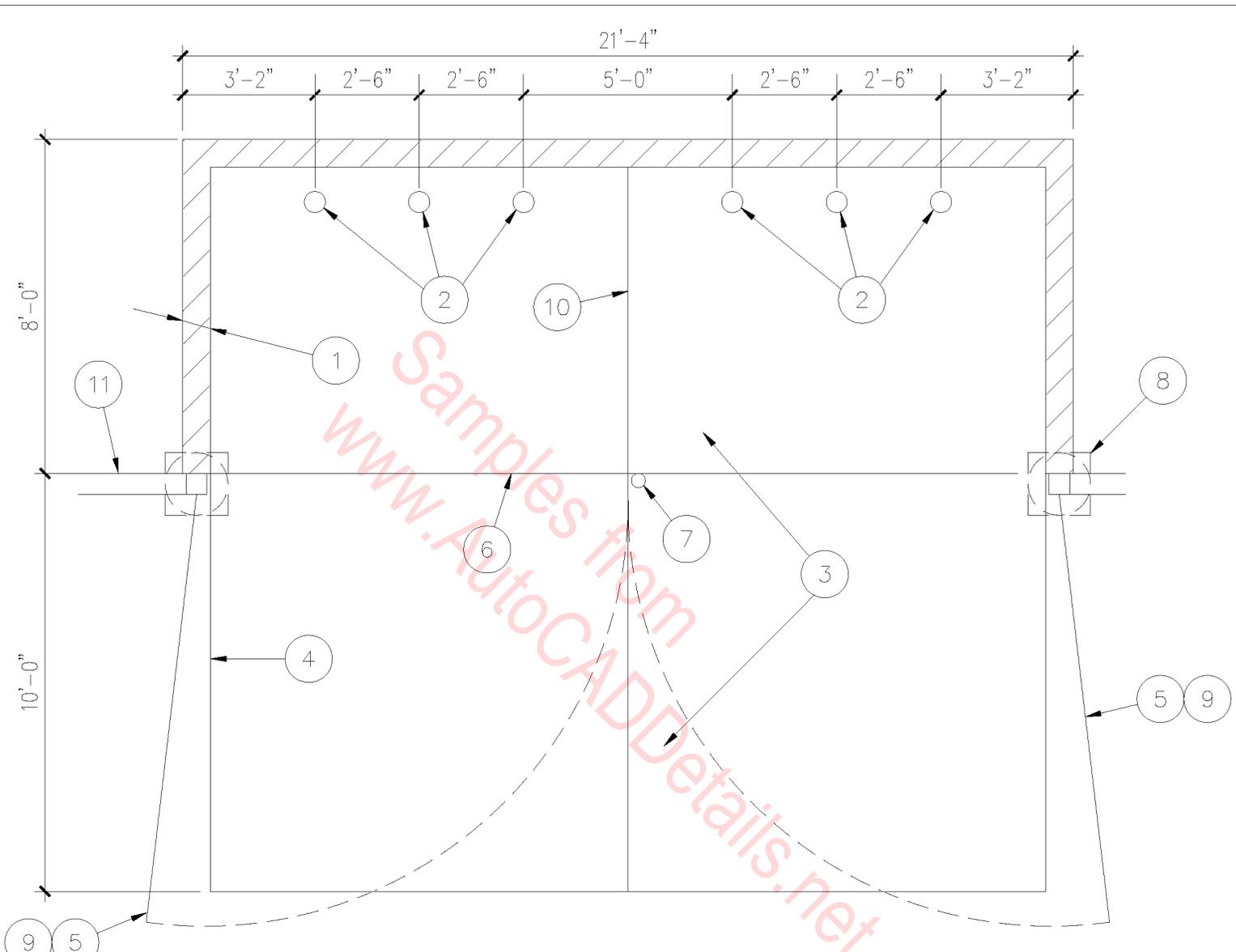
1. 3" X 3" X 3/16" TUBE STEEL.
2. 3" Ø BALL CAP.
3. 4" CONCRETE SIDEWALK.
4. 8" Ø X 12" FOOTING.



BIKE RACK

3/4" = 1'-0"

02A-1057

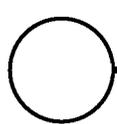


Samples from
www.AutoCADDetails.net

1. PAINTED CMU WALL.
2. 6" DIA. STEEL PIPE BOLLARD.
3. 5" CONCRETE SLAB W/ #3 REBARS @ 18" O.C. EACH WAY.
4. TURN DOWN AT PAVING.
5. ORNAMENTAL IRON GATE.
6. CONCRETE CONTROL JOINT.
7. 2" DIA. PIPE SLEEVE TO LOCK GATE IN CLOSED POSITION.

8. 16" SQUARE X 4'-3" DEEP CONCRETE FOOTING.
9. GATES TO SWING A MIN. 180 DEG.
10. CONCRETE EXPANSION JOINT.
11. CONCRETE CURB.

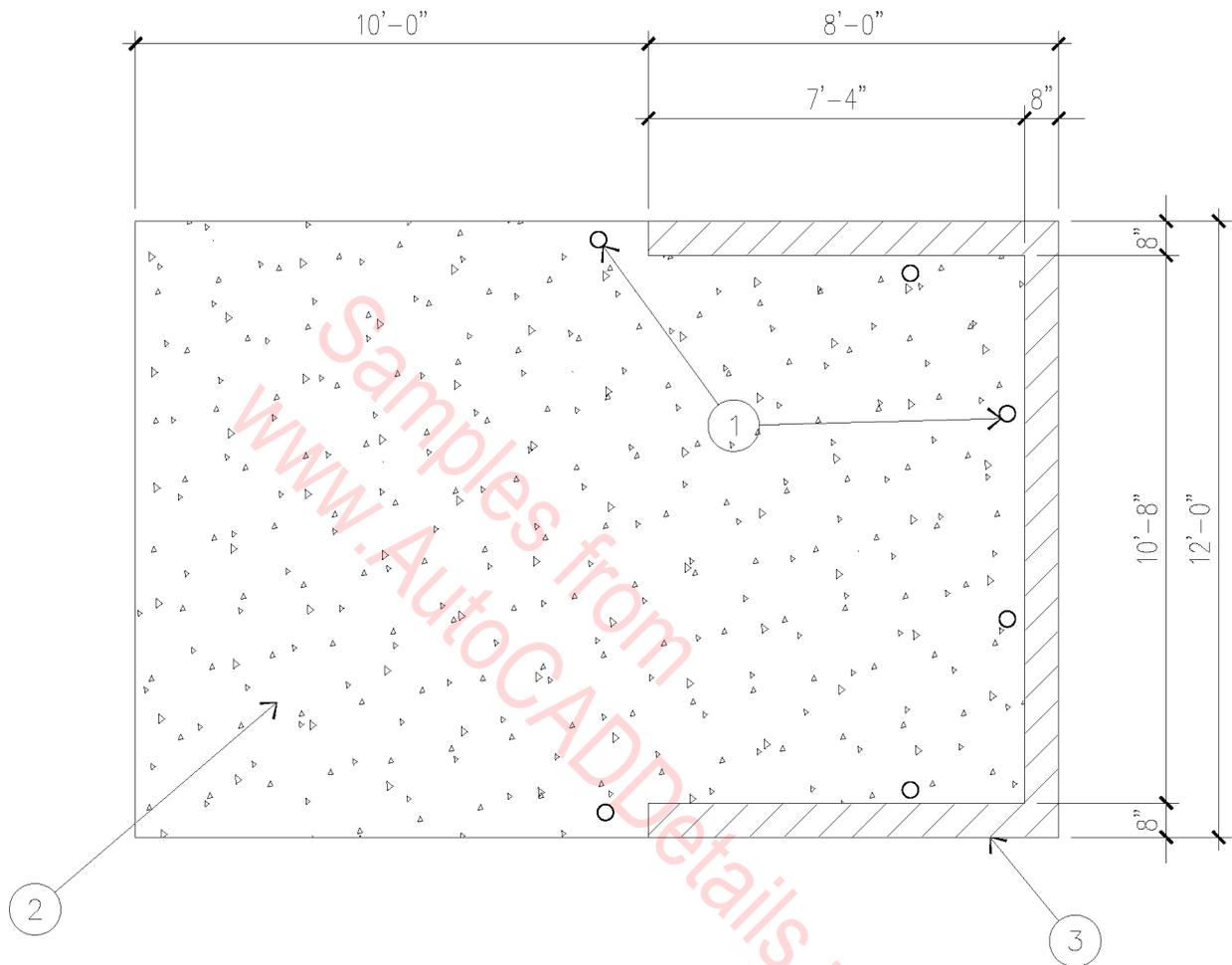
NOTE: PROVIDE A 2" DIA. PIPE SLEEVE TO LOCK GATE IN 180 DEG. OPEN POSITION.



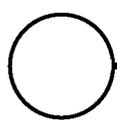
2-BIN TRASH ENCLOSURE

SCALE: 1/4" = 1'-0"

02A-6001



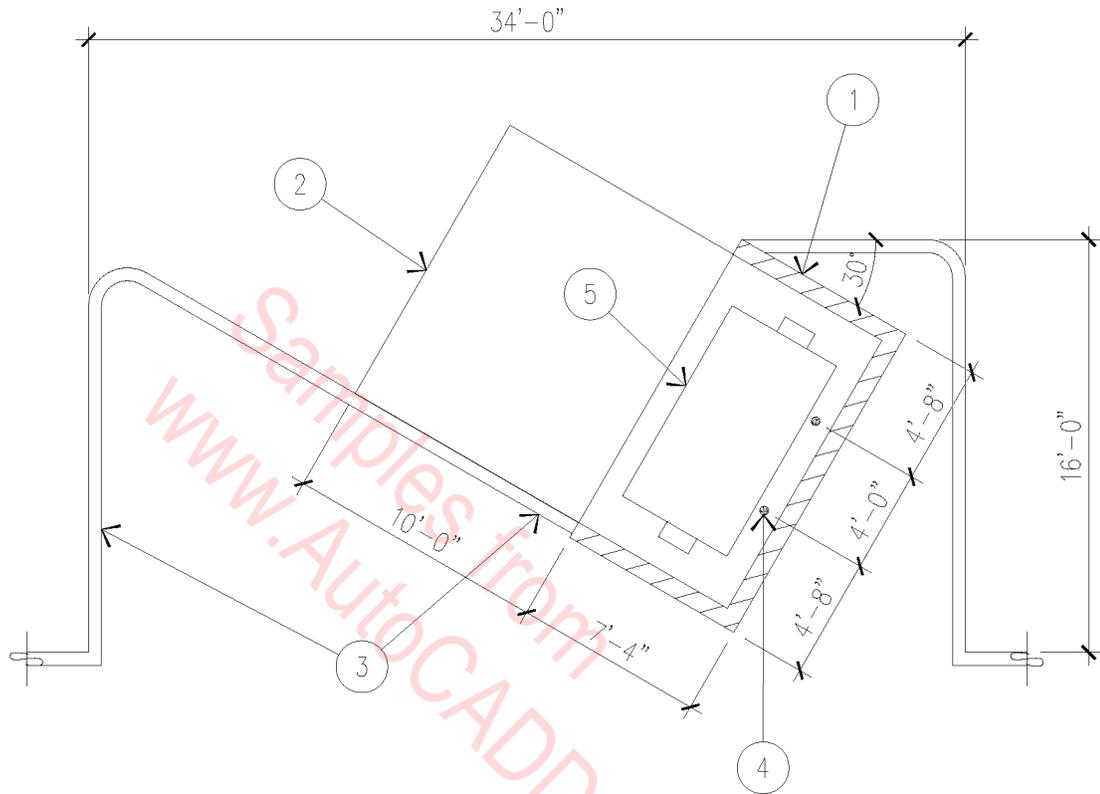
1. 4" ϕ X 3'-0" (ABOVE GRADE) PIPE BOLLARD SET IN 18" ϕ X 24" CONCRETE FOOTING WITH AN 18" EMBED.
2. 6" THICK CONCRETE APRON (300 PSI).
3. 8" MASONRY FENCE TO 6'-0" ABOVE FINISHED GRADE.



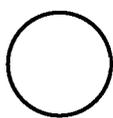
DUMPSTER ENCLOSURE

1/4" = 1'-0"

02A-6002



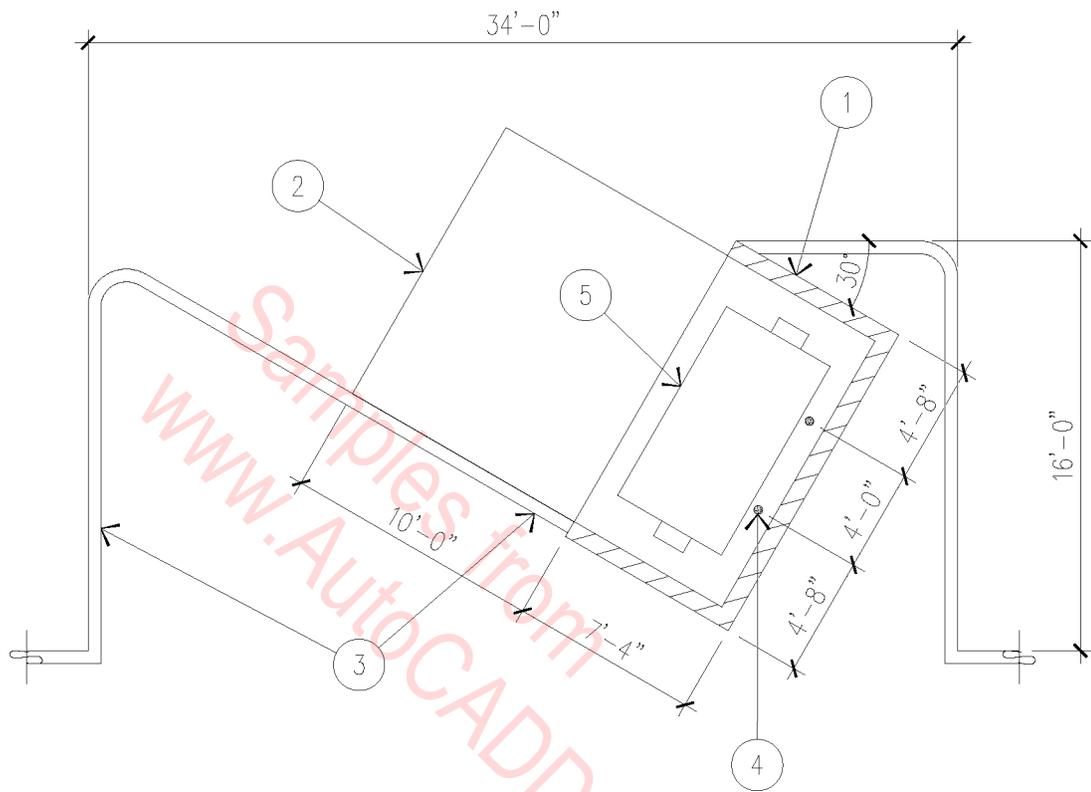
1. 6'-0" HIGH C.M.U. WALL WITH STUCCO FINISH.
2. 6" THICK CLASS 'A' CONCRETE PAD.
3. 6" EXTRUDED CONCRETE CURB.
4. 4" ϕ CONCRETE FILLED STEEL POST, 5'-0" HIGH, SET IN 8" CYLINDER OF CLASS 'C' CONCRETE, 2'-0" DEEP.
5. 6 CUBIC YARD DUMPSTER.



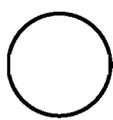
DUMPSTER ENCLOSURE

1/8" = 1'-0"

02A-6003



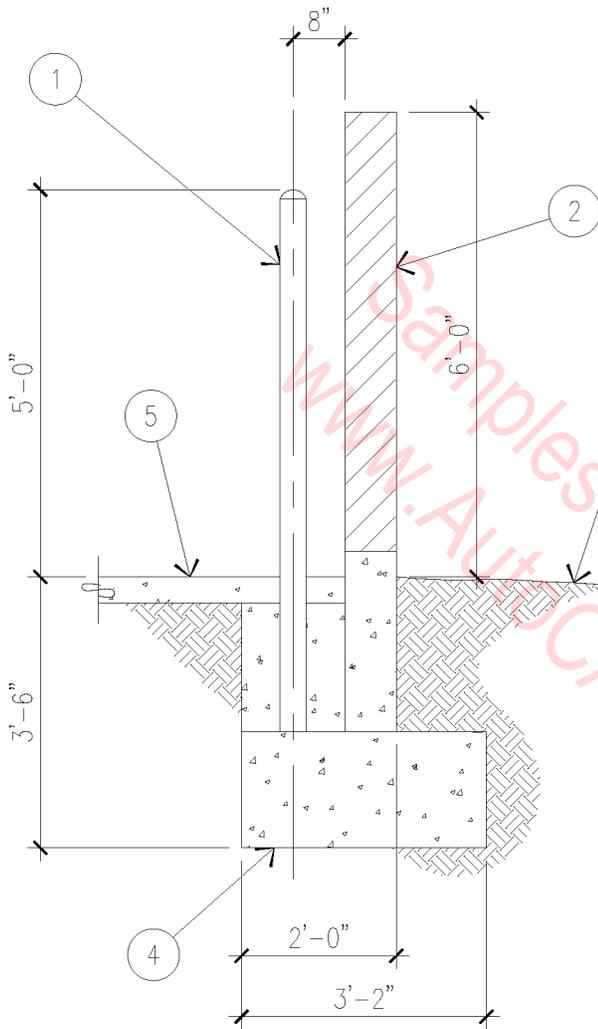
1. 6'-0" HIGH C.M.U. WALL WITH STUCCO FINISH.
2. 6" THICK CLASS 'A' CONCRETE PAD.
3. 6" EXTRUDED CONCRETE CURB.
4. 4" Ø CONCRETE FILLED STEEL POST, 5'-0" HIGH, SET IN 8" CYLINDER OF CLASS 'C' CONCRETE, 2'-0" DEEP.
5. 6 CUBIC YARD DUMPSTER.



DUMPSTER ENCLOSURE

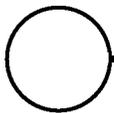
1/8" = 1'-0"

02A-6003



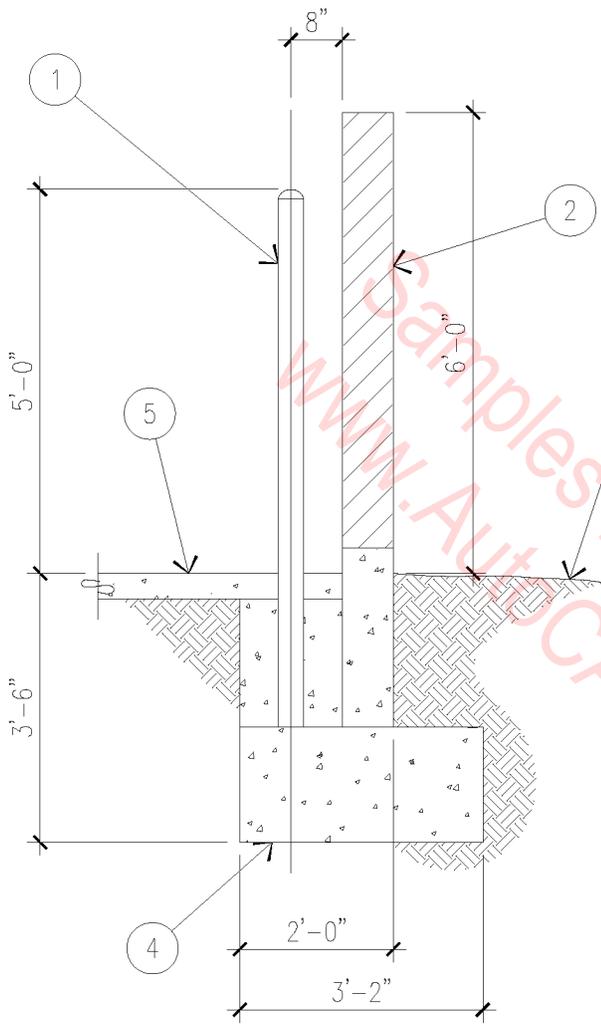
1. 4" ϕ CONCRETE FILLED STEEL POST, 5'-0" HIGH, SET IN 16" ϕ CYLINDER OF CLASS 'C' CONCRETE, 24" DEEP.
2. 8" C.M.U. ENCLOSURE, 6'-0" HIGH, STUCCO FINISH TO MATCH ADJACENT STRUCTURES.
3. FINISH GRADE.
4. FOOTING.
5. 4" CONCRETE SLAB ON GRADE.

TRASH ENCLOSURE WITH BOLLARD



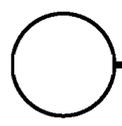
$3/8'' = 1'-0''$

02A-6004



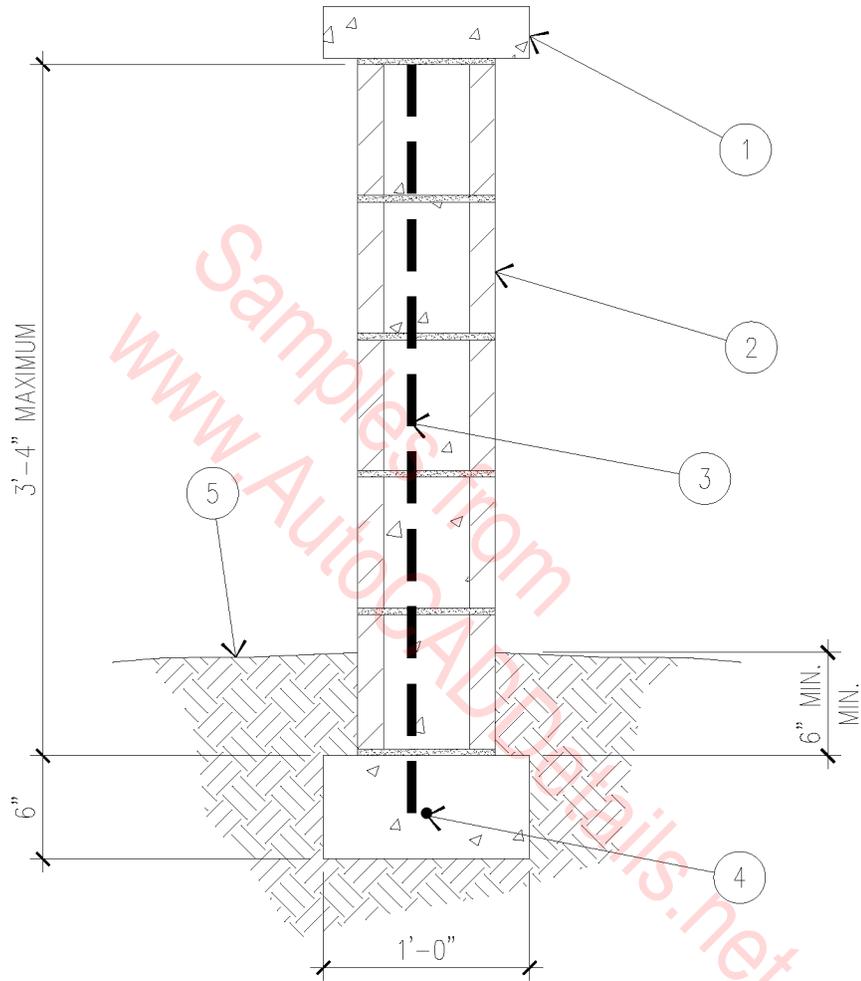
1. 4" ϕ CONCRETE FILLED STEEL POST, 5'-0" HIGH, SET IN 16" ϕ CYLINDER OF CLASS 'C' CONCRETE, 24" DEEP.
2. 8" C.M.U. ENCLOSURE, 6'-0" HIGH, STUCCO FINISH TO MATCH ADJACENT STRUCTURES.
3. FINISH GRADE.
4. FOOTING.
5. 4" CONCRETE SLAB ON GRADE.

TRASH ENCLOSURE WITH BOLLARD

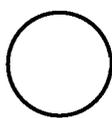


3/8" = 1'-0"

02A-6004



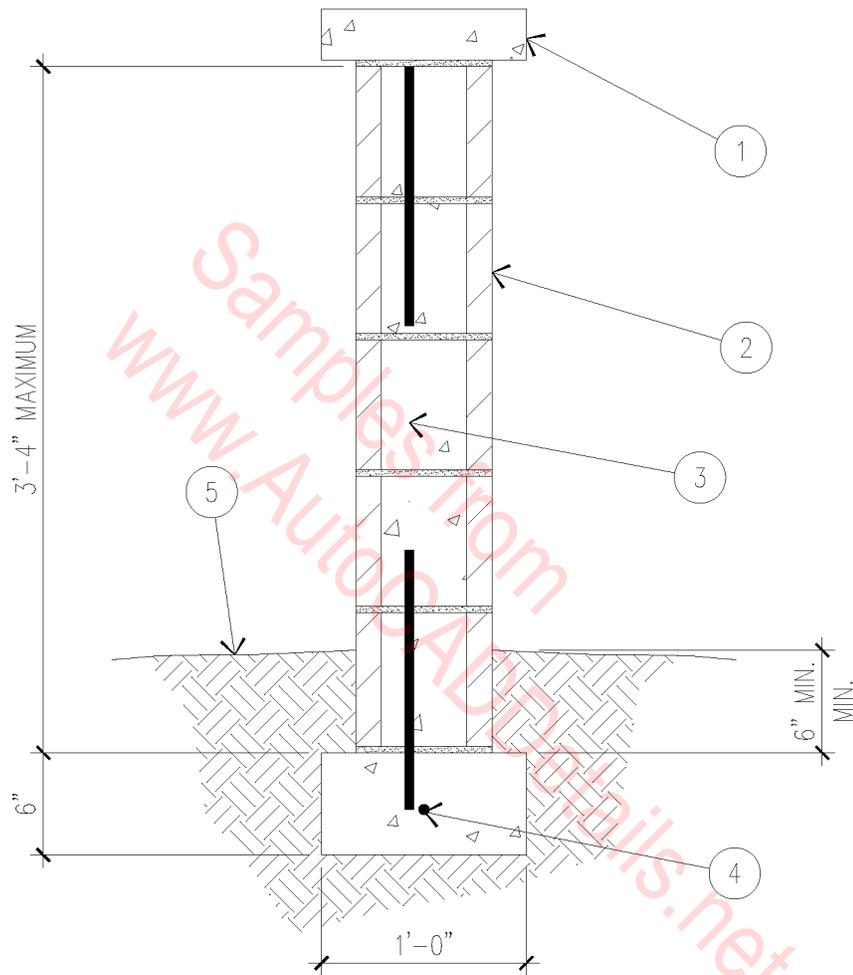
- | | |
|--|-------------------|
| 1. SOLID CAP BLOCK. | 4. #4 CONTINUOUS. |
| 2. 8" C.M.U. | 5. FINISH GRADE. |
| 3. #4 VERTICALS 4" FROM OPENINGS AND CORNERS AT 49" O.C. WITH 6" HOOK. | |



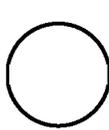
CMU FENCE

1" = 1'-0"

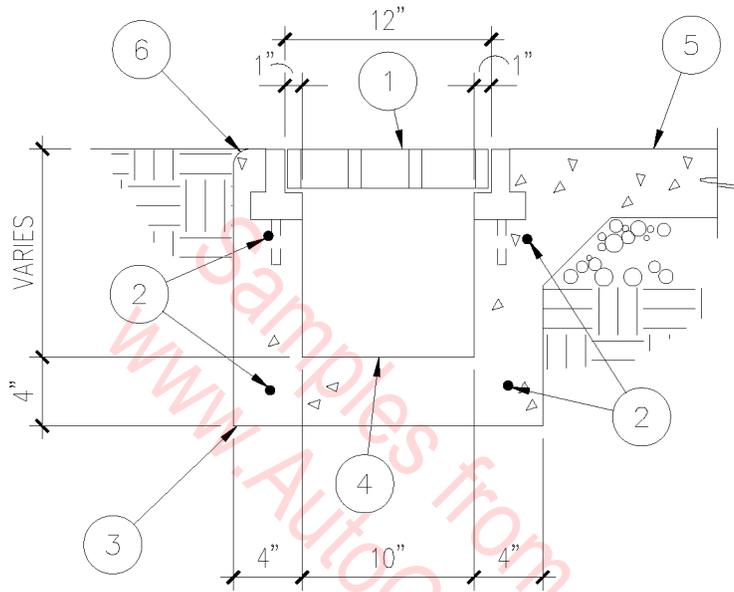
02A-6005



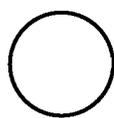
- | | |
|---|-------------------|
| 1. SOLID CAP BLOCK. | 4. #4 CONTINUOUS. |
| 2. 8" C.M.U. | 5. FINISH GRADE. |
| 3. #4 VERTICALS 4" FROM OPENINGS
AND CORNERS AT 49" O.C. WITH 6" HOOK. | |

 CMU FENCE
 1" = 1'-0"

02A-6005



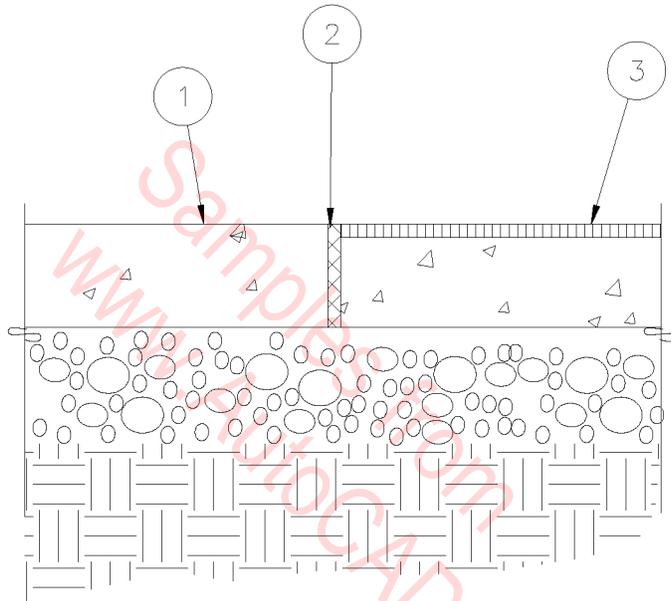
1. HEAVY DUTY GRATE & FRAME.
2. #4 REBARS CONTINUOUS TOP & BOTTOM.
3. C.I.P. CONCRETE TRENCH DRAIN.
4. CONSTRUCT END OF TRENCH DRAINS SIMILAR TO SIDE CONSTRUCTION.
5. CONCRETE SLAB ON SUBGRADE.
6. 1" RADIUS.



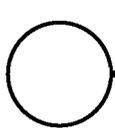
SIDEWALK TRENCH DRAIN

1" = 1'-0"

02A-4001



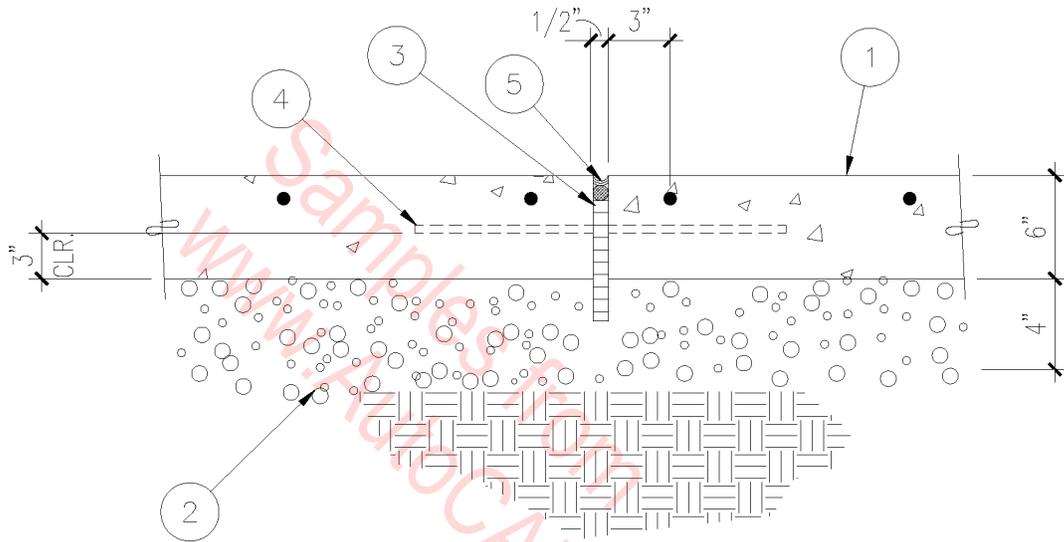
1. 4" CONCRETE ON 4" A.B.C.
2. 1/2" EXPANSION JOINT.
3. TILE ON 4" CONCRETE ON 4" A.B.C.



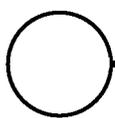
TILE ON CONCRETE

1 1/2" = 1'-0"

02A-4002



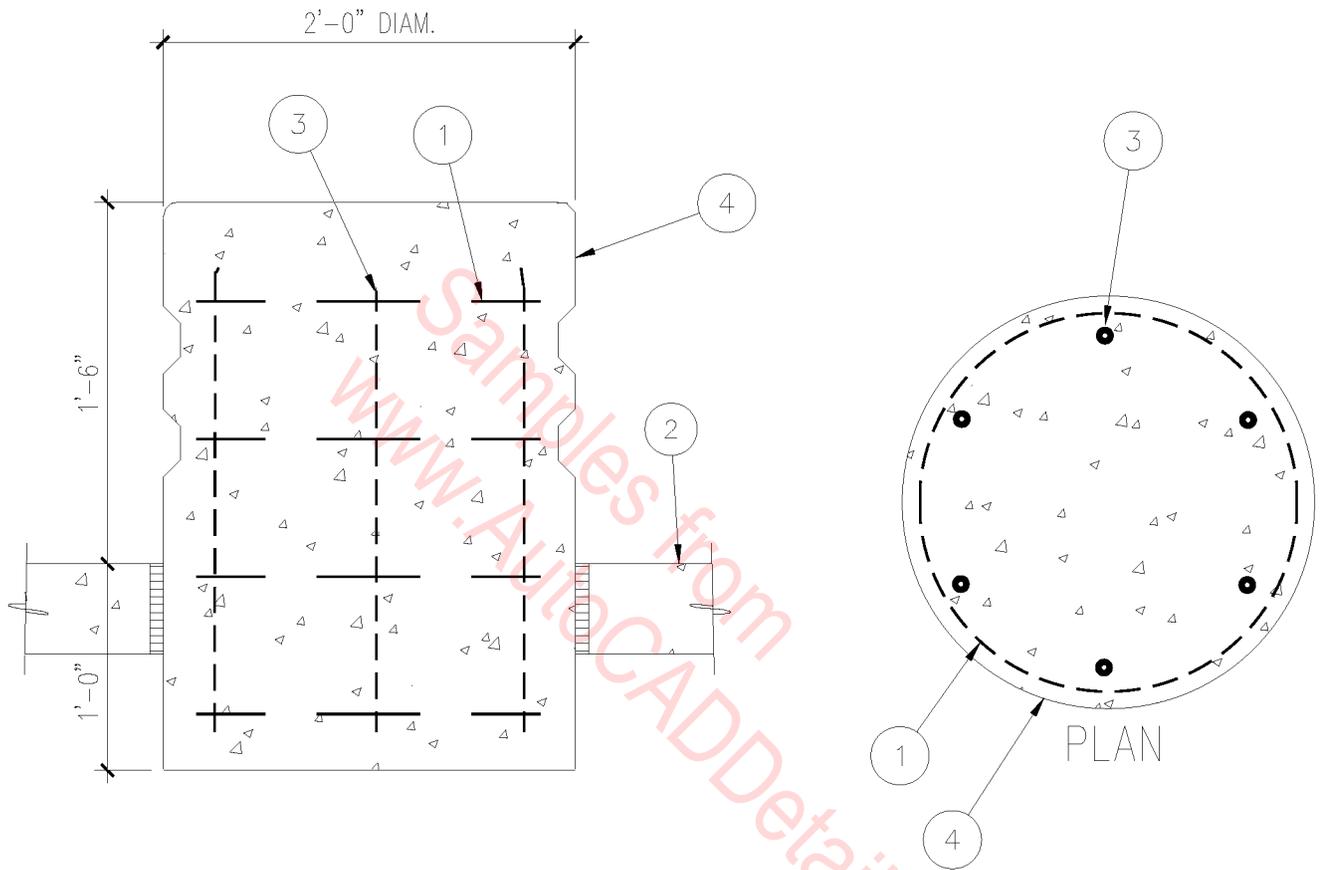
1. CONCRETE SLAB.
2. AGGREGATE BASE COURSE.
3. ASPHALTIC IMPREGNATED EXPANSION JOINT.
WITH BOND BREAKER, TAPE, BACKER ROD,
AND SEALANT.
4. #4 SMOOTH REBARS 2'-0" LONG @ 24" O.C.
(GREASE ONE END LIBERALLY).
5. BACKER ROD AND SEALANT.



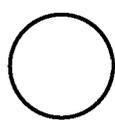
COLD JOINT WITH REINF.

1" = 1'-0"

02A-4003



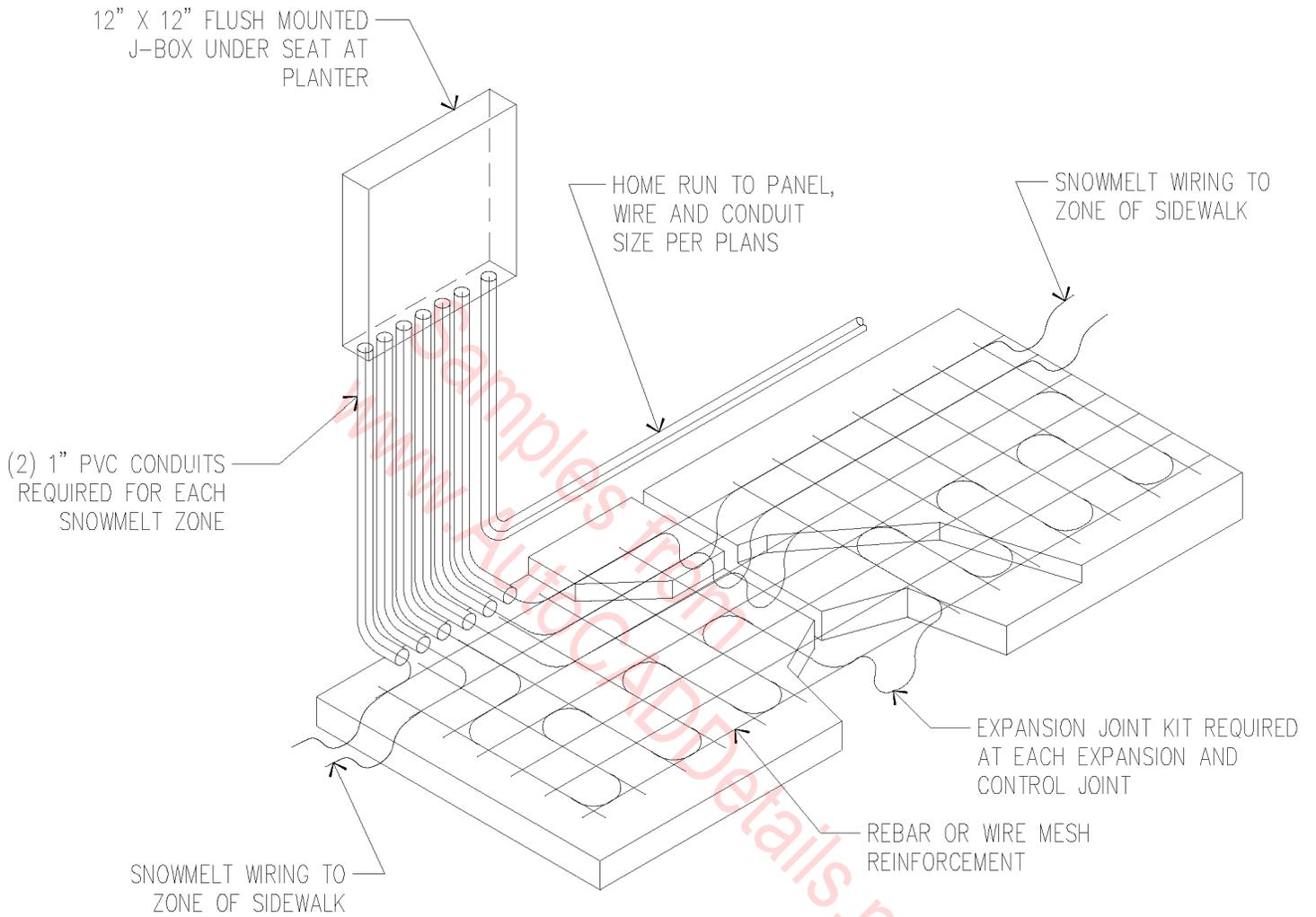
1. #2 TIES @ 8" O.C.
2. CONCRETE SLAB ON SUBGRADE.
3. (6) #4 REBARS.
4. SMOOTH FINISH.



CONCRETE SITE BENCH

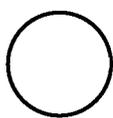
1" = 1'-0"

02A-4004



NOTES:

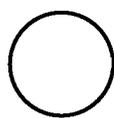
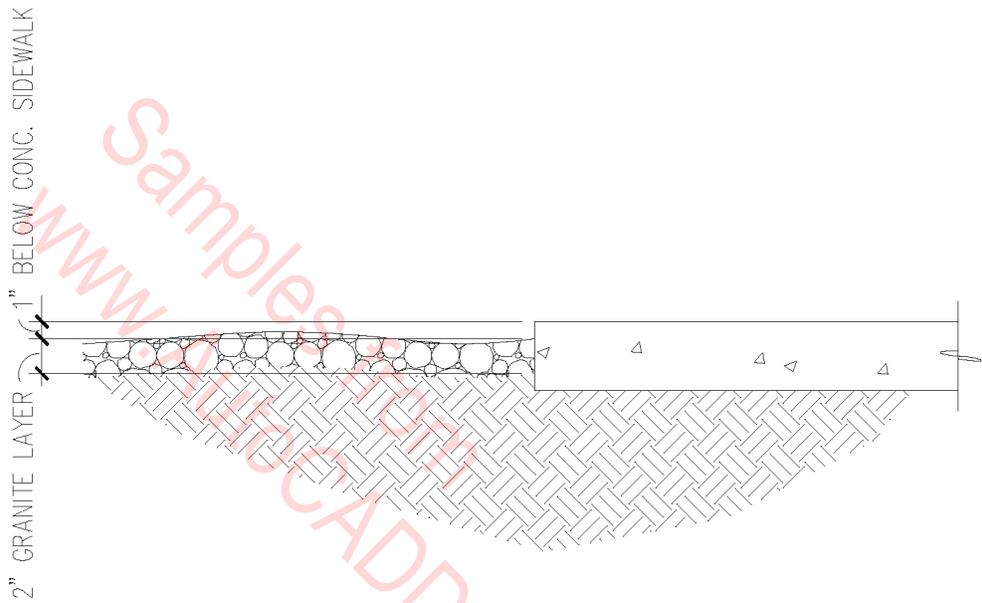
- A. INSTALL SNOWMELT 6" FROM EDGE AND ON 8" CENTERS.
- B. SECURE TO REBAR/REINFORCEMENT WIRE WITH PLASTIC TIES AT 18" CENTERS AND AT EACH MIDPOINT OF BEND.



SNOWMELT WIRING LAYOUT

N.T.S.

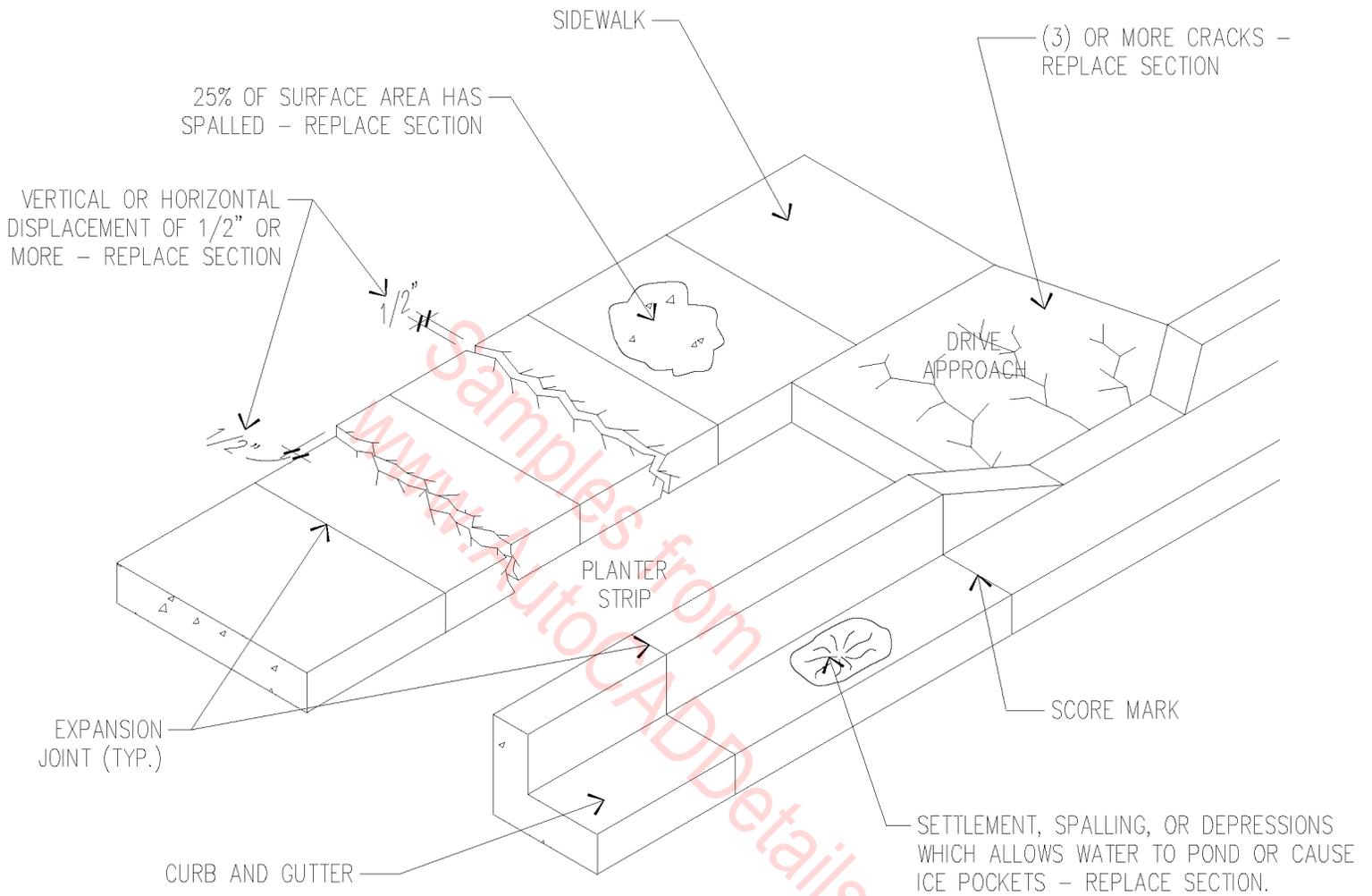
02A-4005



SIDEWALK DETAIL

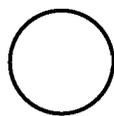
1" = 1'-0"

02A-4006



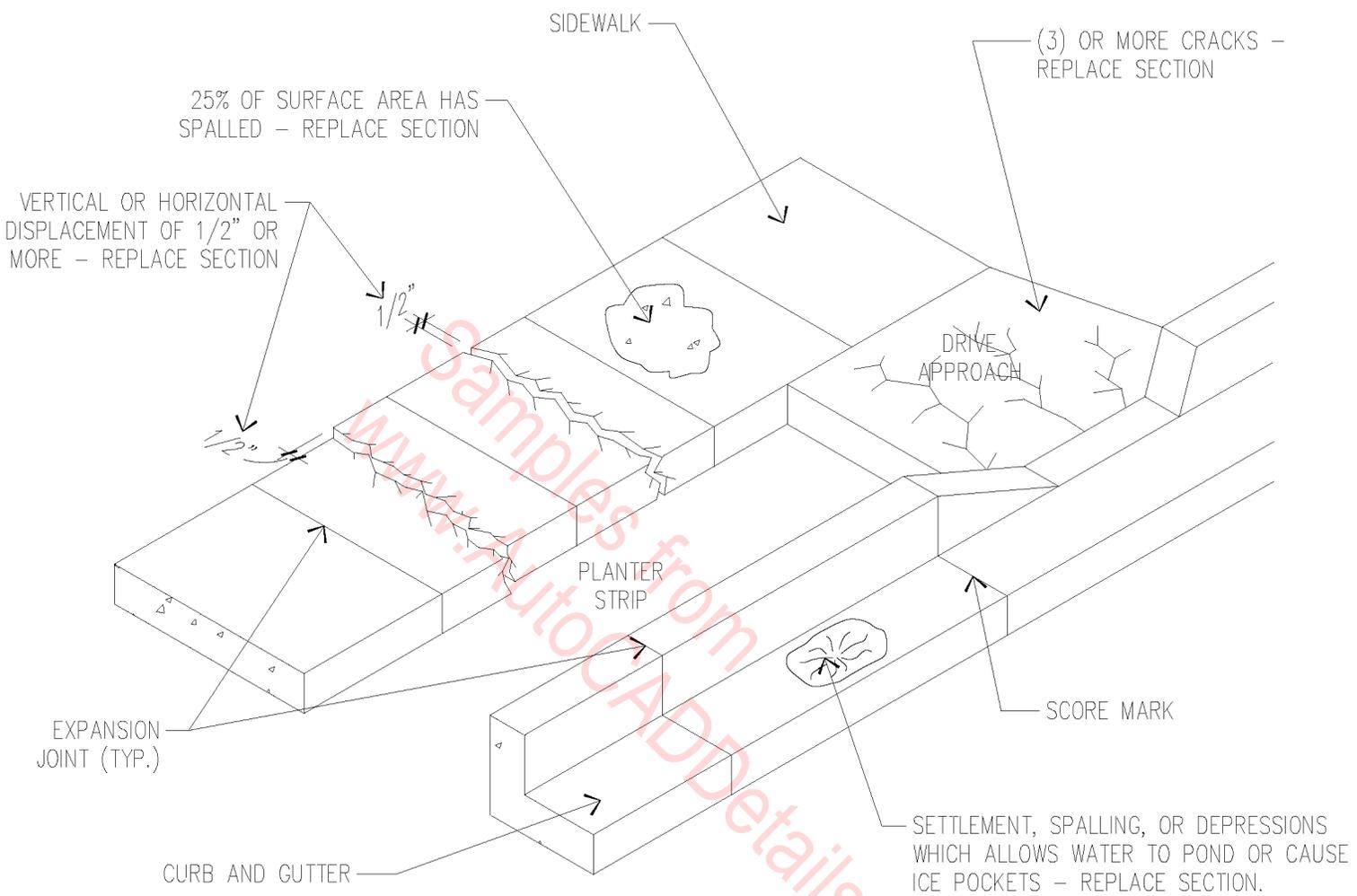
NOTE:
 REPLACEMENT IS REQUIRED IF ANY COMPONENT HAS
 ONE OR MORE OF THE CONDITIONS NOTED ABOVE.

CONCRETE REPLACEMENT CRITERIA



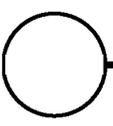
N.T.S.

02A-4007



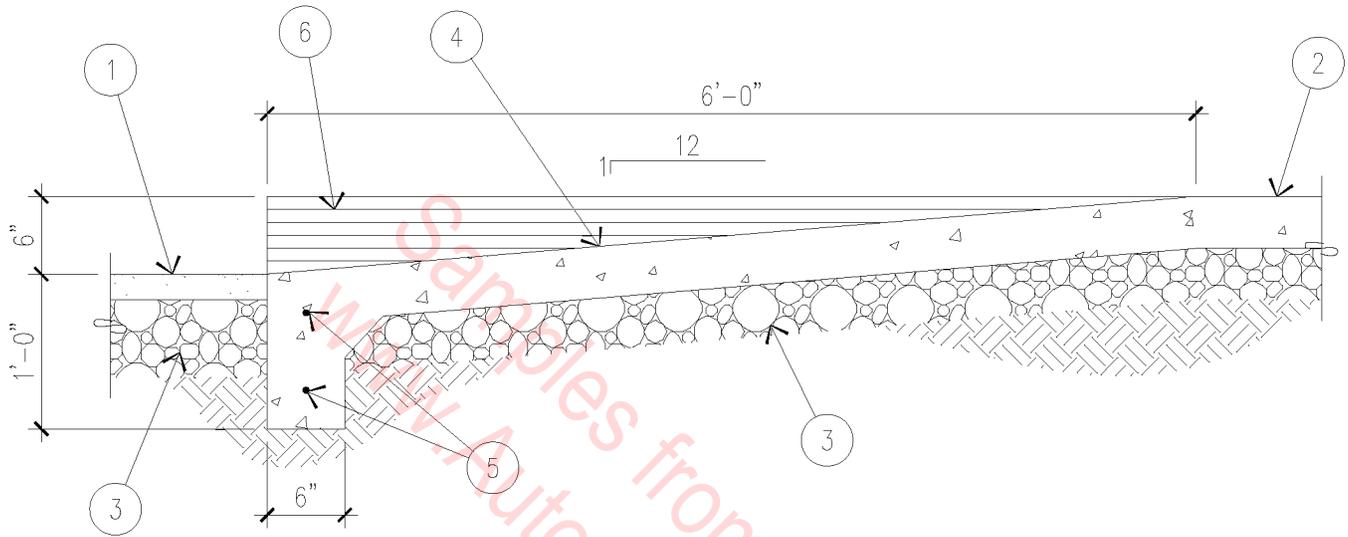
NOTE:
 REPLACEMENT IS REQUIRED IF ANY COMPONENT HAS
 ONE OR MORE OF THE CONDITIONS NOTED ABOVE.

CONCRETE REPLACEMENT CRITERIA



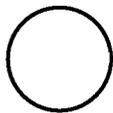
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02A-4007



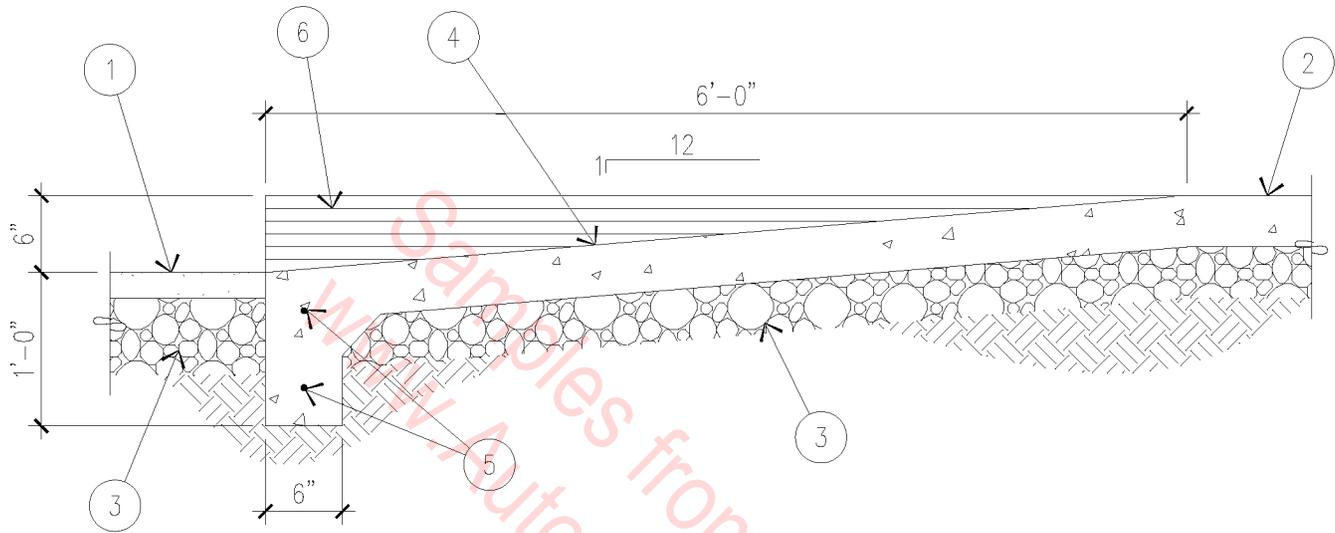
1. 2" ASPHALT ON 4" ROAD BASE.
2. 4" CONCRETE SLAB ON 6" A.B.C., REINFORCED PER GENERAL CONDITIONS.
3. AGGREGATE BASE COURSE.
4. CONCRETE RAMP.
5. (2) #4 REBAR, CONTINUOUS.
6. 1/4" GROOVES, 1/8" DEEP, AT 1" CENTERS - FULL FACE OF RAMP.

SECTION AT HANDICAP RAMP



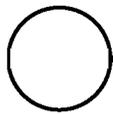
3/4" = 1'-0"

02A-4008



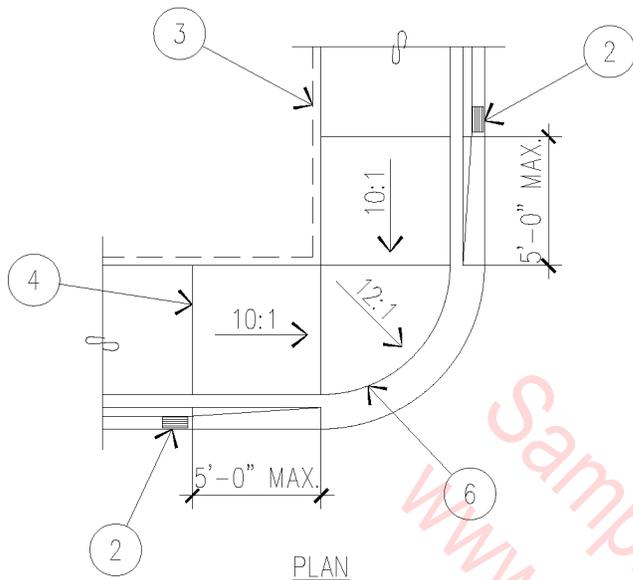
1. 2" ASPHALT ON 4" ROAD BASE.
2. 4" CONCRETE SLAB ON 6" A.B.C.,
REINFORCED PER GENERAL CONDITIONS.
3. AGGREGATE BASE COURSE.
4. CONCRETE RAMP.
5. (2) #4 REBAR, CONTINUOUS.
6. 1/4" GROOVES, 1/8" DEEP, AT 1"
CENTERS - FULL FACE OF RAMP.

SECTION AT HANDICAP RAMP

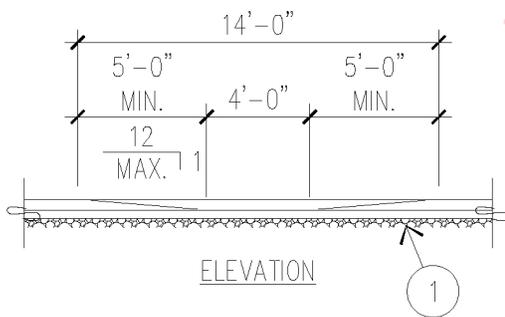


3/4" = 1'-0"

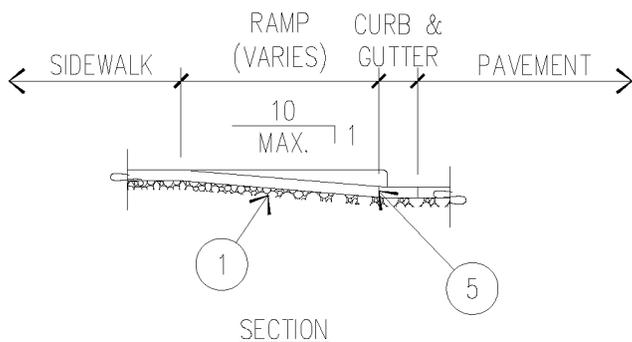
02A-4008



PLAN



ELEVATION



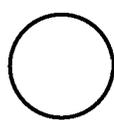
SECTION

KEYNOTES:

1. UNDER RAMP USE UNTREATED BASE COURSE MATERIAL ONLY WHERE EXISTING SOIL IS UNSATISFACTORY AND WHERE USE IS PROPERLY APPROVED.
2. LOCATE THE INLET GRATE 2" MINIMUM AWAY FROM THE PEDESTRIAN CROSSWALK WITH ALL DRAINAGE INTERCEPTED BEFORE IT GETS TO THE CROSSWALK AREA.
3. WHERE EXISTING GROUND BEHIND SIDEWALK IS TOO HIGH TO ALLOW SIDEWALK TO RAMP DOWN, GRADE GROUND TO ACCEPTABLE SLOPE OR INSTALL CURB WALL AS REQUIRED.
4. EXPANSION JOINT (TYPICAL).
5. CONSTRUCTION JOINT.
6. CONSTRUCTION JOINT OR POUR MONOLITHICALLY AT CONTRACTOR'S OPTION.

GENERAL NOTES:

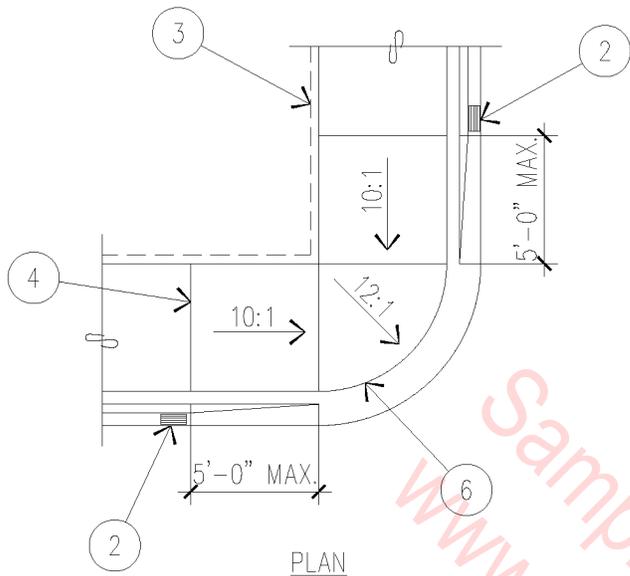
- A. USE 4,000 P.S.I. CONCRETE.
- B. SLOPES SHOWN AS 12:1 SHALL BE MEASURED USING THE AVERAGE GRADE OF THE CLOSEST 50' OF SIDEWALK UPHILL FROM THE RAMP AS A HORIZONTAL REFERENCE (BY DEFINITION). WHERE THE AVERAGE GRADE IS LESS THAN 12:1 OR HAS A NEGATIVE SLOPE, THE SIDEWALK RAMP SHALL BE CONSTRUCTED AS 12:1 FROM ACTUAL HORIZONTAL.
- C. ALTERNATE LOCATION OF HANDICAP RAMP FOR STREETS WITH P.T. CURVE RADIUS OF LESS THAN 25 FEET AND WITH SLOPES GREATER THAN 10% USED WITH PROPER APPROVAL.
- D. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
- E. USE FINE HAIR BROOM TO FINISH ON GRADES UNDER 6%. OVER 6% GRADE, USE ROUGH HAIR BROOM.
- F. SLOPES SHOWN ARE MAXIMUM SLOPES.



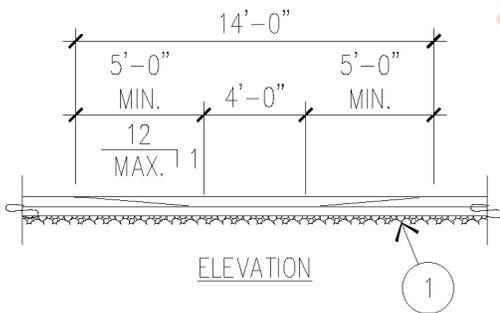
SIDEWALK RAMP

N.T.S.

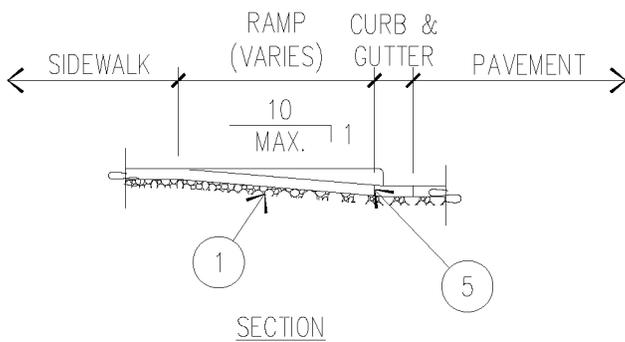
02A-4009



PLAN



ELEVATION



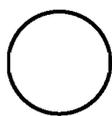
SECTION

KEYNOTES:

1. UNDER RAMP USE UNTREATED BASE COURSE MATERIAL ONLY WHERE EXISTING SOIL IS UNSATISFACTORY AND WHERE USE IS PROPERLY APPROVED.
2. LOCATE THE INLET GRATE 2" MINIMUM AWAY FROM THE PEDESTRIAN CROSSWALK WITH ALL DRAINAGE INTERCEPTED BEFORE IT GETS TO THE CROSSWALK AREA.
3. WHERE EXISTING GROUND BEHIND SIDEWALK IS TOO HIGH TO ALLOW SIDEWALK TO RAMP DOWN, GRADE GROUND TO ACCEPTABLE SLOPE OR INSTALL CURB WALL AS REQUIRED.
4. EXPANSION JOINT (TYPICAL).
5. CONSTRUCTION JOINT.
6. CONSTRUCTION JOINT OR POUR MONOLITHICALLY AT CONTRACTOR'S OPTION.

GENERAL NOTES:

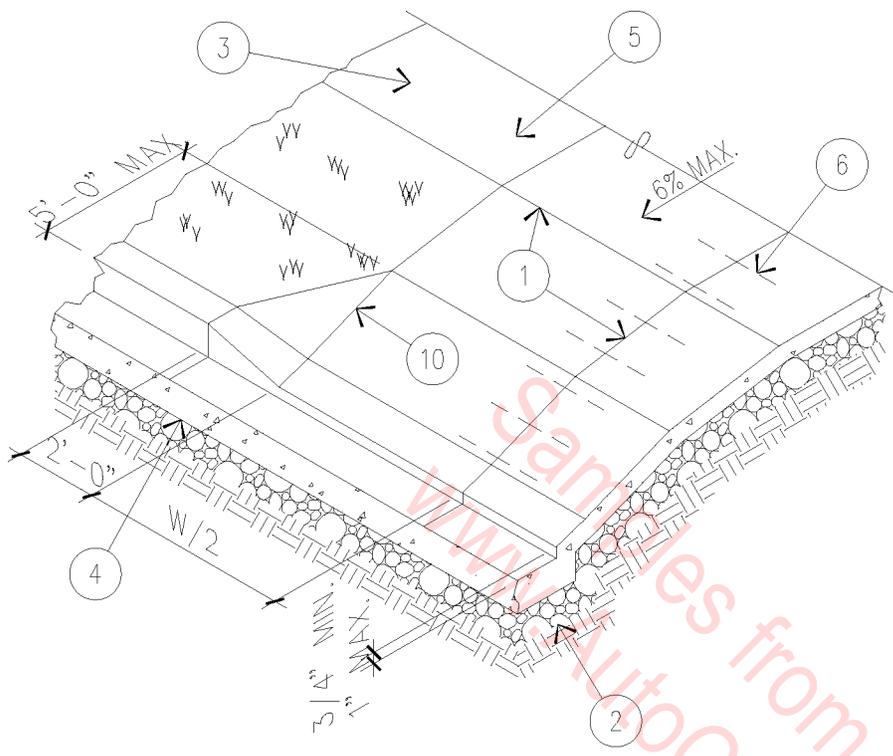
- A. USE 4,000 P.S.I. CONCRETE.
- B. SLOPES SHOWN AS 12:1 SHALL BE MEASURED USING THE AVERAGE GRADE OF THE CLOSEST 50' OF SIDEWALK UPHILL FROM THE RAMP AS A HORIZONTAL REFERENCE (BY DEFINITION). WHERE THE AVERAGE GRADE IS LESS THAN 12:1 OR HAS A NEGATIVE SLOPE, THE SIDEWALK RAMP SHALL BE CONSTRUCTED AS 12:1 FROM ACTUAL HORIZONTAL.
- C. ALTERNATE LOCATION OF HANDICAP RAMP FOR STREETS WITH P.T. CURVE RADIUS OF LESS THAN 25 FEET AND WITH SLOPES GREATER THAN 10% USED WITH PROPER APPROVAL.
- D. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
- E. USE FINE HAIR BROOM TO FINISH ON GRADES UNDER 6%. OVER 6% GRADE, USE ROUGH HAIR BROOM.
- F. SLOPES SHOWN ARE MAXIMUM SLOPES.



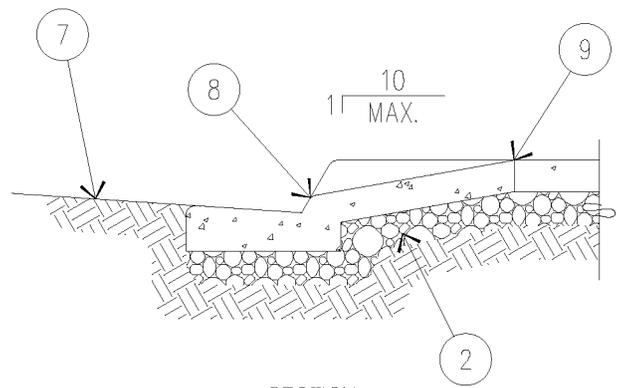
SIDEWALK RAMP

N.T.S.

02A-4009



PLAN



SECTION

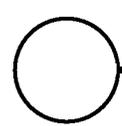
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. SCORE LINE.

GENERAL NOTES:

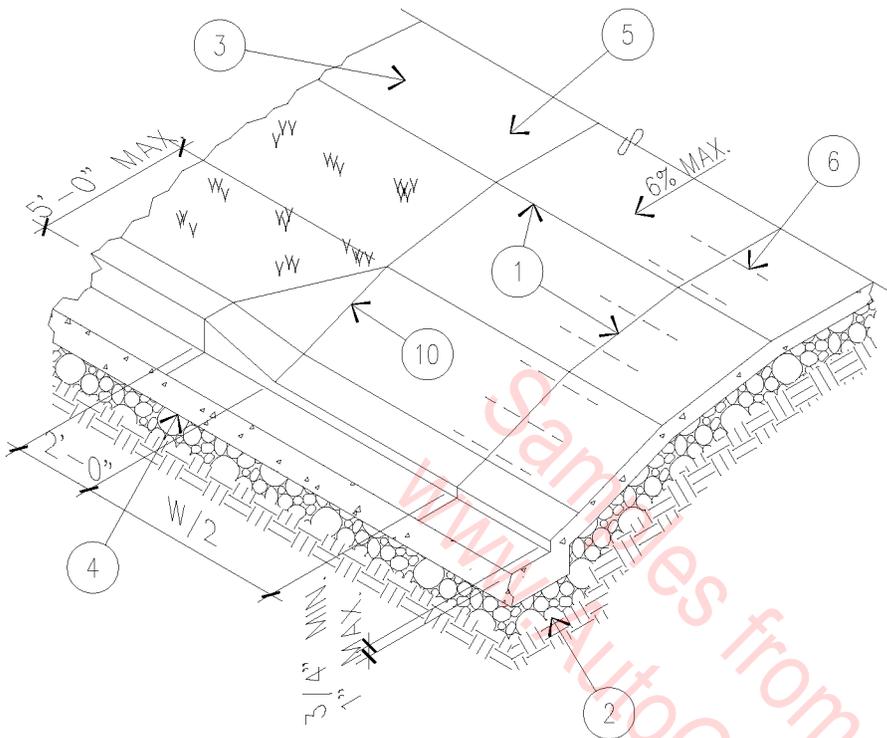
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- D. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- E. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.
- F. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.

FLARE DRIVEWAY APPROACH

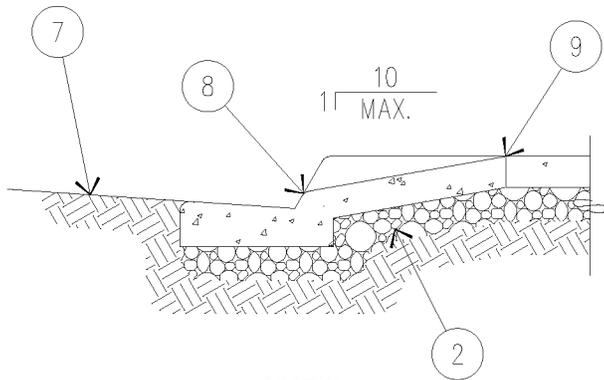


N.T.S.

02A-4010



PLAN



SECTION

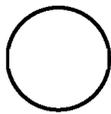
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. SCORE LINE.

GENERAL NOTES:

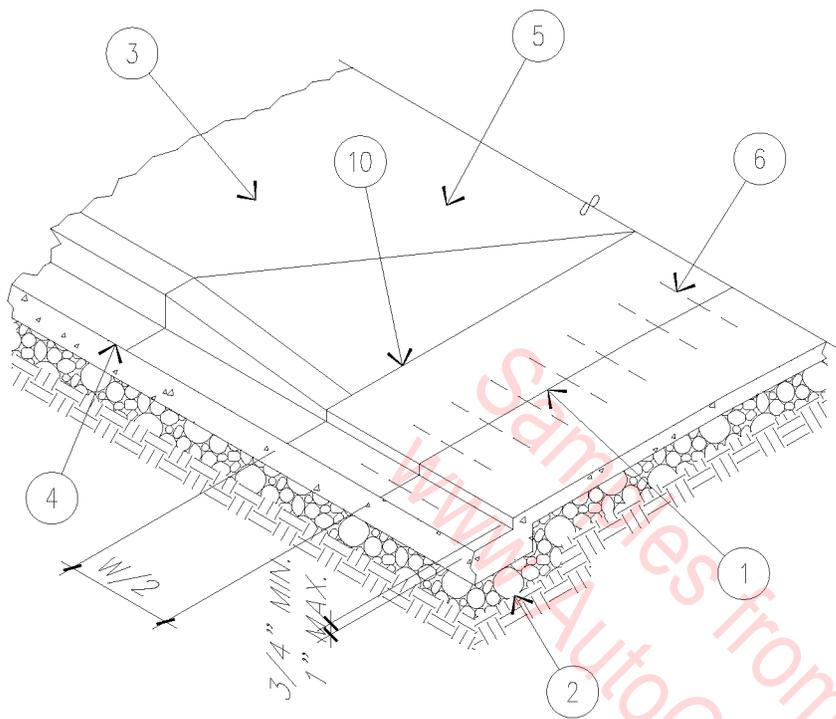
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- D. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- E. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.
- F. ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO STAY WITHIN 2:1 RATIO.

FLARE DRIVEWAY APPROACH

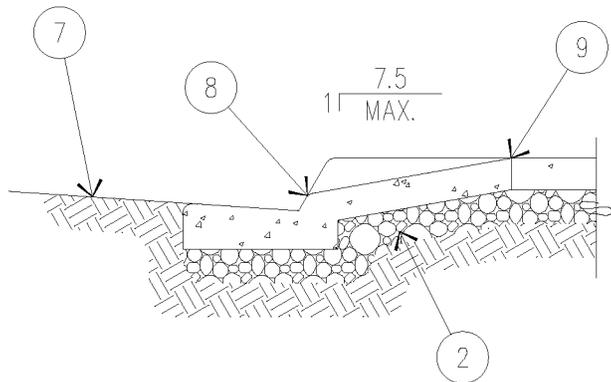


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02A-4010



PLAN



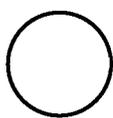
SECTION

KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. STRAIGHT SCORE LINE.

GENERAL NOTES:

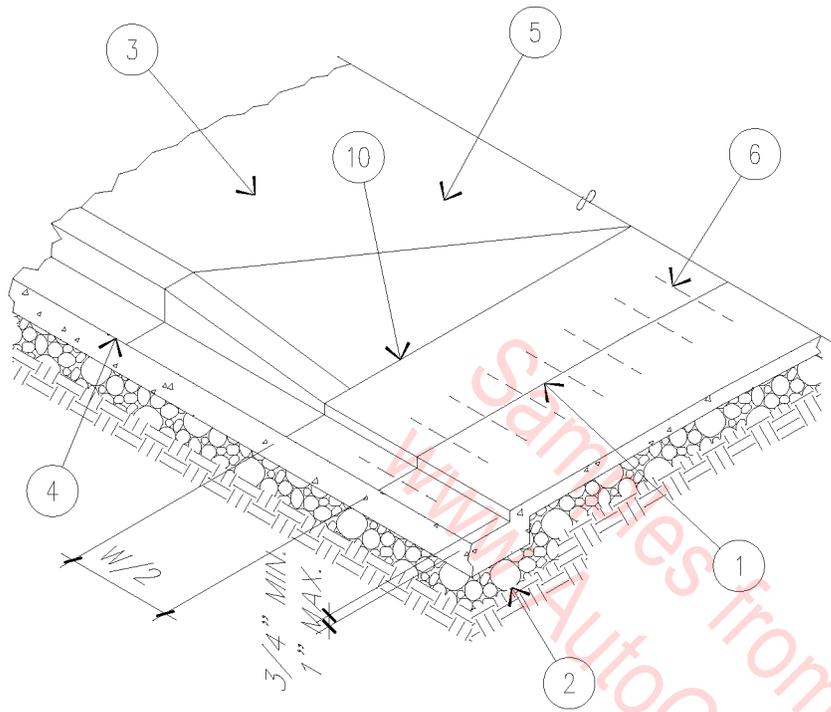
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- D. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.



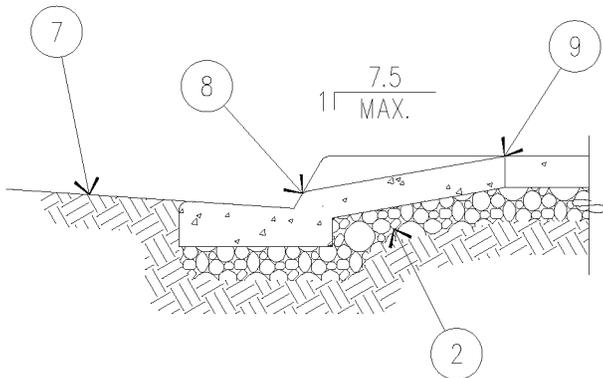
DIP DRIVEWAY APPROACH

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02A-4011



PLAN



SECTION

KEYNOTES:

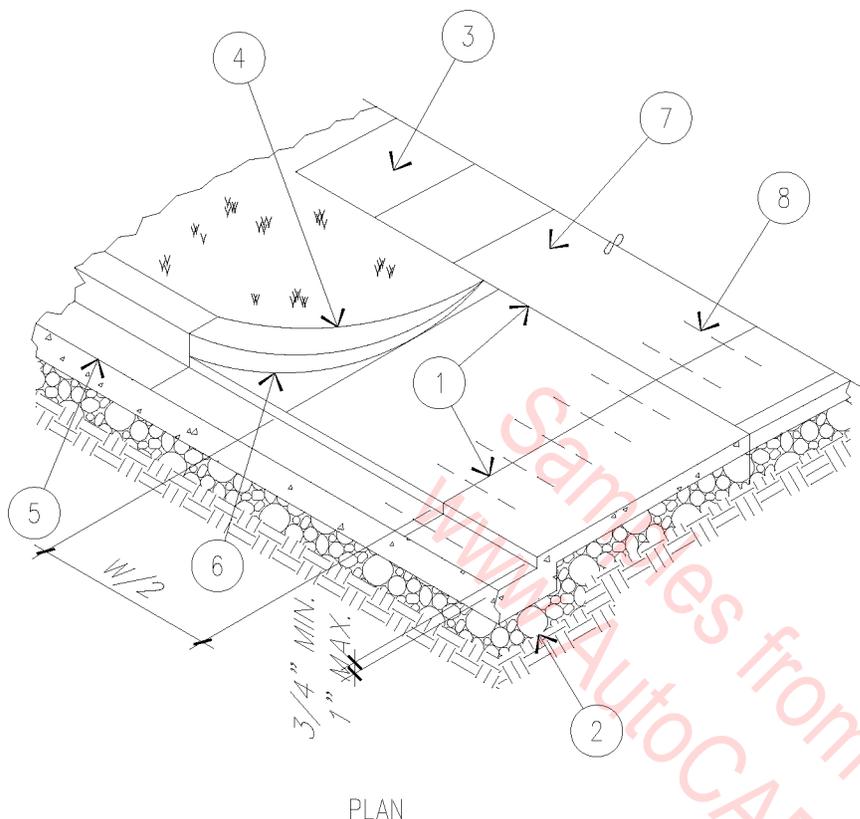
1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. LIP OF GUTTER.
5. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
6. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
7. STREET CROSS SLOPE.
8. 1 1/2" RADIUS.
9. 1/2" EXPANSION JOINT.
10. STRAIGHT SCORE LINE.

GENERAL NOTES:

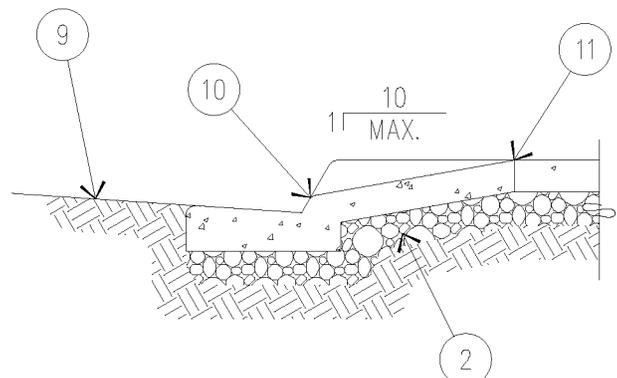
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. CONCRETE SHALL BE MONOLITHIC CLASS 40.
- D. USE CLASS 40 TYPE III HIGH EARLY STRENGTH CONCRETE WITH FIBERMESH REINFORCING - SEE SPECIFICATIONS.

○ DIP DRIVEWAY APPROACH
N.T.S.

02A-4011



PLAN



SECTION

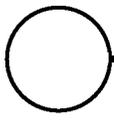
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. 5'-6" MAXIMUM RADIUS.
5. LIP OF GUTTER.
6. CURB RETURN.
7. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
8. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
9. STREET CROSS SLOPE.
10. 1 1/2" RADIUS.
11. 1/2" EXPANSION JOINT.

GENERAL NOTES:

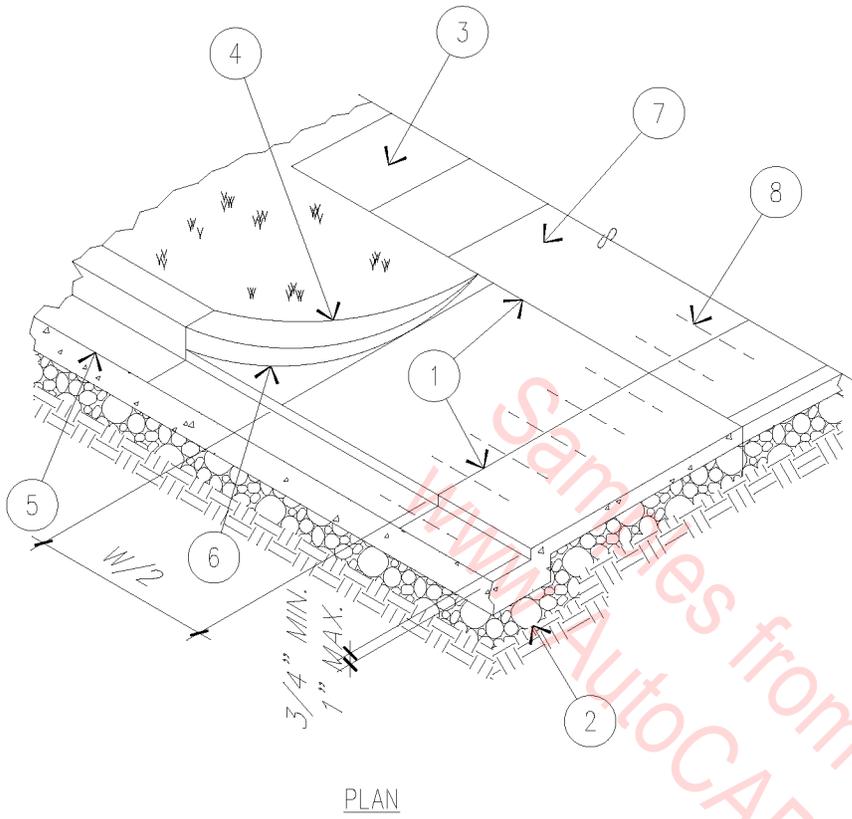
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. LIP MAY BE ELIMINATED IF DESIRED.
- D. CONCRETE SHALL BE MONOLITHIC 4,000 P.S.I. REINFORCED WITH POLYPROPYLENE MULTI-FILAMENT FIBERS.

OPEN DRIVEWAY APPROACH

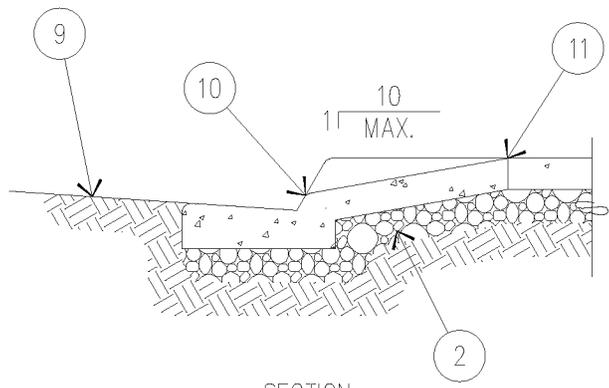


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PLAN



SECTION

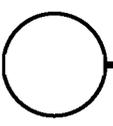
KEYNOTES:

1. PLACE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND DRIVE APRON, AND IN THE DRIVEWAY CENTER-LINE IF 'W' IS GREATER THAN 20'. FILLER STRIP SHALL BE FULL DEPTH OF CONCRETE PLUS 1" WITH TOP SET FLUSH WITH TOP OF CONCRETE.
2. USE UNTREATED BASE COURSE MATERIAL EXCEPT WHERE ACCEPTABLE SAND OR GRAVEL ALREADY EXISTS. COMPACT TO 96% AVERAGE WITH NOTHING LESS THAN 92% OF THE MAXIMUM DRY DENSITY (ASTM D-698).
3. SIDEWALK.
4. 5'-6" MAXIMUM RADIUS.
5. LIP OF GUTTER.
6. CURB RETURN.
7. GRADUALLY WARP SIDEWALK AS APPROVED BY ENGINEER TO MATCH DRIVEWAY GRADES OR AS NECESSARY TO REDUCE DRIVEWAY SLOPE TO ACCEPTABLE GRADE.
8. INSTALL #4 X 2'-0" DOWELS AT 12" ON CENTER IN CENTER JOINT WHERE CENTER DRIVEWAY IS MORE THAN 30'-0" WIDE.
9. STREET CROSS SLOPE.
10. 1 1/2" RADIUS.
11. 1/2" EXPANSION JOINT.

GENERAL NOTES:

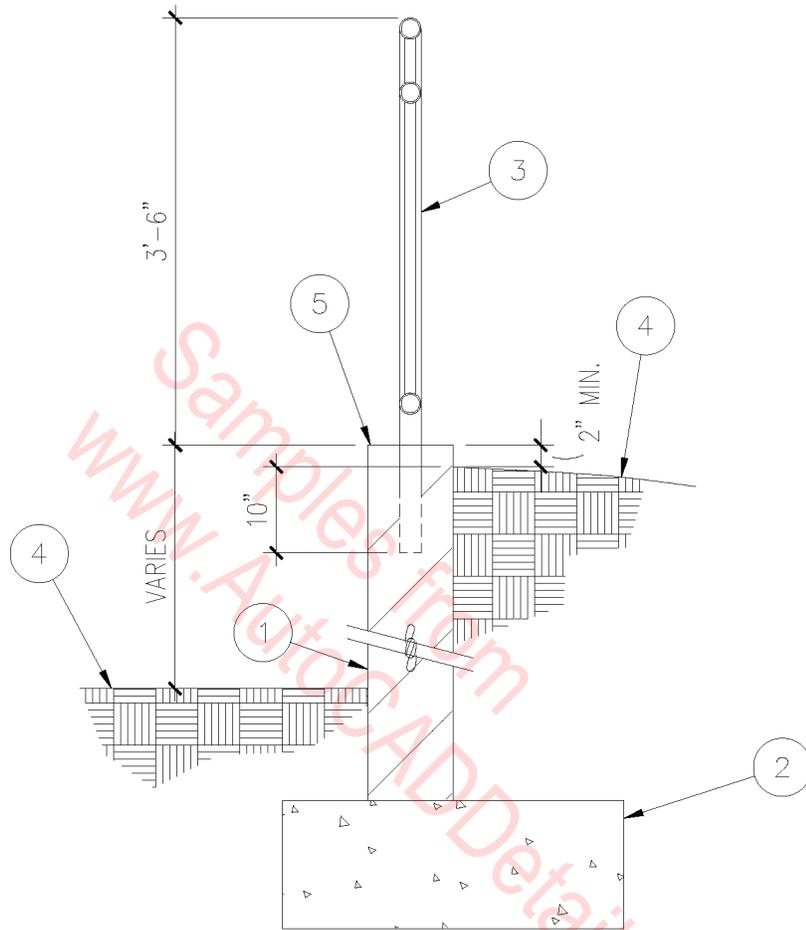
- A. EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- B. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5'-0" FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAX.
- C. LIP MAY BE ELIMINATED IF DESIRED.
- D. CONCRETE SHALL BE MONOLITHIC 4,000 P.S.I. REINFORCED WITH POLYPROPYLENE MULTI-FILAMENT FIBERS.

OPEN DRIVEWAY APPROACH



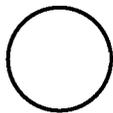
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02A-4012



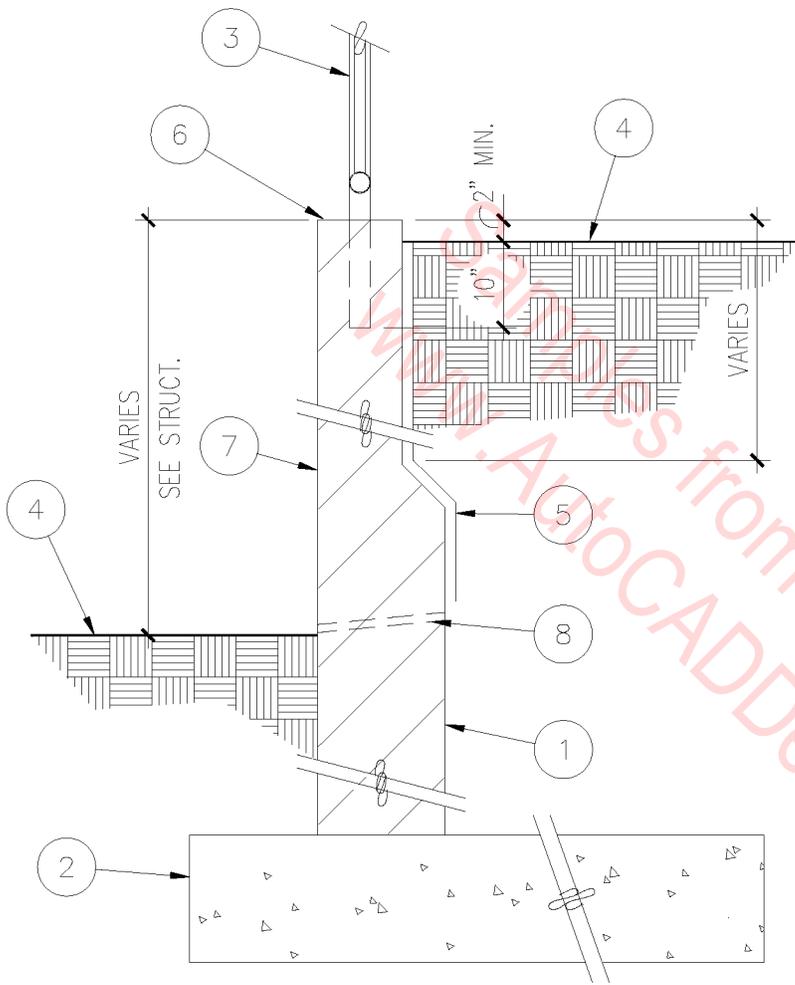
1. EXPOSED FACE OF WALL SPLIT FACE BLOCK.
2. CONCRETE FOOTING – SEE STRUCTURAL.
3. TYPICAL GUARD RAIL.
4. FINISH GRADE.
5. SLOPE TOP OF WALL WHERE APPLICABLE SAW CUT BLOCK AS REQUIRED.

GUARD RAIL @ RETAINING WALL



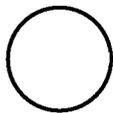
1/2" = 1'-0"

02A-3001



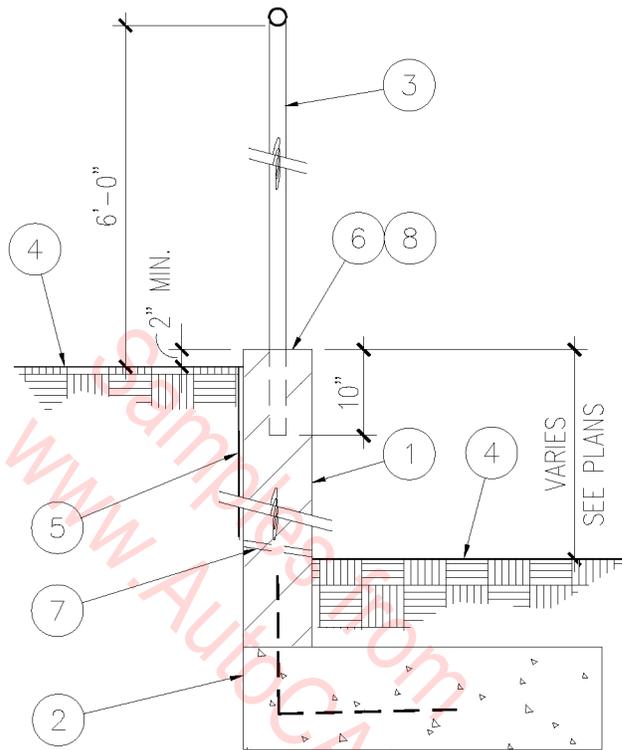
1. RETAINING WALL.
2. CONCRETE FOOTING - SEE STRUCTURAL.
3. GUARD RAIL.
4. FINISH GRADE.
5. WATERPROOFING.
6. SLOPE TOP OF WALL WHERE APPLICABLE.
SAW CUT BLOCK AS REQUIRED.
7. EXPOSED FACE OF WALL - SPLIT
FACE BLOCK.

GUARD RAIL @ RETAINING WALL



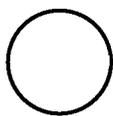
1/2" = 1'-0"

02A-3002



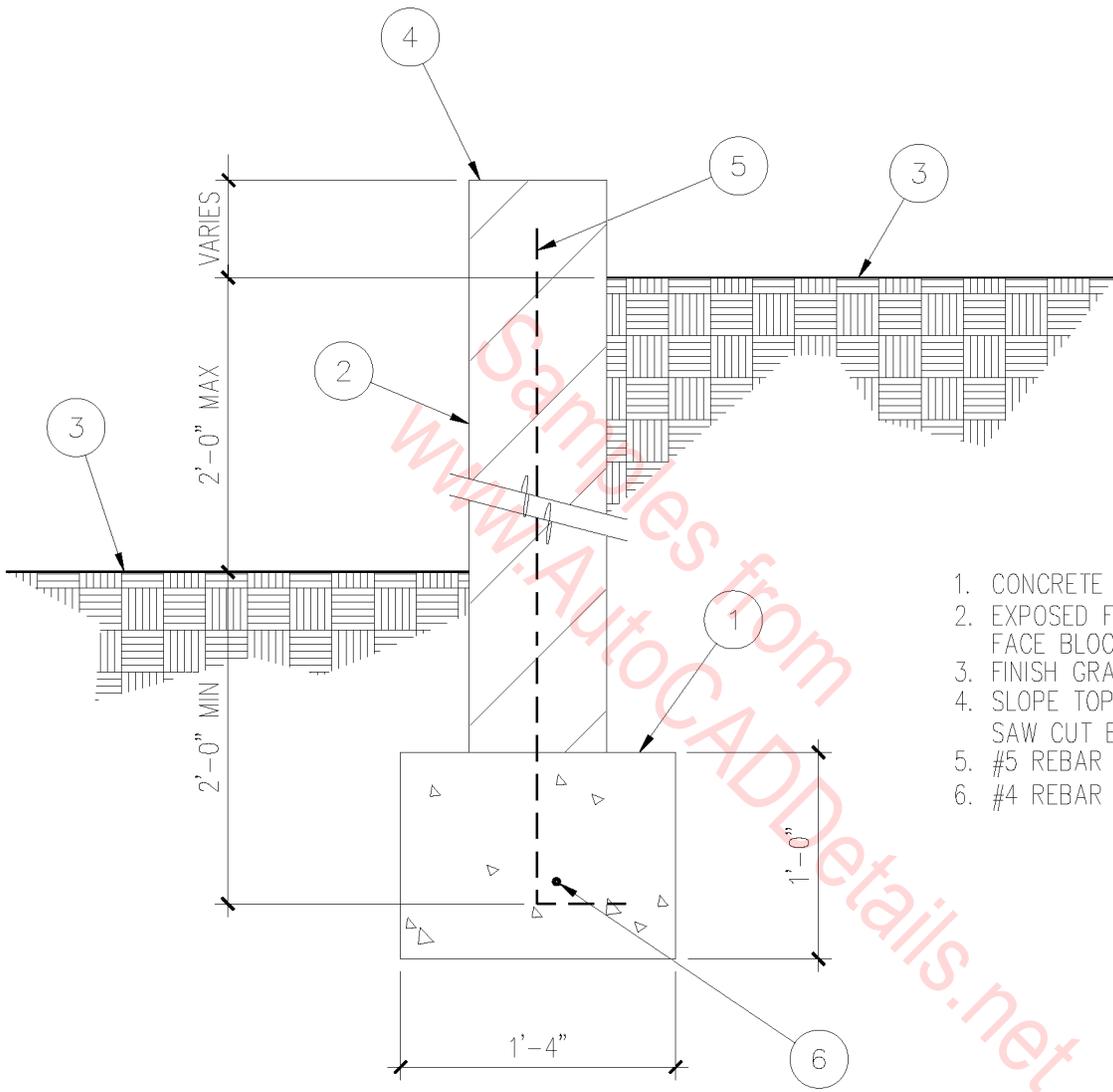
1. RETAINING WALL - SEE STRUCTURAL.
2. CONCRETE FOOTING - SEE STRUCTURAL.
3. GUARD RAIL.
4. FINISH GRADE.
5. WATERPROOFING.
6. SOLID CAP BLOCK.
7. WEEP HOLE.
8. SLOPE TOP OF WALL WHERE APPLICABLE
SAW CUT BLOCK AS REQUIRED.

RETAINING WALL WITH OFFSET FOOTING

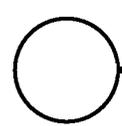


1/2" = 1'-0"

02A-3003



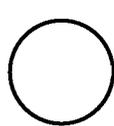
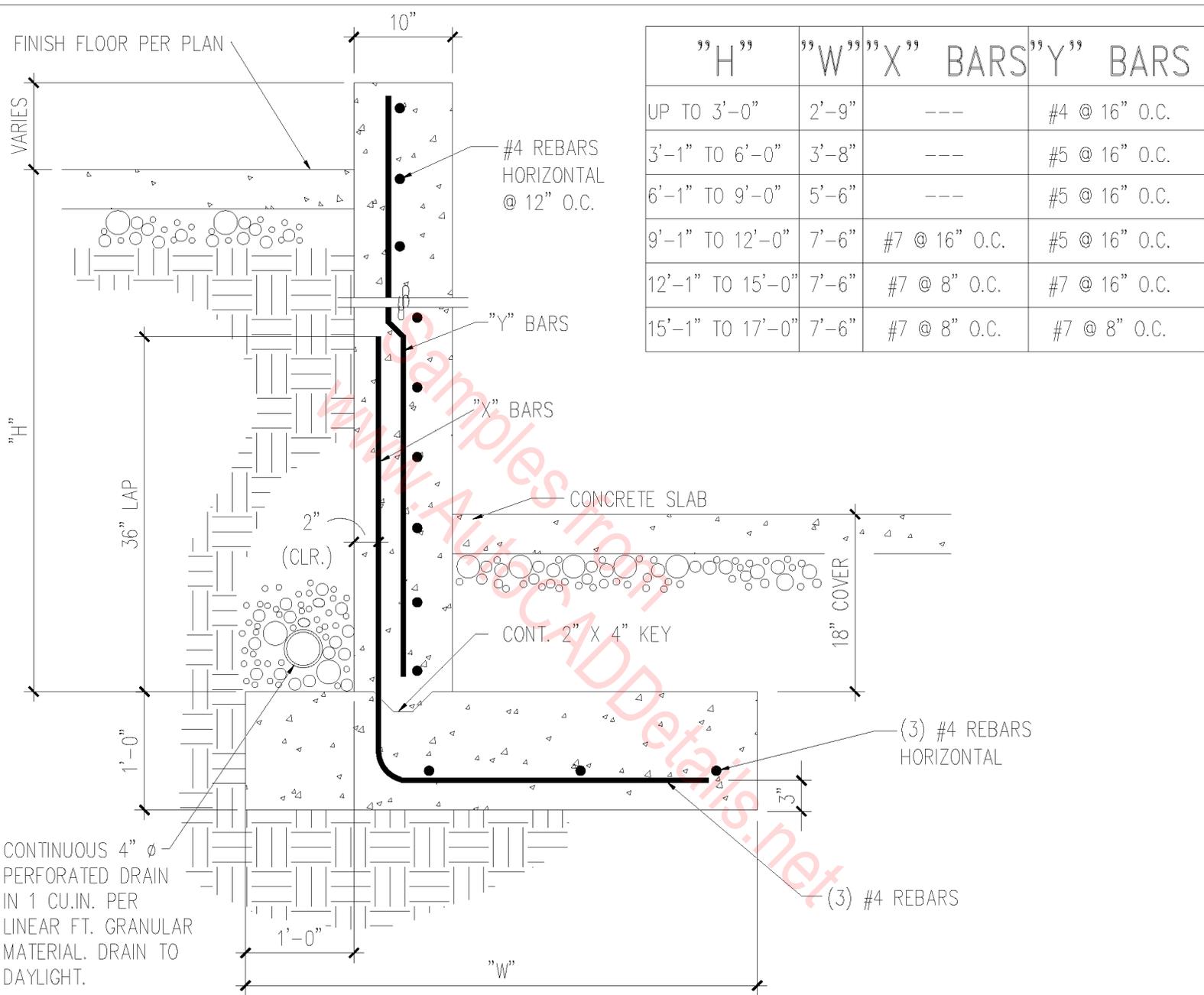
1. CONCRETE FOOTING—SEE STRUCTURAL.
2. EXPOSED FACE OF WALL SPLIT FACE BLOCK.
3. FINISH GRADE.
4. SLOPE TOP OF WALL WHERE APPLICABLE SAW CUT BLOCK AS REQUIRED.
5. #5 REBAR AT 48" O.C.
6. #4 REBAR CONT.



RETAINING WALL

1" = 1'-0"

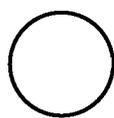
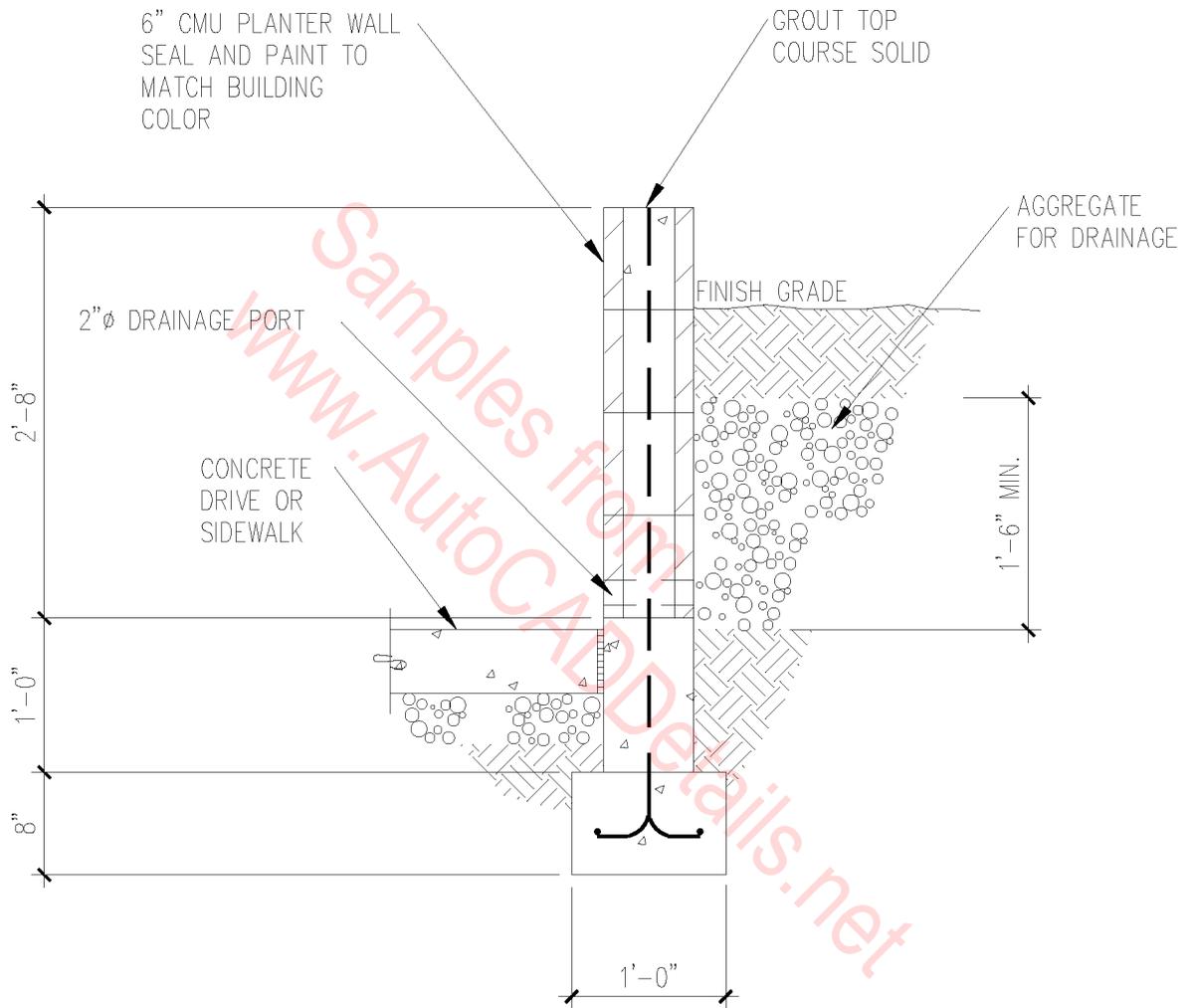
02A-3004



C.I.P. RETAINING WALL

3/4" = 1'-0"

02A-3005



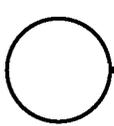
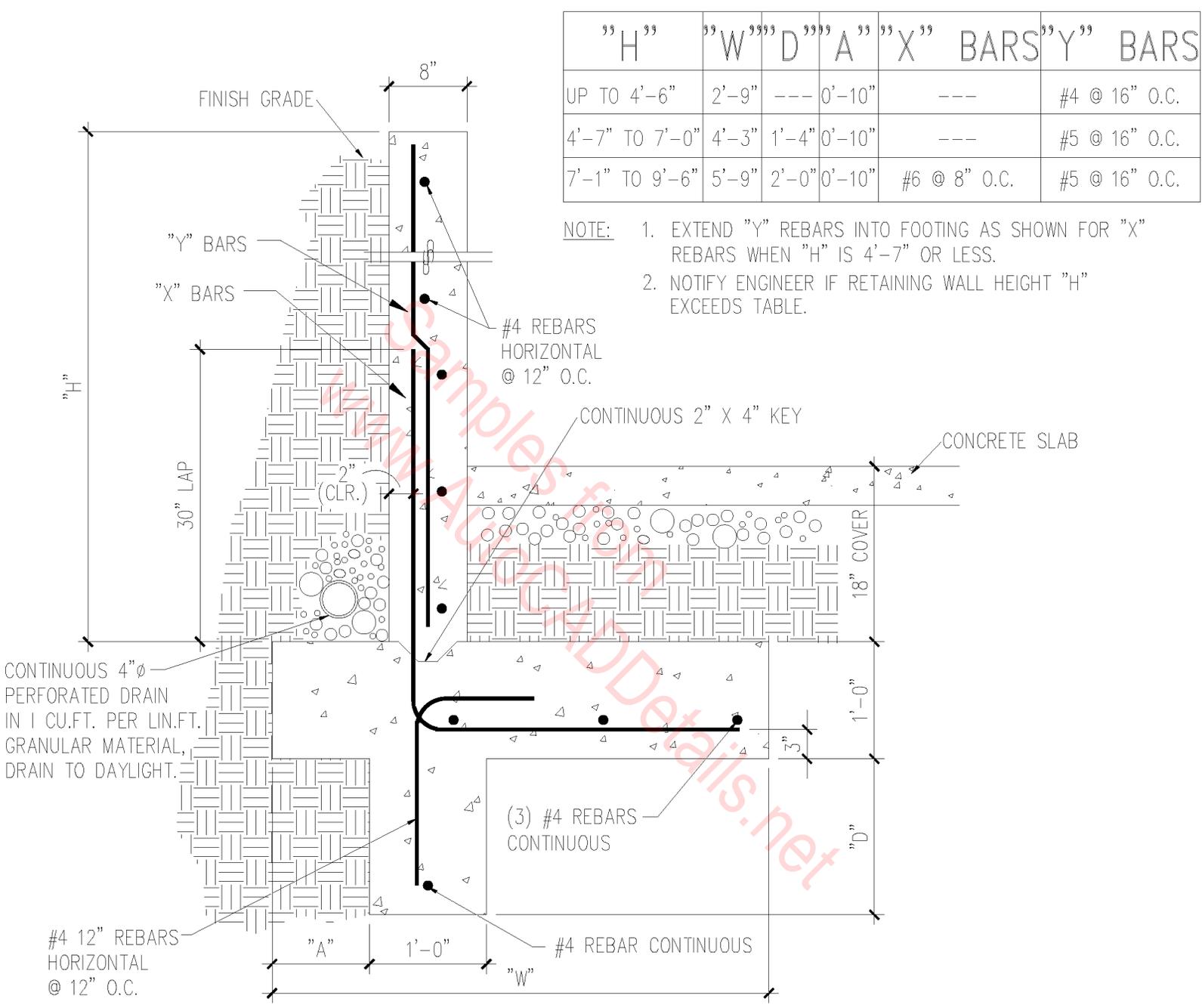
C.M.U. PLANTER SECTION

3/4" = 1'-0"

02A-3006

"H"	"W"	"D"	"A"	"X" BARS	"Y" BARS
UP TO 4'-6"	2'-9"	---	0'-10"	---	#4 @ 16" O.C.
4'-7" TO 7'-0"	4'-3"	1'-4"	0'-10"	---	#5 @ 16" O.C.
7'-1" TO 9'-6"	5'-9"	2'-0"	0'-10"	#6 @ 8" O.C.	#5 @ 16" O.C.

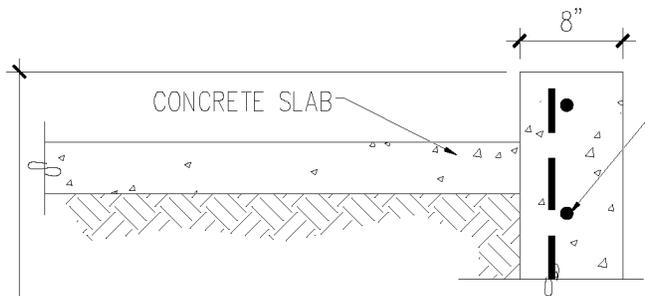
NOTE: 1. EXTEND "Y" REBARS INTO FOOTING AS SHOWN FOR "X" REBARS WHEN "H" IS 4'-7" OR LESS.
 2. NOTIFY ENGINEER IF RETAINING WALL HEIGHT "H" EXCEEDS TABLE.



RETAINING WALL

3/4" = 1'-0"

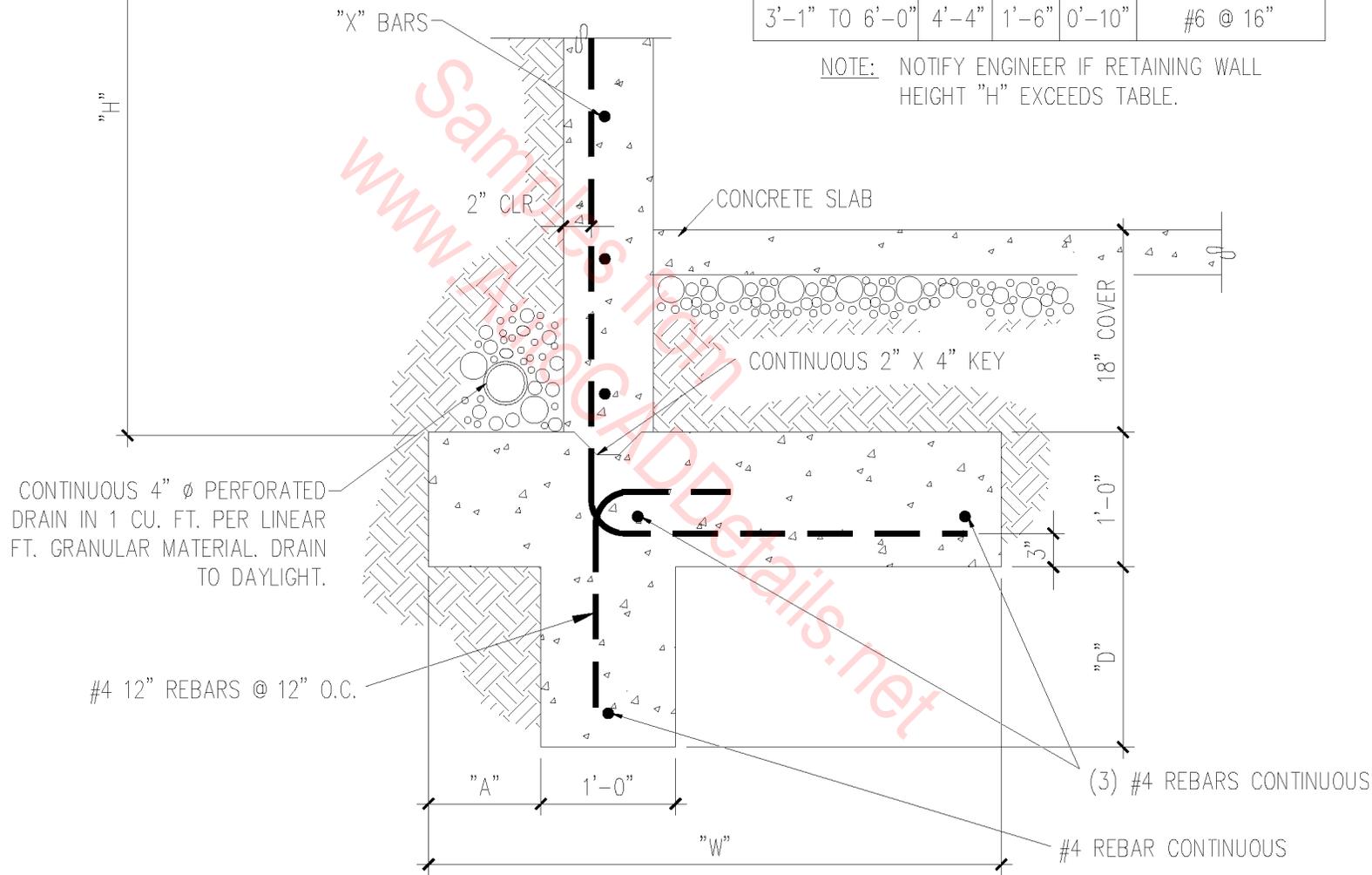
02A-3007



#4 REBARS
HORIZONTAL
@ 12" O.C.

"H"	"W"	"D"	"A"	"X" BARS
UP TO 3'-0"	2'-8"	1'-0"	0'-10"	#5 @ 16"
3'-1" TO 6'-0"	4'-4"	1'-6"	0'-10"	#6 @ 16"

NOTE: NOTIFY ENGINEER IF RETAINING WALL HEIGHT "H" EXCEEDS TABLE.

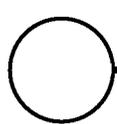


CONTINUOUS 4" Ø PERFORATED DRAIN IN 1 CU. FT. PER LINEAR FT. GRANULAR MATERIAL. DRAIN TO DAYLIGHT.

#4 12" REBARS @ 12" O.C.

(3) #4 REBARS CONTINUOUS

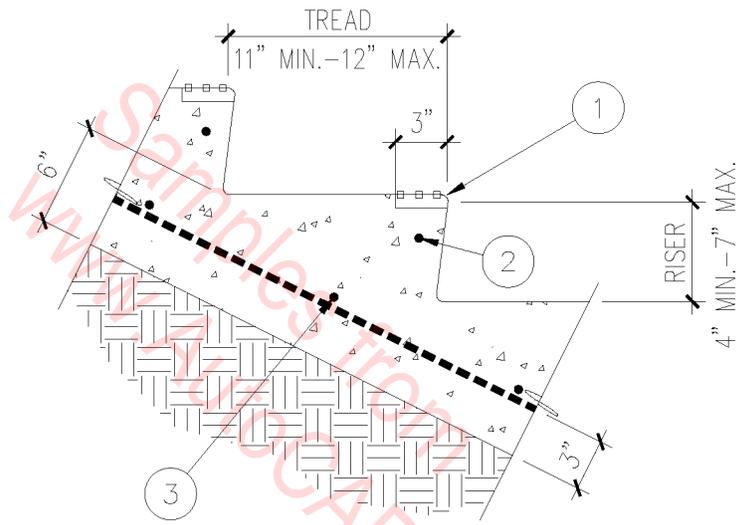
#4 REBAR CONTINUOUS



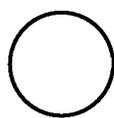
RETAINING WALL

3/4" = 1'-0"

02A-3008



1. STAIR NOSING.
2. #4 REBAR CONTINUOUS.
3. #4 REBAR @ 12" O.C. EACH WAY.



EXTERIOR STAIRS

1" = 1'-0"

02A-5001

SEE ARCHITECTURAL DRAWINGS

10"

SEE ARCHITECTURAL DRAWINGS

12"

#4 NOSING REBAR
1" CLEAR TYP.

LAP $32d$

#4 @ 24" O.C.
EACH WAY

10"

#3 X 3'-0" @ 24" O.C.
AT SLAB ON GRADE

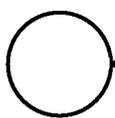
6" MIN.

NOTE: REBAR HORIZONTAL SLAB BARS
INTO ADJACENT WALLS.

24"

#3 X 4"
@ 24" O.C. AT
SLAB ON GRADE

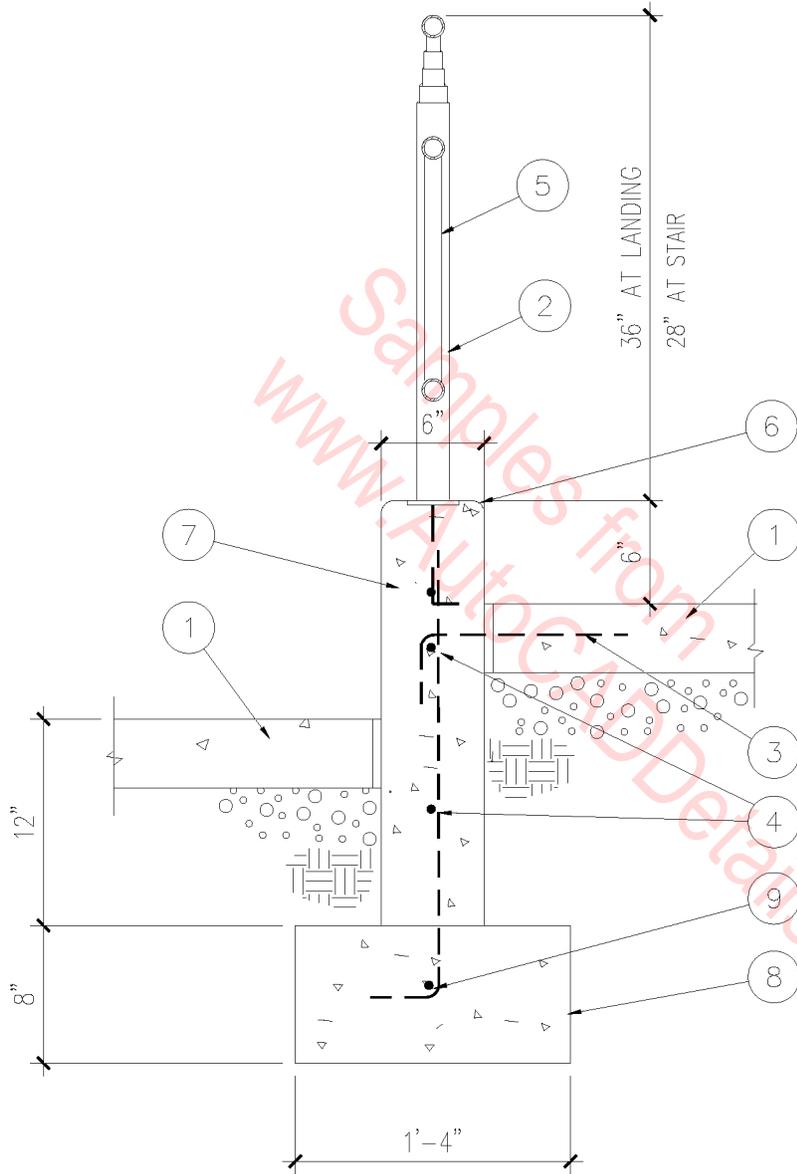
10"



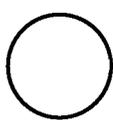
CONC. STAIRS ON GRADE

N.T.S.

02A-5002



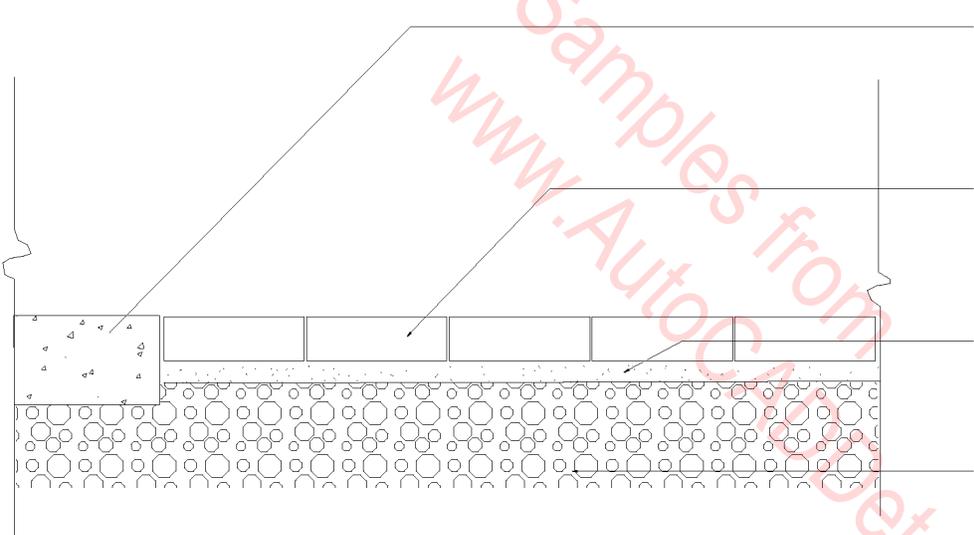
1. 4" CONC. SLAB OVER 4" A.B.C.
2. 1-1/2" DIAMETER. STEEL. PIPE AT 4'-8" O.C. AND EACH END WITH 3"x3"x1/4" WELD PLATE WITH 5/8" DIAMETER ANCHOR BOLT WITH 2" HOOK EMBEDDED 6".
3. ONE #4 REBAR X 16" LONG WITH 4" HOOK @ 24" O.C.
4. #4 REBAR @ 12" O.C. EACH WAY.
5. 3/4" DIAMETER STEEL. PIPE AT 6" O.C. MAX PICKETS.
6. 3/4" RADIUS.
7. CONC. CURB.
8. CONC. FOOTING.
9. ONE (1) #4 REBAR CONT.



CURB @ STAIR

SCALE: 1" = 1'-0"

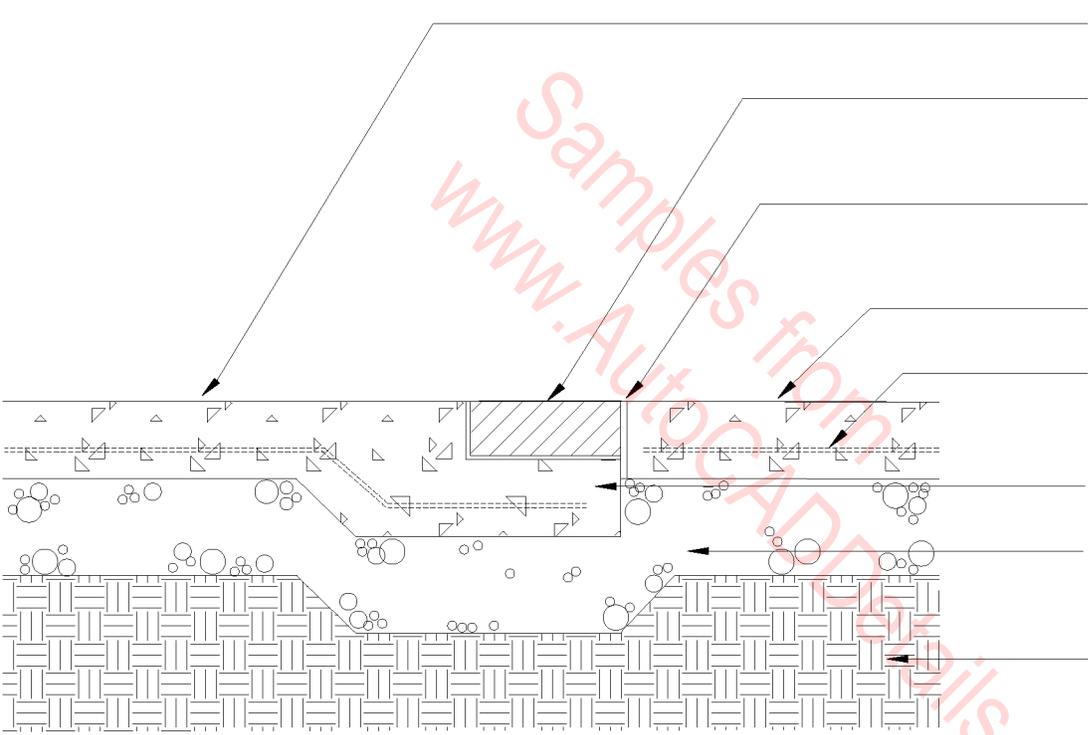
02A-5003



- 4" CONCRETE WALK
FINE SAND FILLED JOINT
BETWEEN CONCRETE AND PAVER
- CONCRETE INTERLOCKING
PAVERS (UNI-DECOR/EUROSTONE
OR AS APPROVED BY LANDSCAPE
ARCHITECT)
- 1" MAXIMUM SHARP SAND LEVELING
BED FOR PAVERS WITH A GEO-
TEXTILE FABRIC ATOP GRAVEL
- 5-6" SUBBASE OF CLASS 5 GRAVEL
OR AS SPECIFIED BY MANUFACTURER

CONCRETE INTERLOCKING PAVER DETAIL

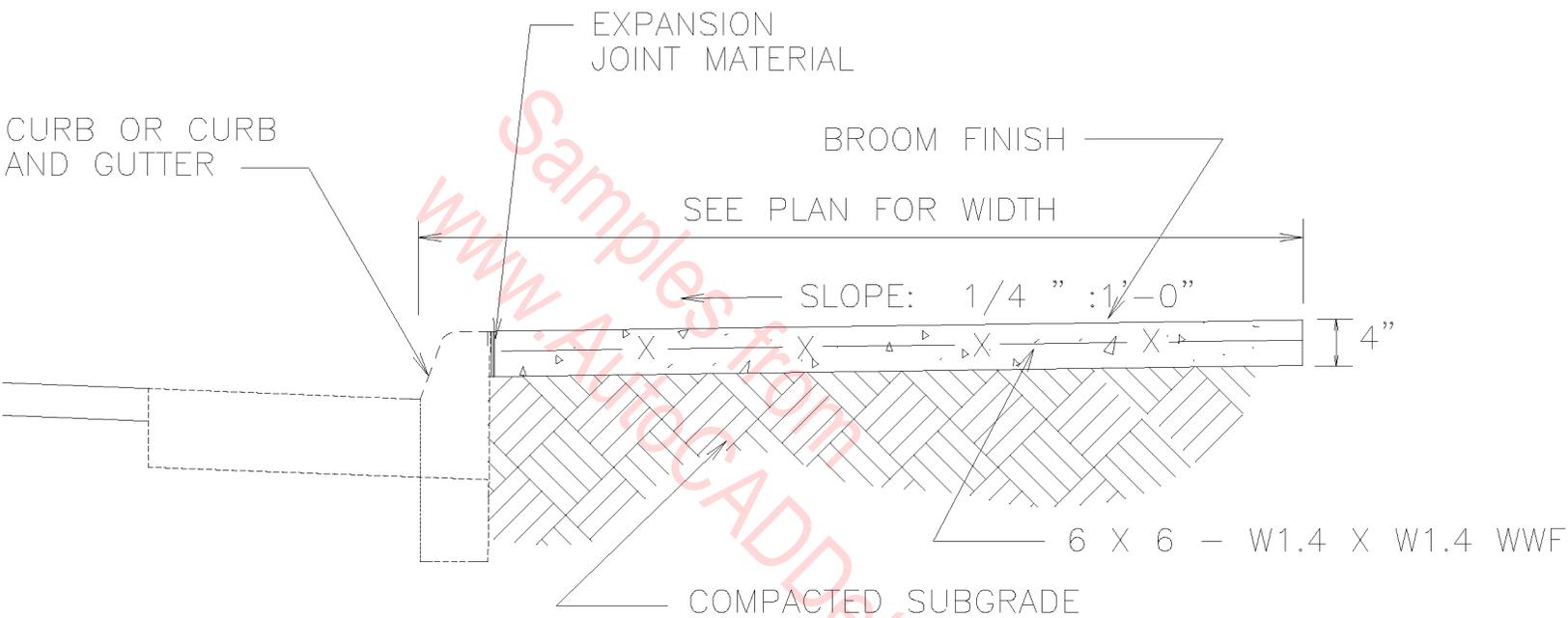
SCALE: 1-1/2" = 1'-0"



- 4" REINF. CONCRETE WALK
- PAVERS SET ON MORTAR SETTING BED OR EPOXY ADHESIVE.
- "HORN" STRIP JOINT EXPANSION JOINT (3/8" X 4")
- EXISTING CONCRETE WALK
- #4 REINF. BAR
- 4" THICKEN SLAB AREA
- 5" COMPACTED CLASS 5 GRAVEL
- UNDISTURBED SOIL

ROWLOCK PAVER DETAIL

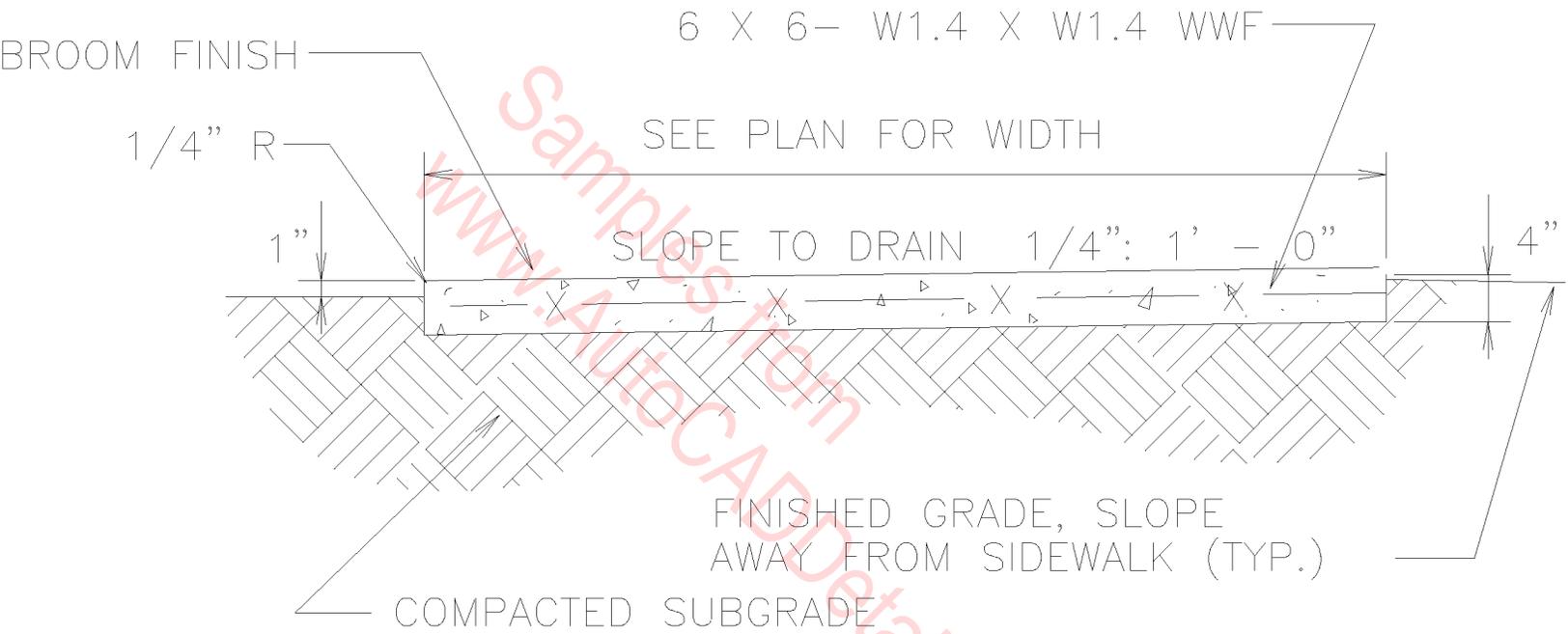
SCALE: 1-1/2" = 1'-0"



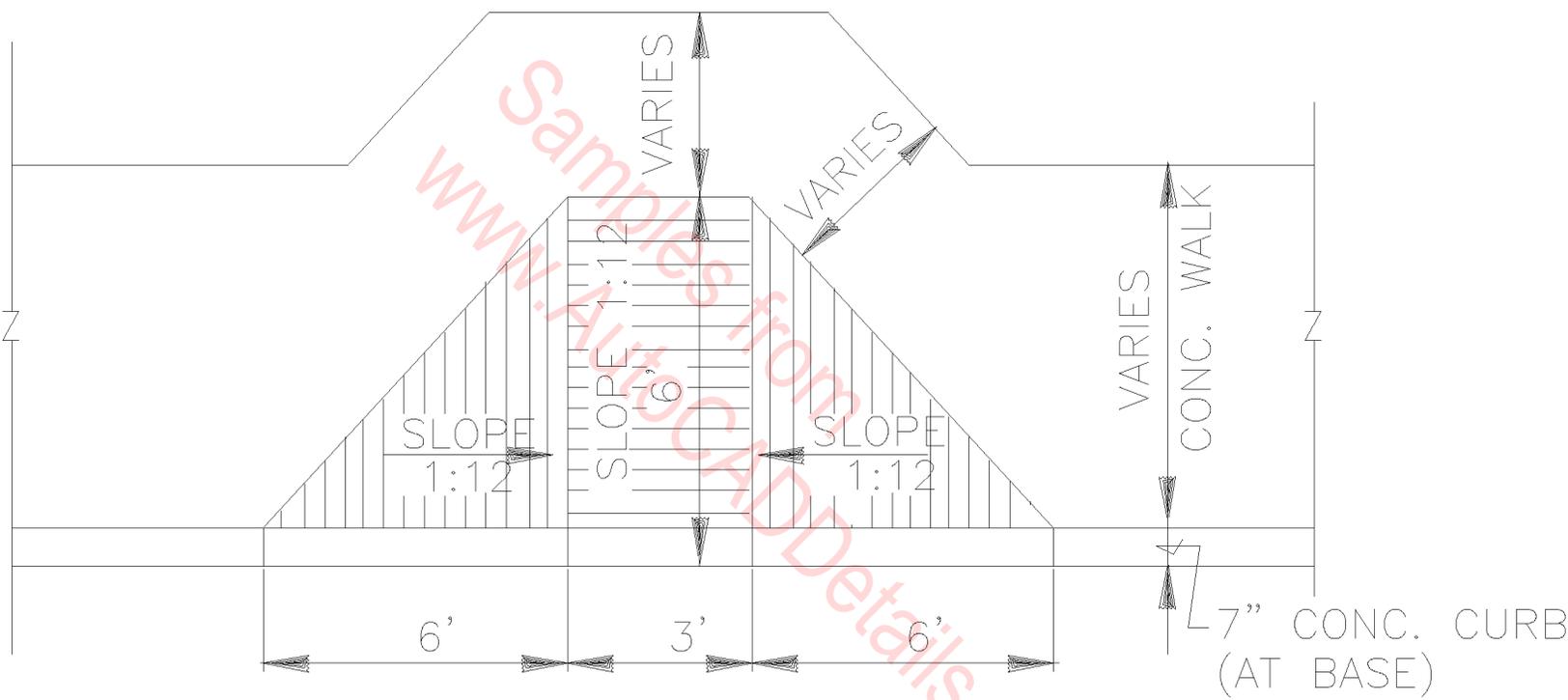
NOTE: TO BE USED WHERE ADJACENT TO CURB OR CURB AND GUTTER

CONCRETE SIDEWALK

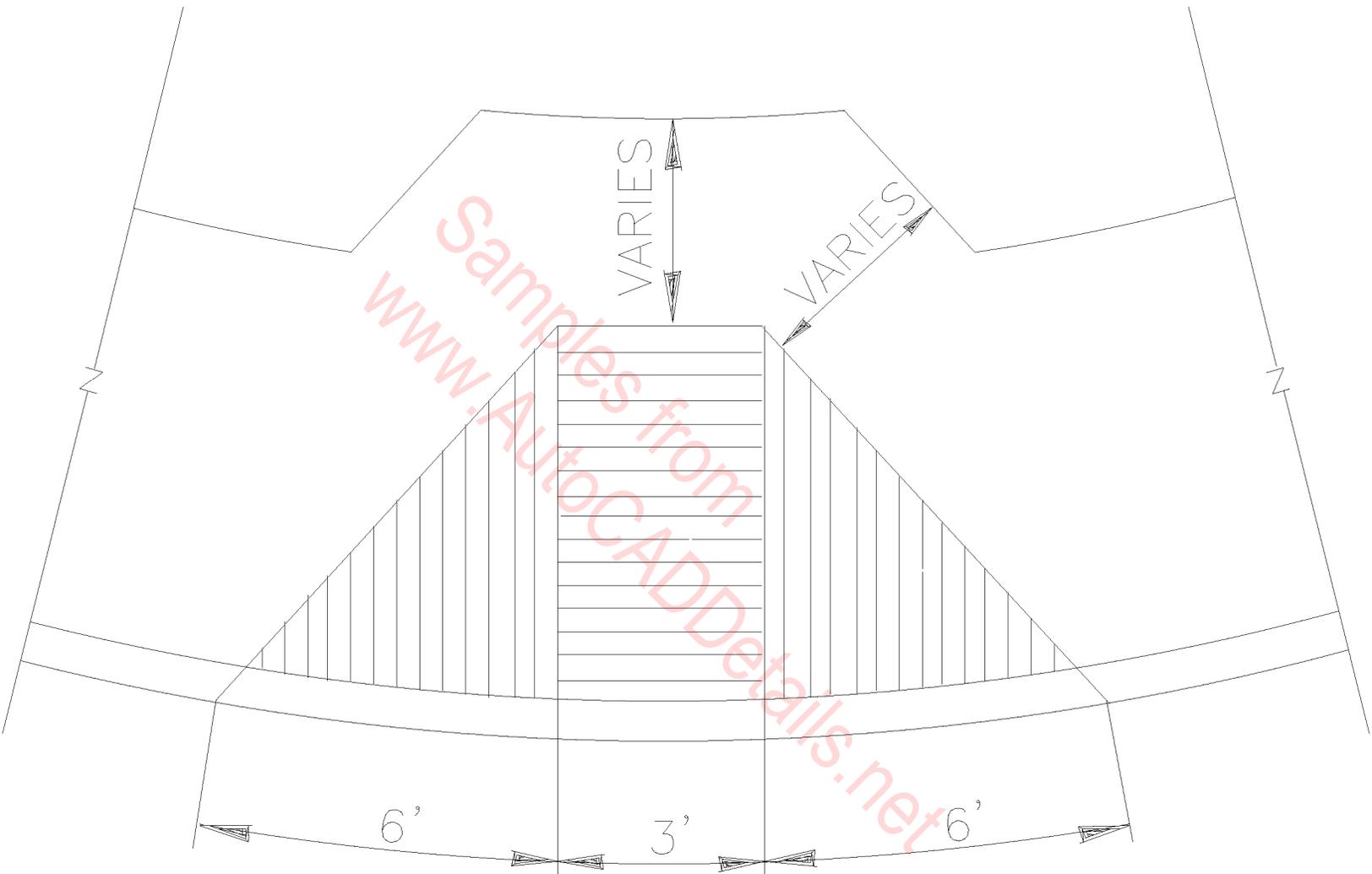
SCALE: 3/4" = 1' - 0"



CONCRETE SIDEWALK
N.T.S.

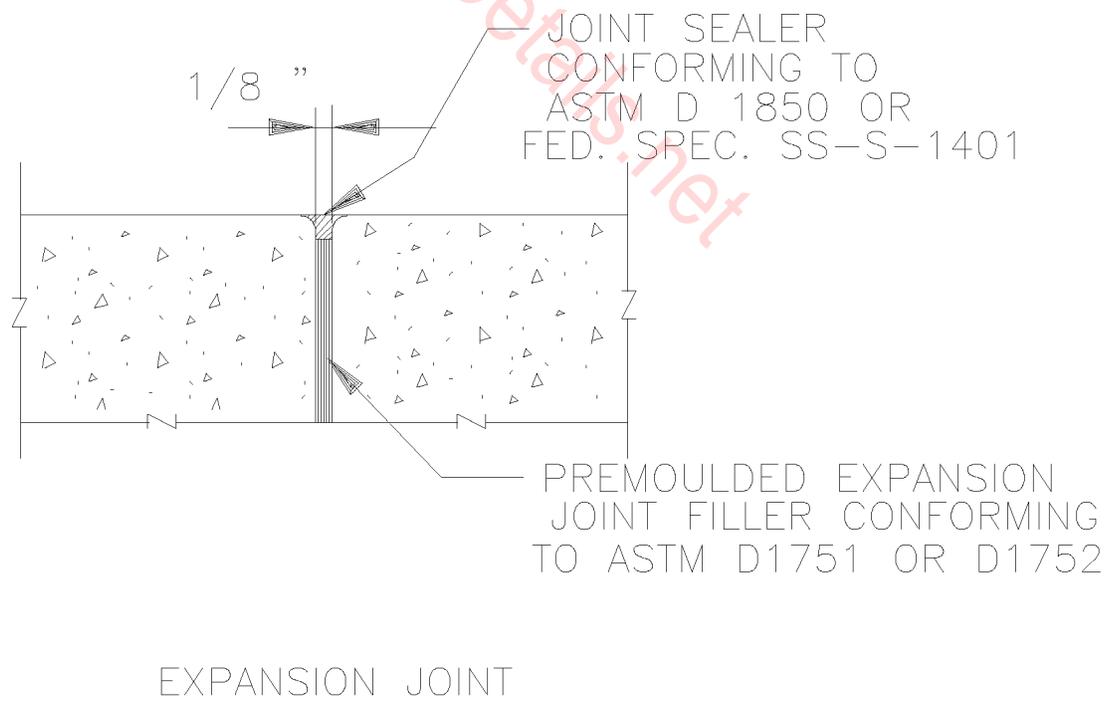
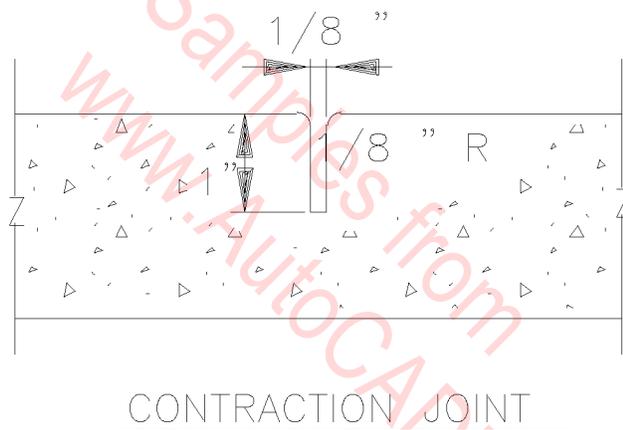
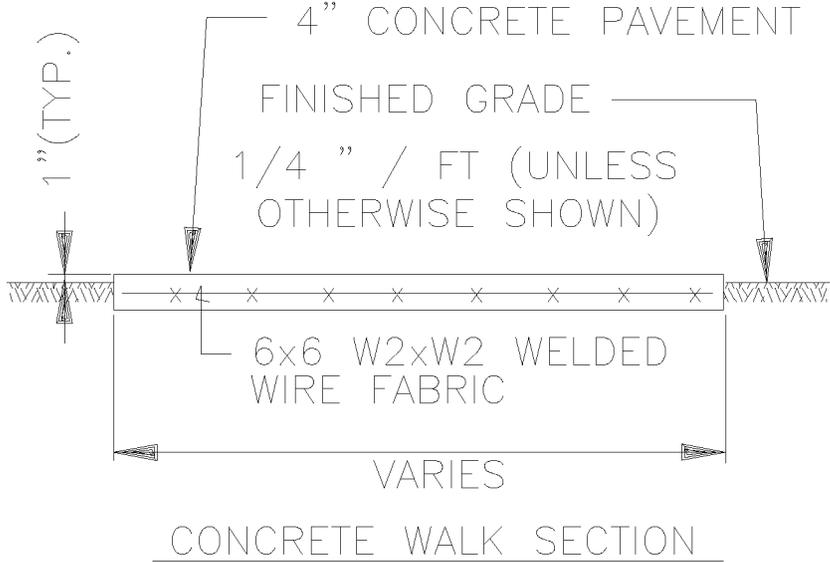


RAMP ON TANGENT
 N.T.S.

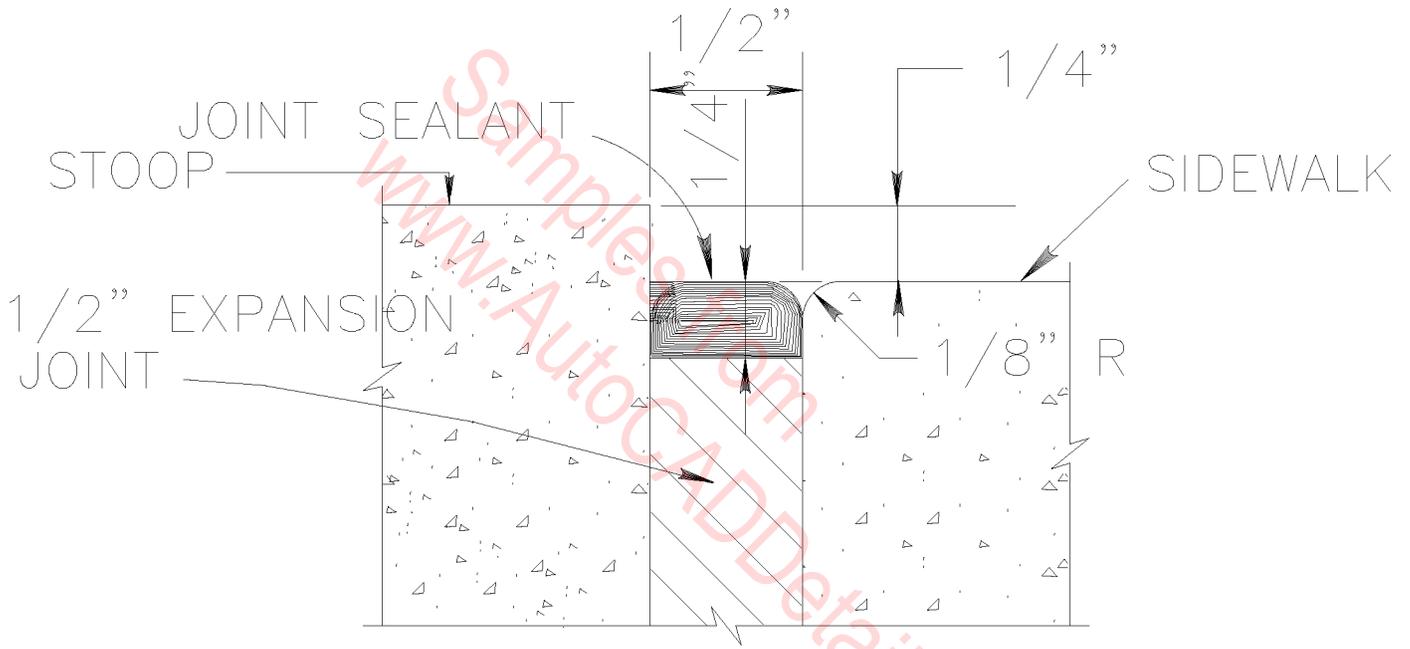


RAMP ON CURVE

N.T.S.

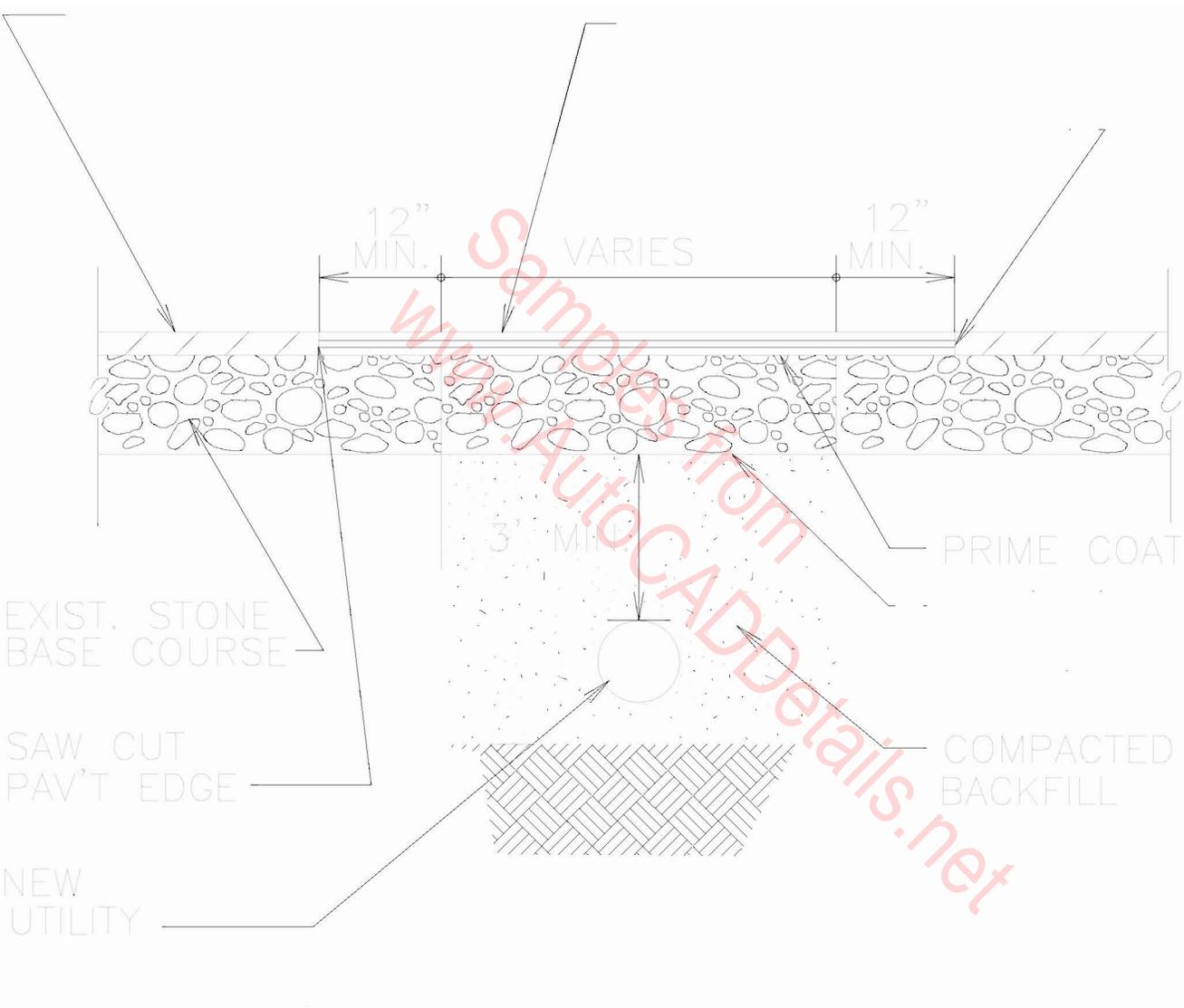


TYPICAL CONCRETE WALK DETAILS

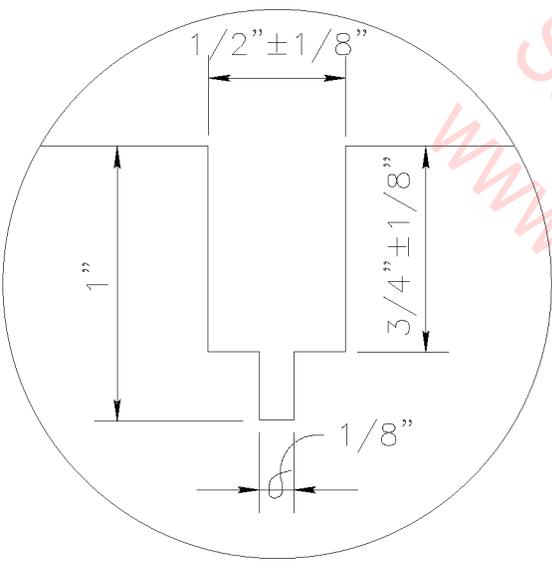


SIDEWALK — STOOP INTERFACE

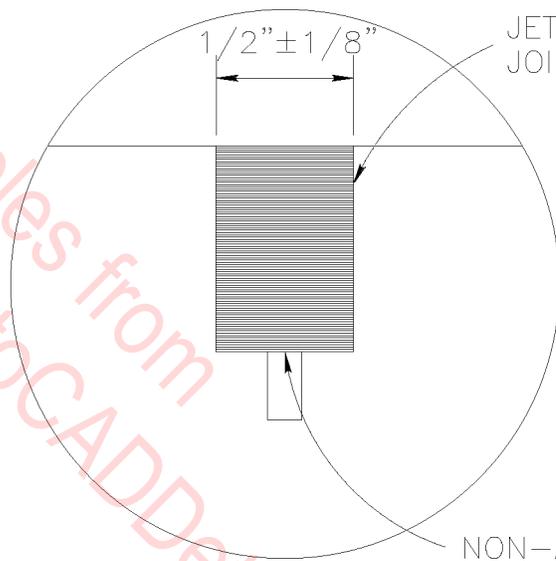
N.T.S.



N.T.S



SAWCUT



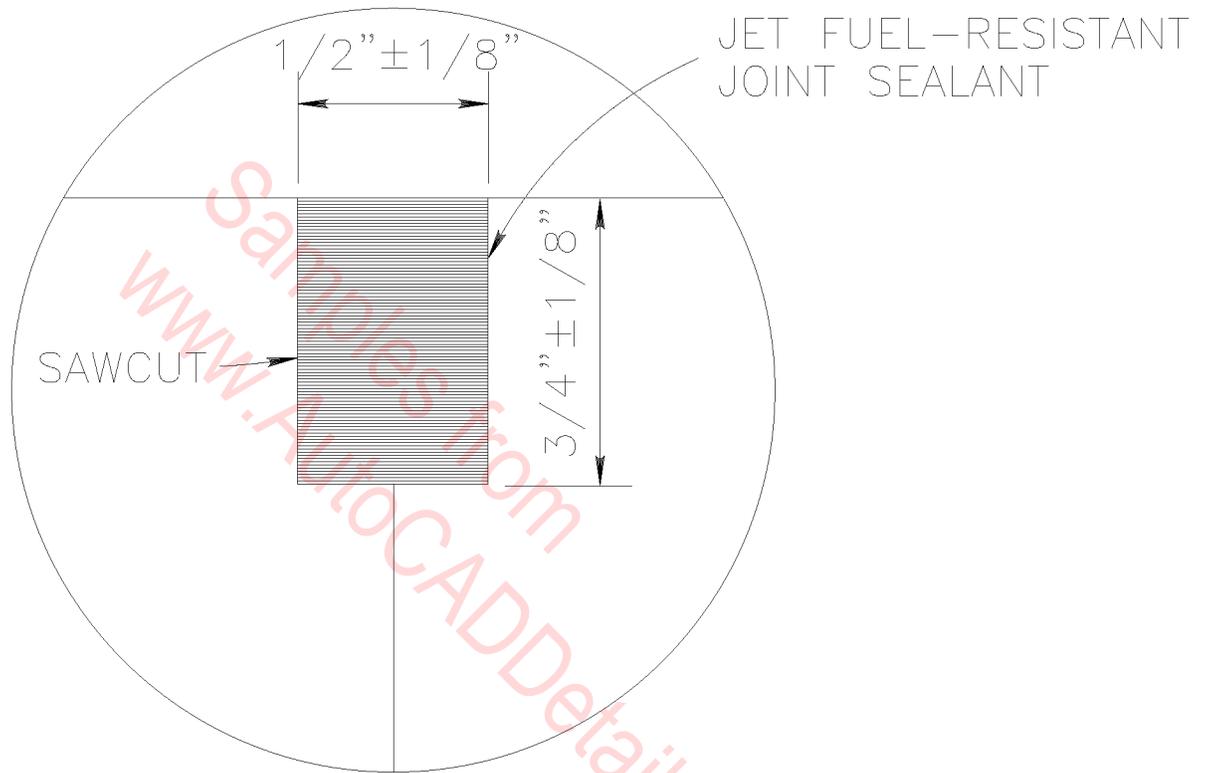
COMPLETED SAWCUT JOINT

JET FUEL-RESISTANT
JOINT SEALANT

NON-ABSORPTIVE MATERIAL
REQUIRED TO PREVENT JOINT
SEALANT FROM FLOWING
INTO SAWCUT

CONTRACTION JOINT DETAILS

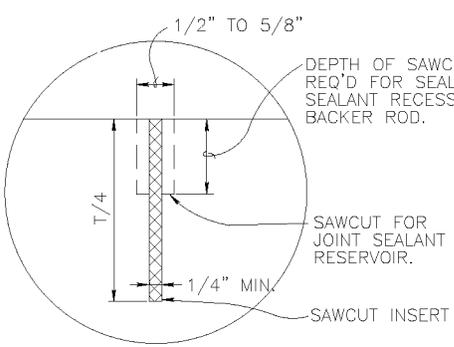
N.T.S.



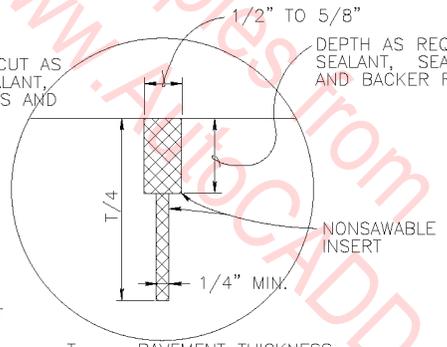
COMPLETED CONSTRUCTION JOINT SEALANT DETAIL

N.T.S.

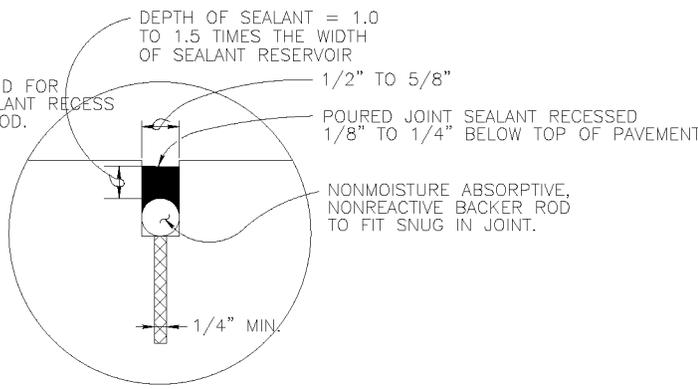
Samples from
www.ArchCADDetails.net



SAWABLE INSERT INSTALLATION

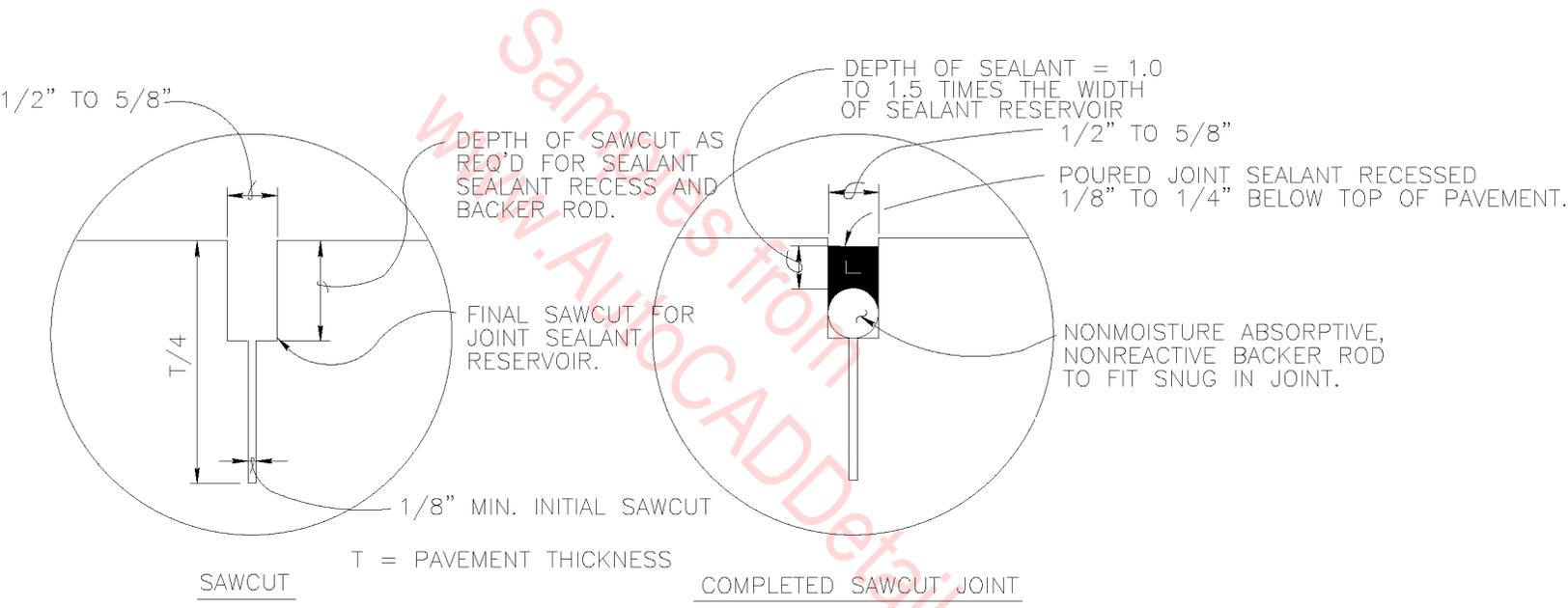


NONSAWABLE INSERT INSTALLATION



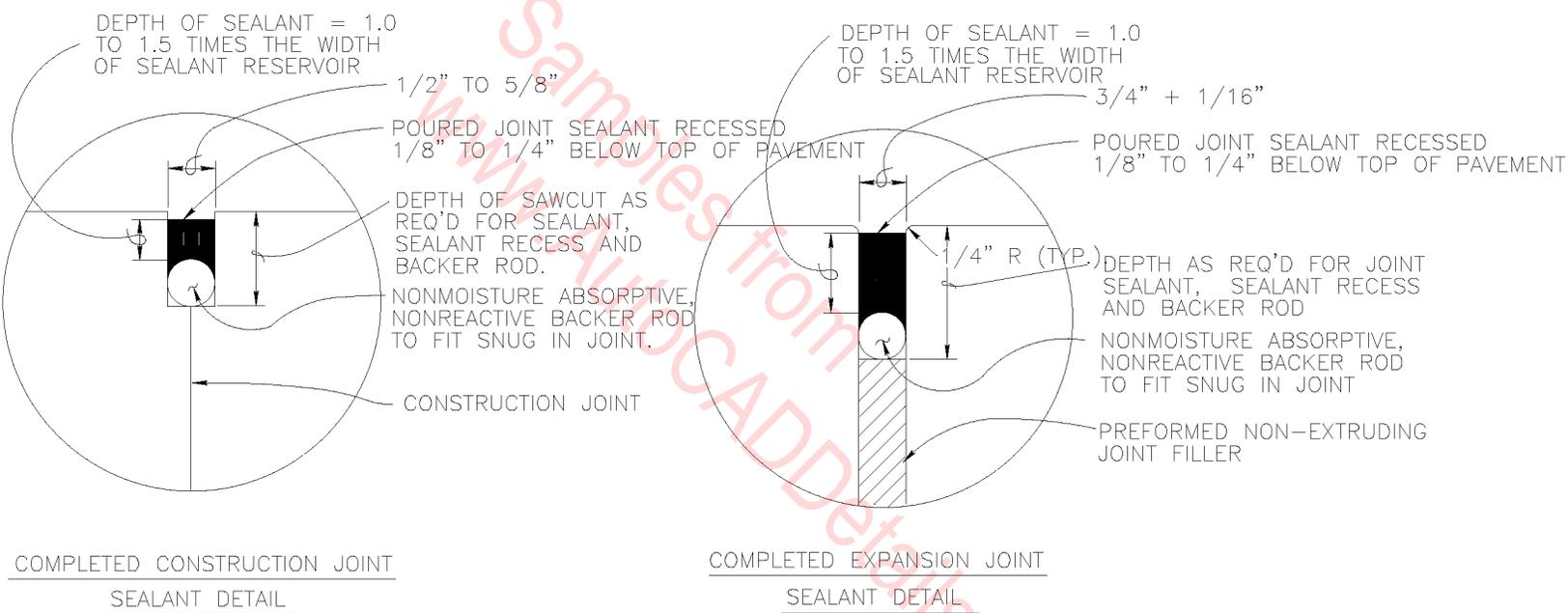
COMPLETED INSERT INSTALLATION

CONTRACTION JOINT SEALANT DETAILS (INSERT TYPE)
N.T.S.



CONTRACTION JOINT SEALANT DETAILS (SAWED TYPE)

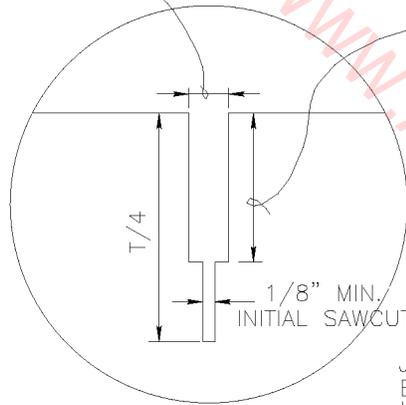
N.T.S.



POURED JOINT SEALANT DETAILS

N.T.S.

1/2" MIN. TO 5/8" MAX.

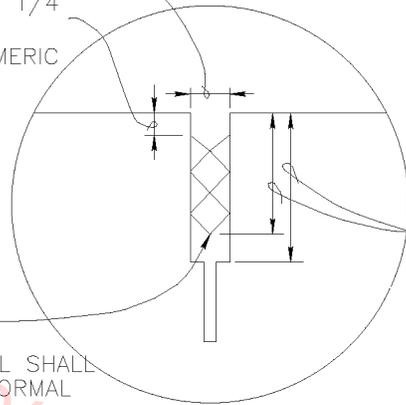


SAWCUT

1/2" MIN. TO 5/8" MAX.

1/8" TO 1/4"

FINAL SAWCUT DEPTH FOR PREFORMED ELASTOMERIC COMPRESSION SEAL AS RECOMMENDED BY JOINT SEAL MANUFACTURER



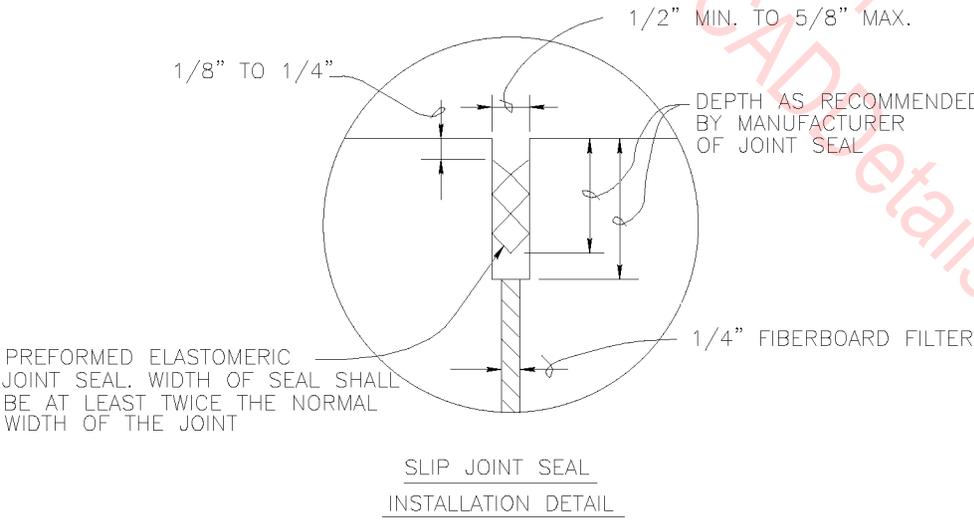
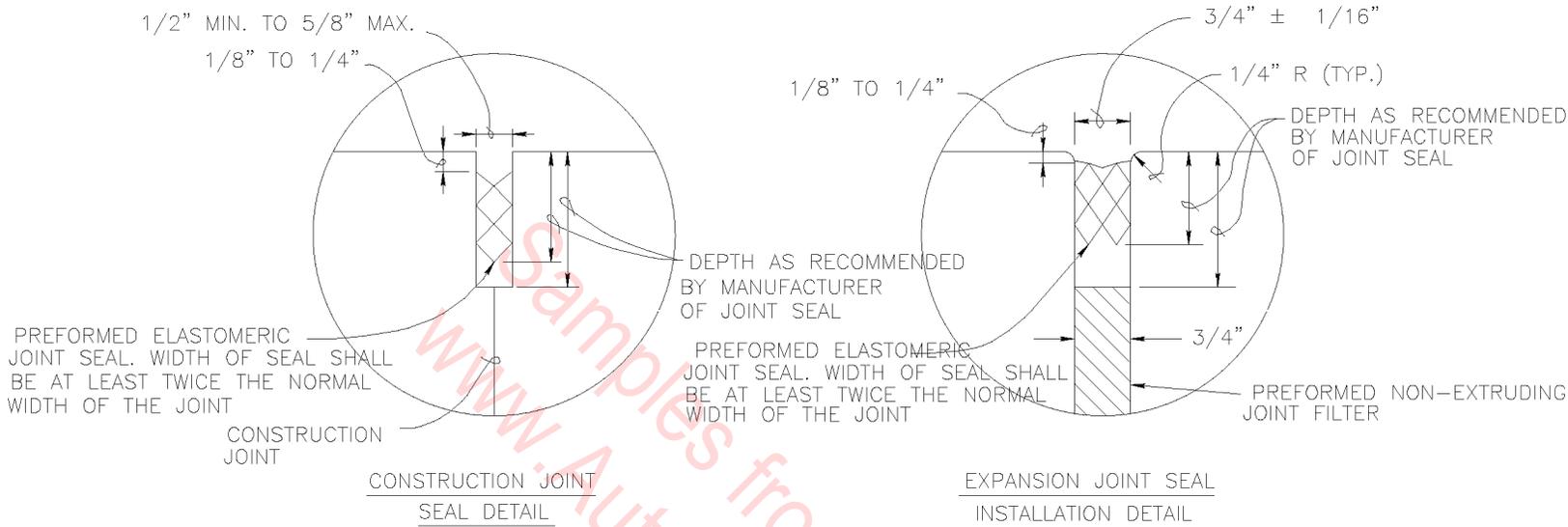
COMPLETED JOINT

DEPTH AS RECOMMENDED BY MANUFACTURER OF JOINT SEAL

PREFORMED ELASTOMERIC JOINT SEAL. WIDTH OF SEAL SHALL BE AT LEAST TWICE THE NORMAL WIDTH OF THE JOINT

CONTRACTION JOINT SEAL DETAILS (SAWED TYPE)

N.T.S.



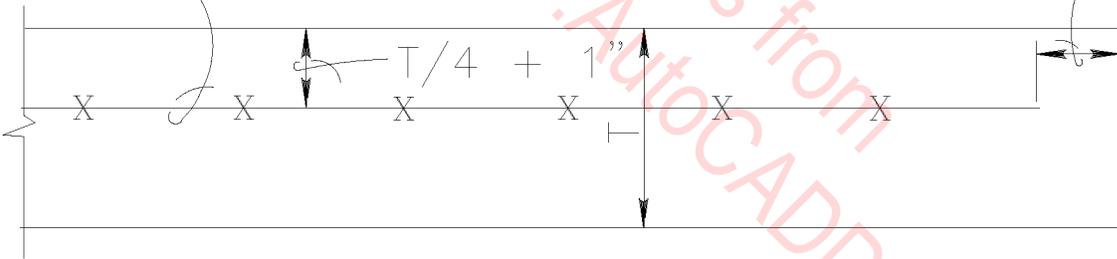
PREFORMED JOINT SEAL DETAILS

N.T.S.

REINFORCE SLABS MARKED "R"
ON JOINT PLAN WITH WELDED
STEEL WIRE FABRIC

1/2 WIRE SPACING
OR 3" MAX.

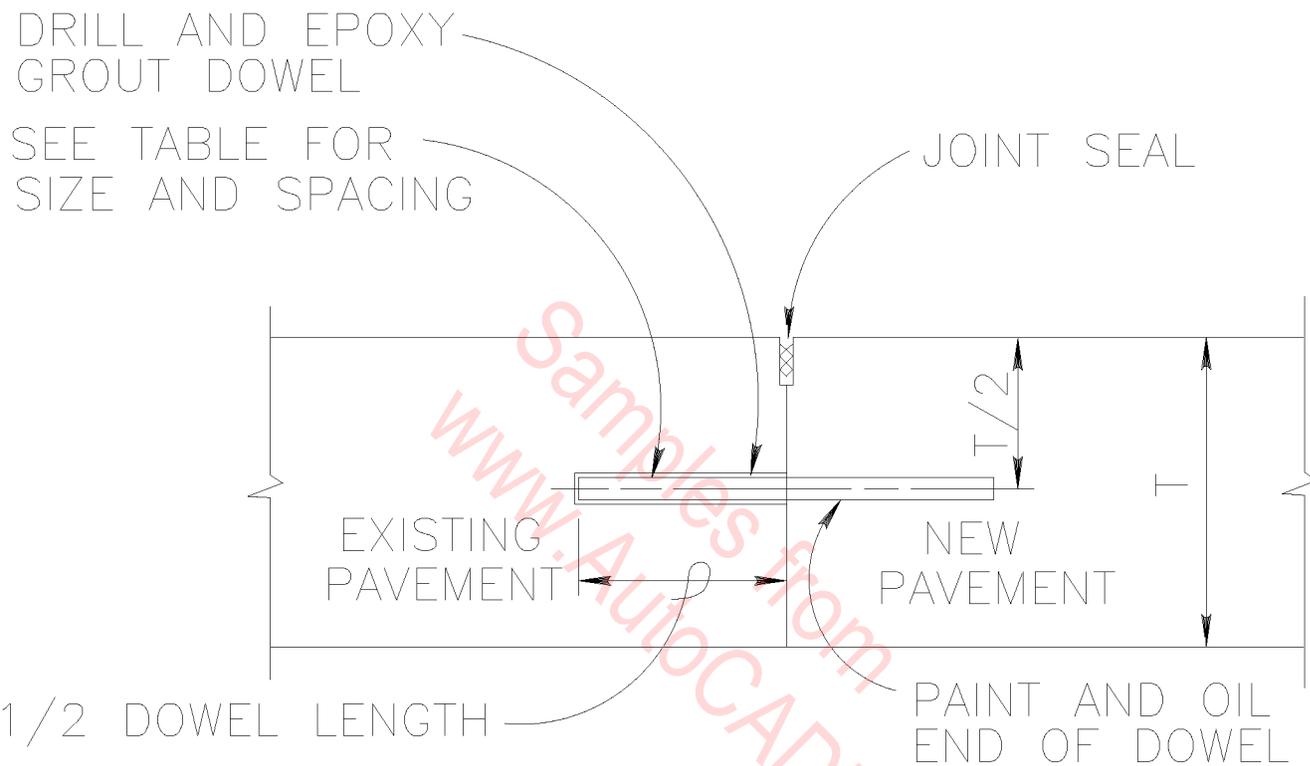
PAVEMENT JOINT
OR EDGE



T = PAVEMENT THICKNESS

SLAB REINFORCING DETAIL

N.T.S.



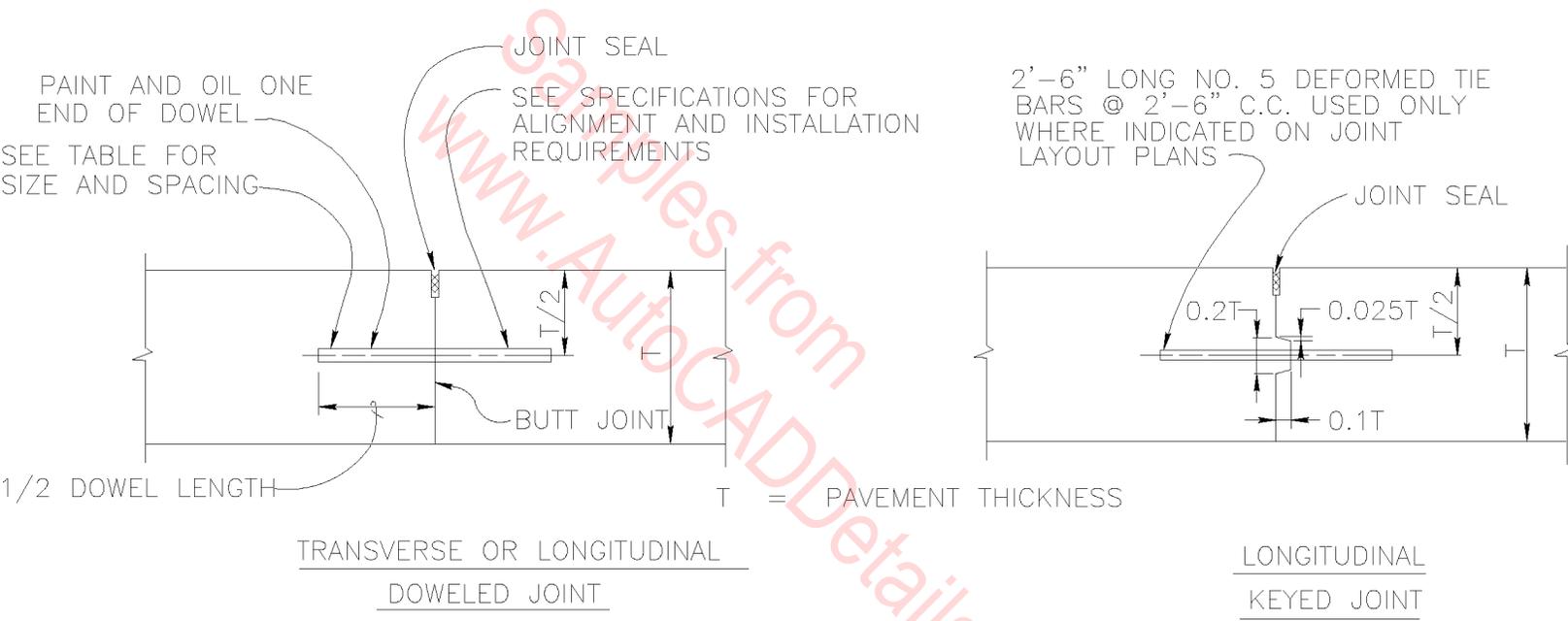
$T =$ PAVEMENT THICKNESS

DOWELED JOINT BETWEEN NEW AND EXISTING PAVEMENT

N.T.S.

NOTES:

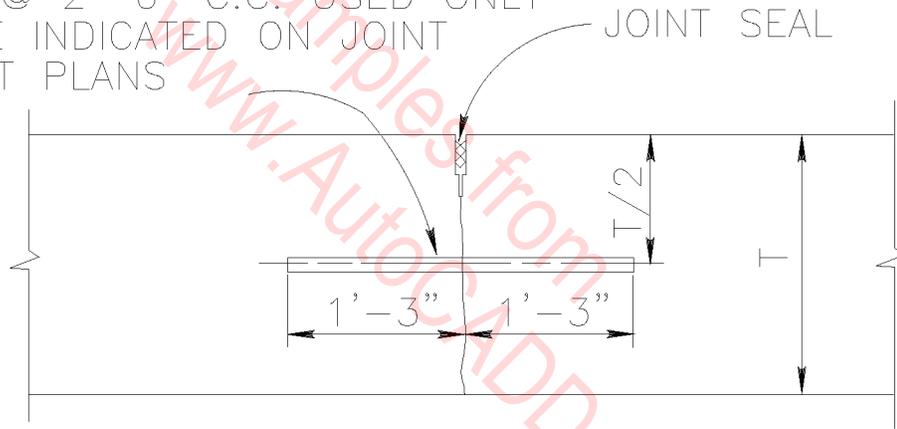
1. HOLES APPROXIMATELY $1/8$ INCH GREATER IN DIAMETER THAN THE DOWELS SHALL BE DRILLED IN THE EXISTING CONCRETE AND THE DOWELS SHALL BE BONDED IN THE DRILLED HOLES USING AN EPOXY RESIN GROUT.



CONSTRUCTION JOINT DETAILS

N.T.S.

2'-6" LONG NO. 5 DEFORMED TIE
BARS @ 2'-6" C.C. USED ONLY
WHERE INDICATED ON JOINT
LAYOUT PLANS

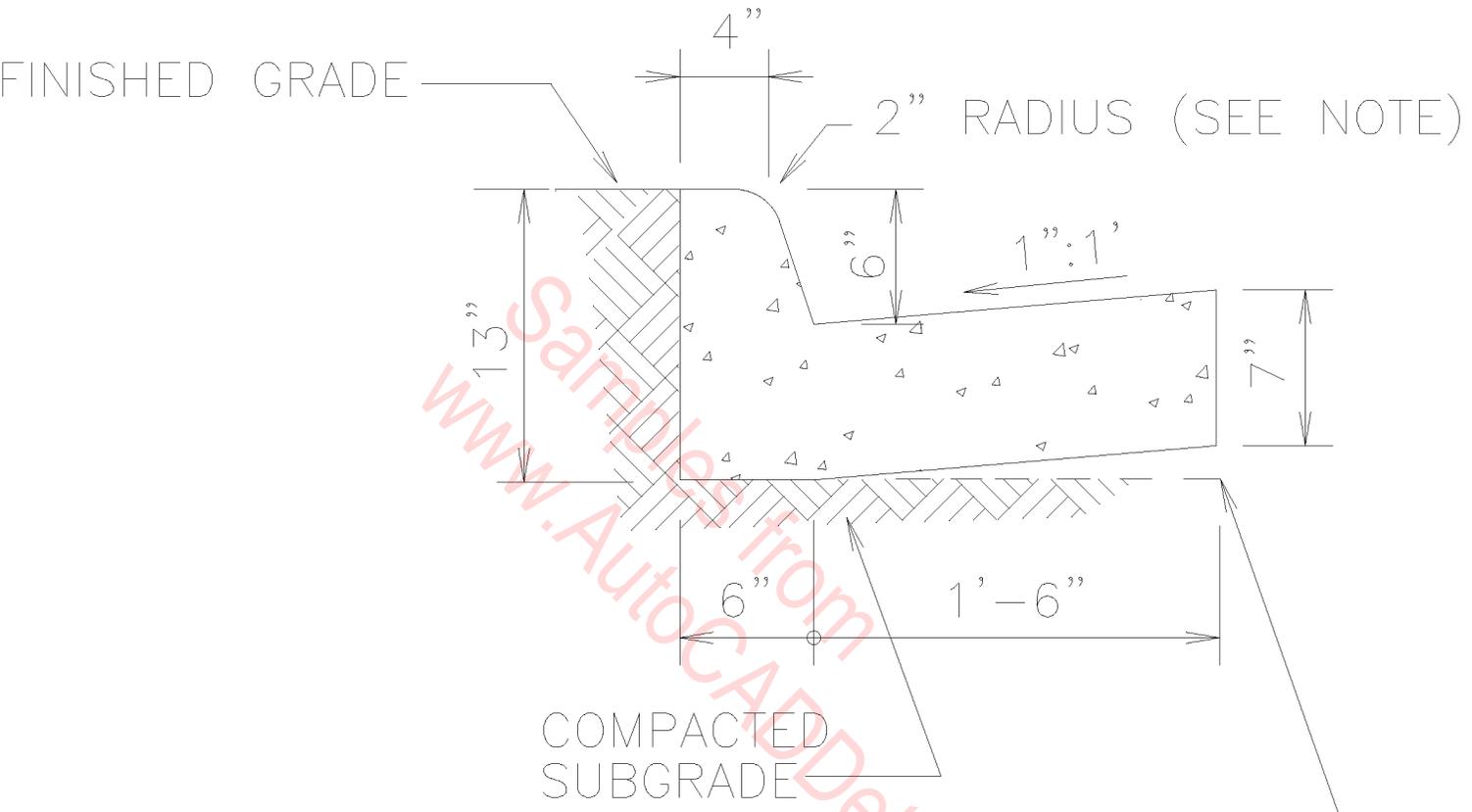


T = PAVEMENT THICKNESS

DUMMY GROOVE CONTRACTION JOINT

N.T.S.

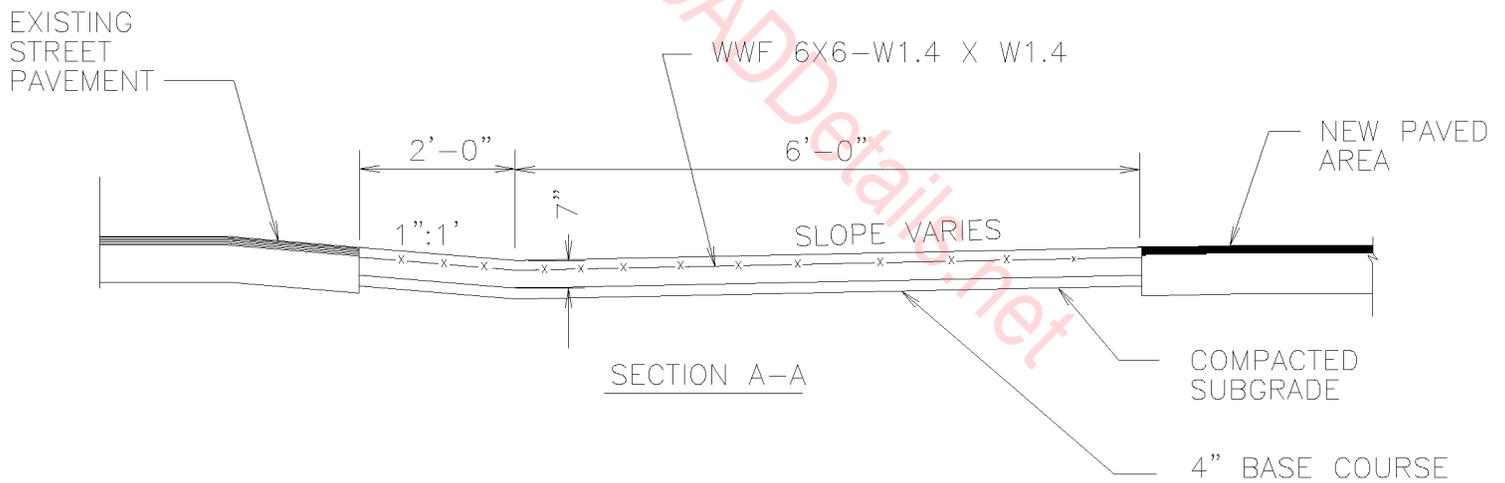
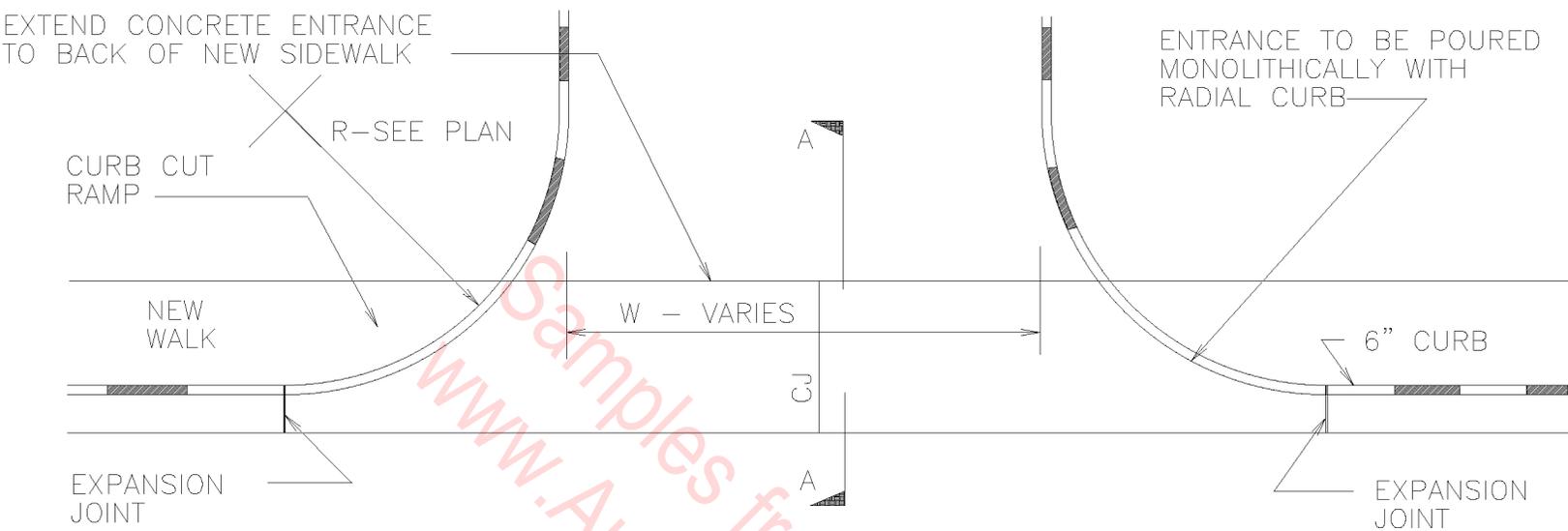
NOTE: STANDARD CURB SHAPE OF THE STATE IN WHICH THE PROJECT IS LOCATED MAY BE SUBSTITUTED.



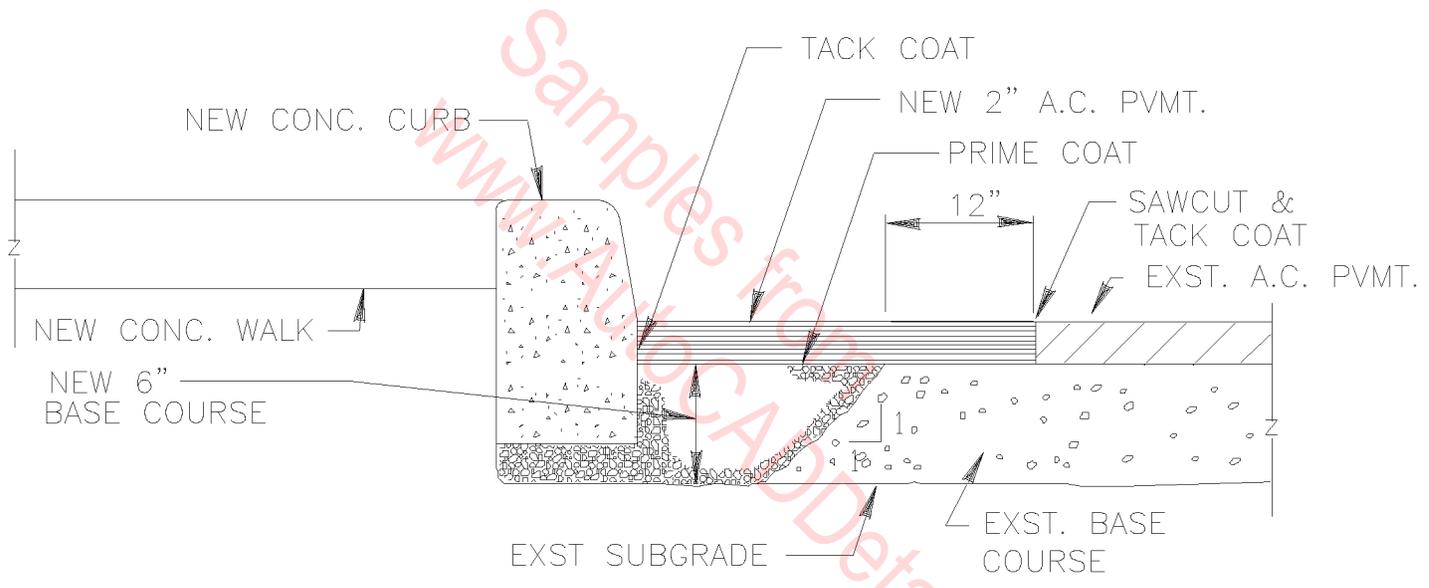
THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBSURFACE COURSES PROVIDED A MINIMUM THICKNESS OF 7" IS MAINTAINED.

CURB AND GUTTER

N.T.S.

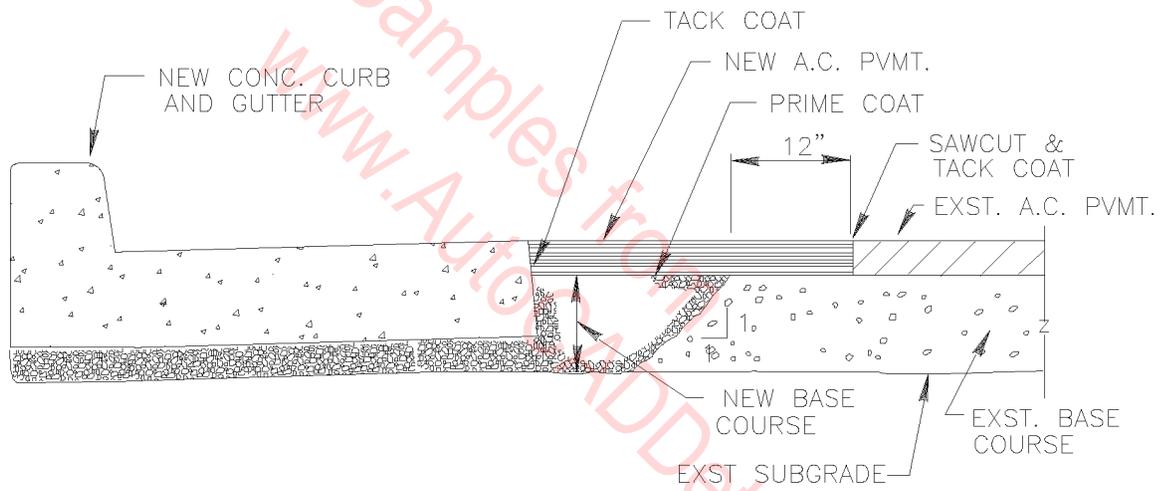


CONCRETE ENTRANCE
N.T.S.

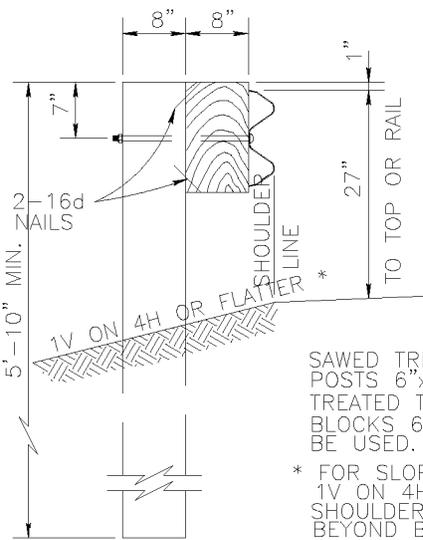


NEW A.C. PAVEMENT AT NEW CONCRETE CURB

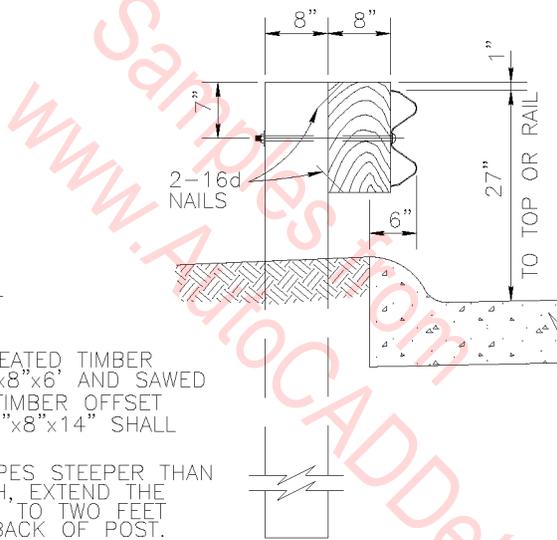
N.T.S.



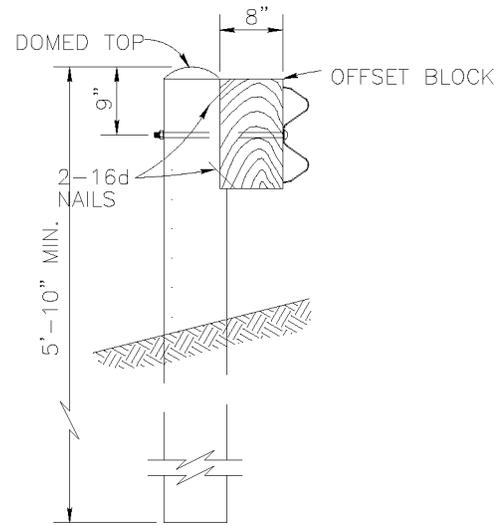
NEW A.C. PAVEMENT AT NEW CONCRETE CURB & GUTTER
 N.T.S.



NON-CURBED LOCATIONS



CURBED LOCATIONS



ALTERNATE ROUND WOOD POST

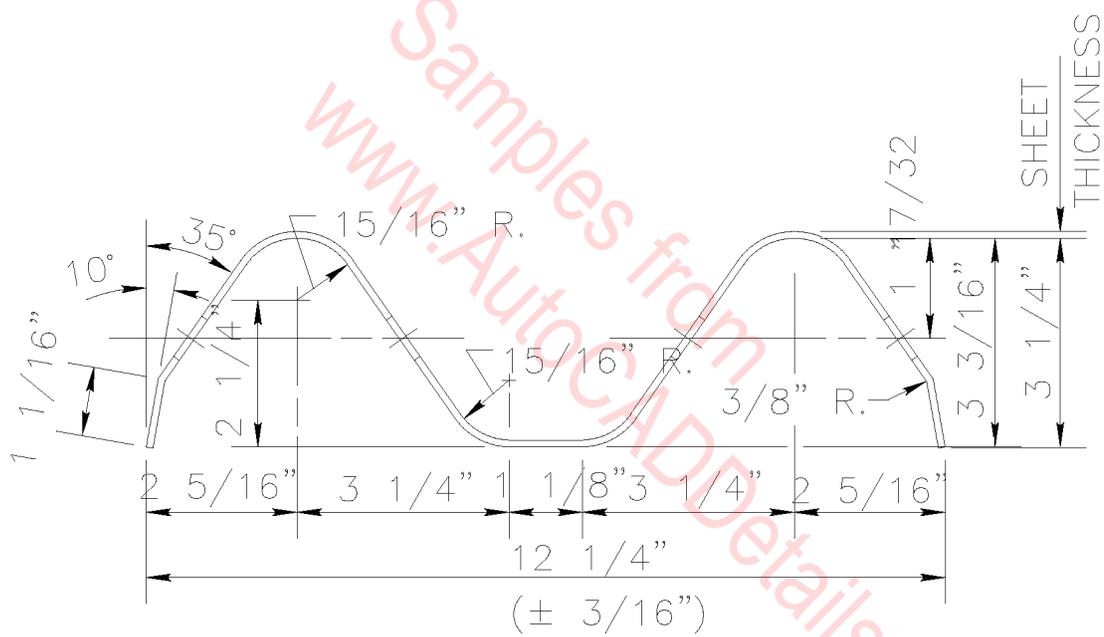
SAWED TREATED TIMBER POSTS 6"x8"x6', AND SAWED TREATED TIMBER OFFSET BLOCKS 6"x8"x14" SHALL BE USED.

* FOR SLOPES STEEPER THAN 1V ON 4H, EXTEND THE SHOULDER TO TWO FEET BEYOND BACK OF POST.

SAWN WOOD POST

GUARDRAIL POST DETAILS

N.T.S.



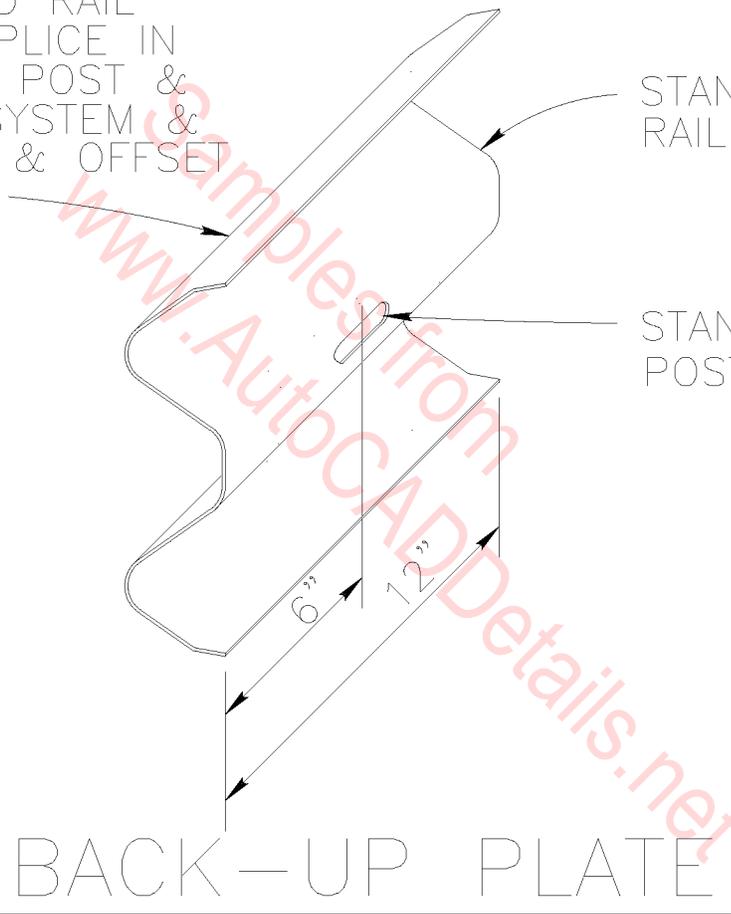
SECTION THRU SAFETY BEAM GUARDRAIL

N.T.S.

REQUIRED BEHIND RAIL
AT EACH NON-SPLICE IN
STEEL "H" BEAM POST &
OFFSET BLOCK SYSTEM &
STEEL "C" POST & OFFSET
BLOCK SYSTEM

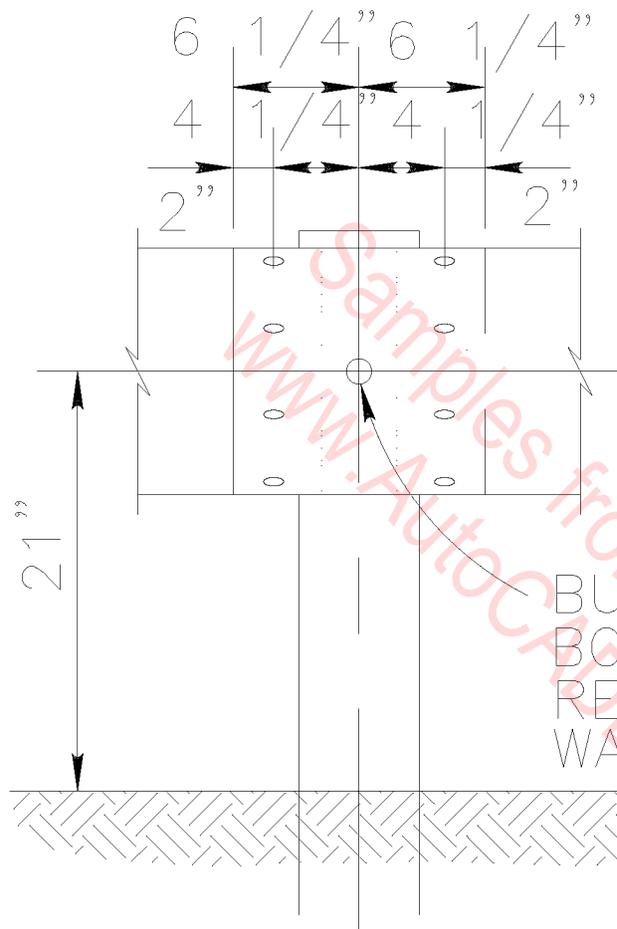
STANDARD W-BEAM
RAIL MATERIAL

STANDARD 3/4" x 2 1/2"
POST BOLT SLOT



BACK-UP PLATE

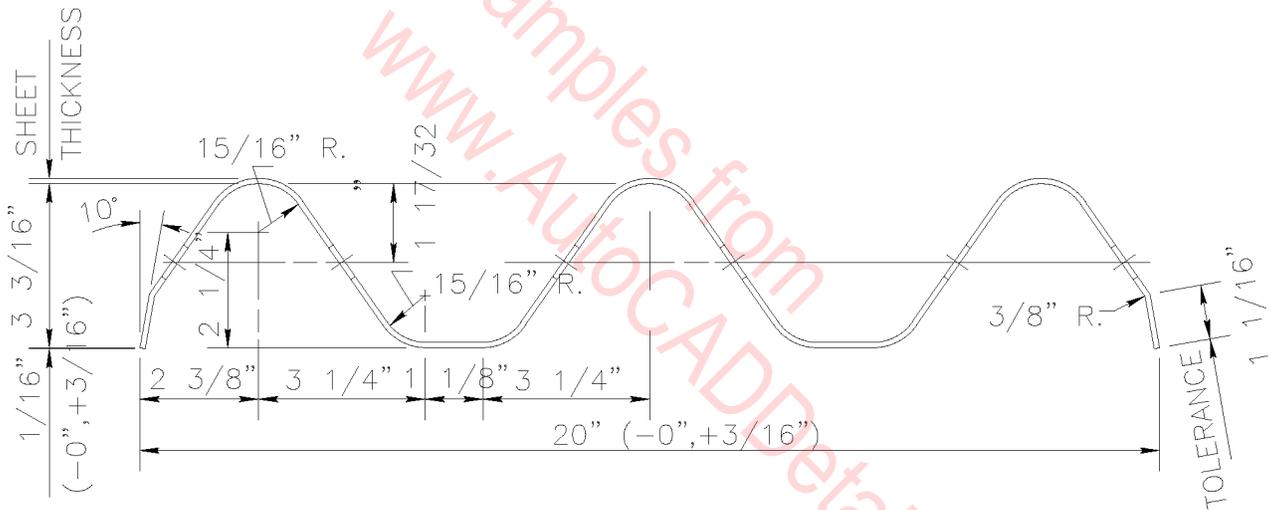
N.T.S.



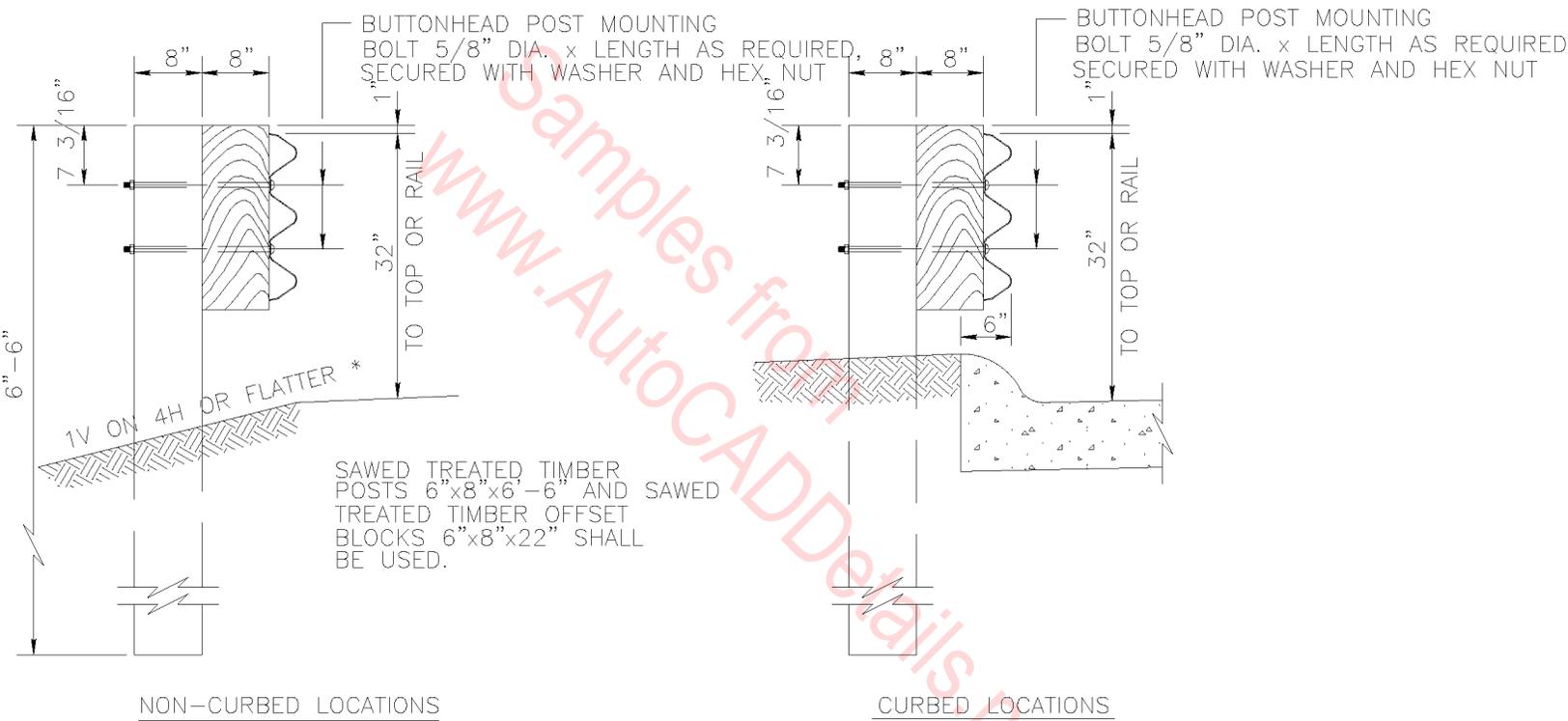
BUTTONHEAD POST MOUNTING
 BOLT 5/8" DIA. x LENGTH AS
 REQUIRED, SECURED WITH
 WASHER AND NUT

RAIL ELEMENT SPLICING AND POST MOUNTING

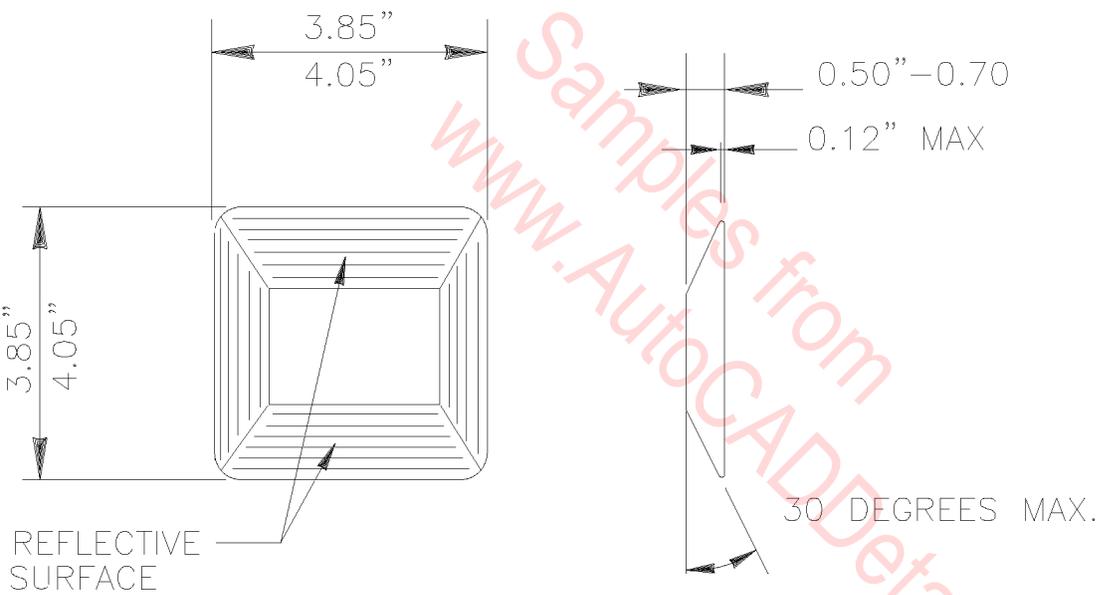
N.T.S.



SECTION THRU SAFETY BEAM GUARDRAIL, TYPE "C"
 N.T.S.



SAWN WOOD POST
 N.T.S.

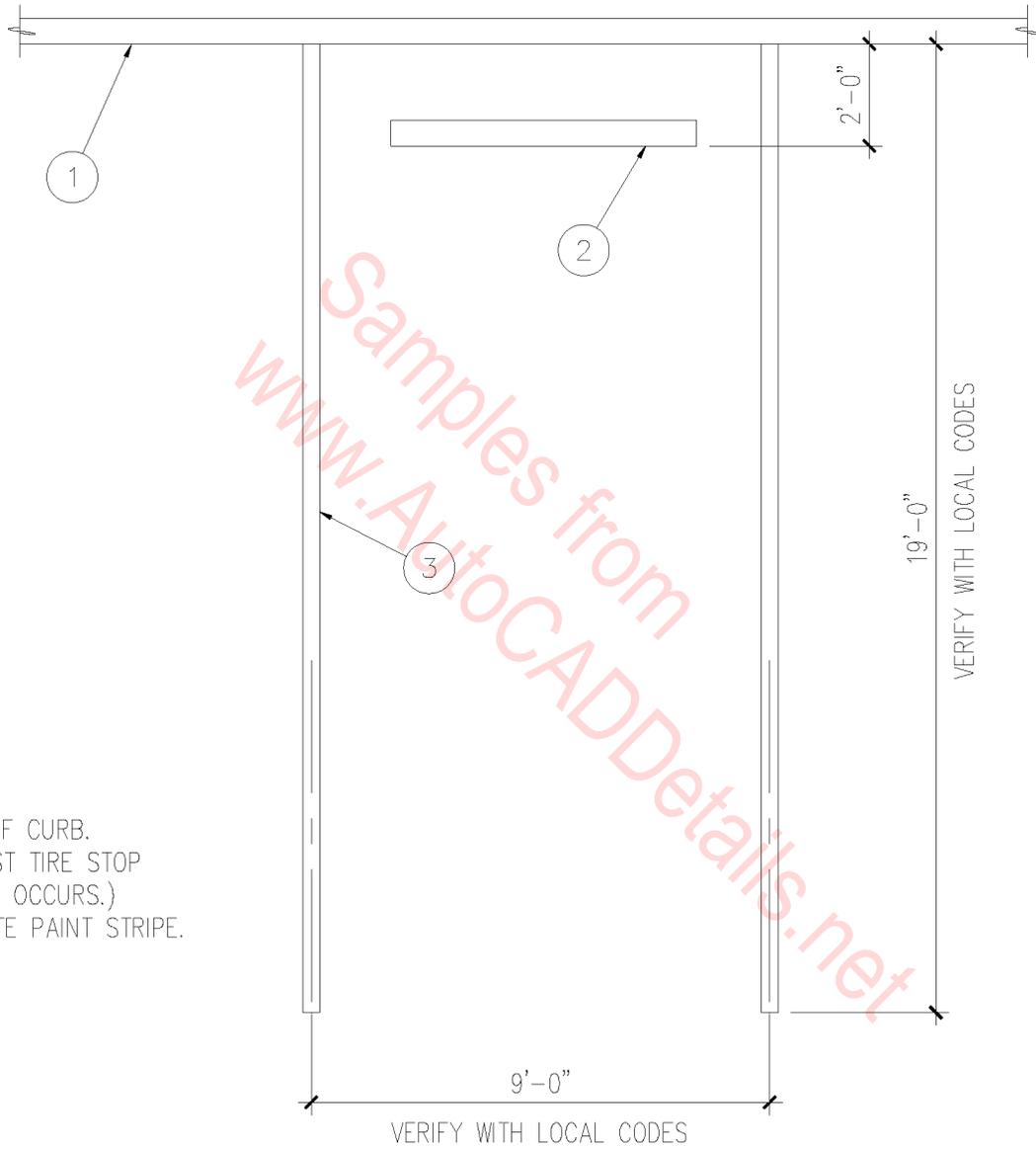


NOTE:

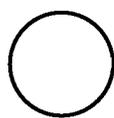
PAVEMENT MARKER AND
ADHESIVE EPOXY SHALL
CONFORM TO ASTM D 4280.

TWO-WAY REFLECTIVE RAISED
PAVEMENT MARKER DETAIL

N.T.S.



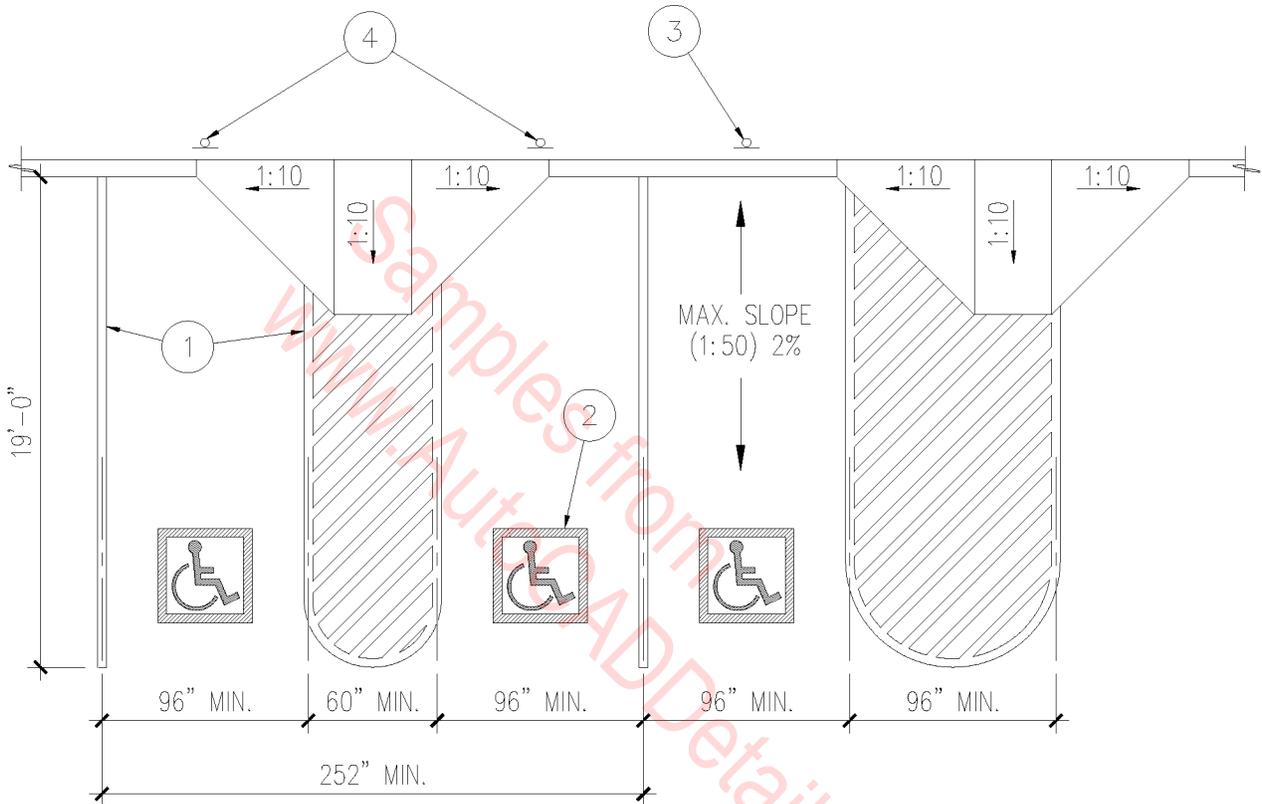
- 1. FACE OF CURB.
- 2. PRECAST TIRE STOP
(WHERE OCCURS.)
- 3. 4" WHITE PAINT STRIPE.



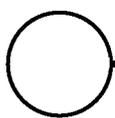
PARKING STALL

SCALE: 1/4" = 1'-0"

02B-2001



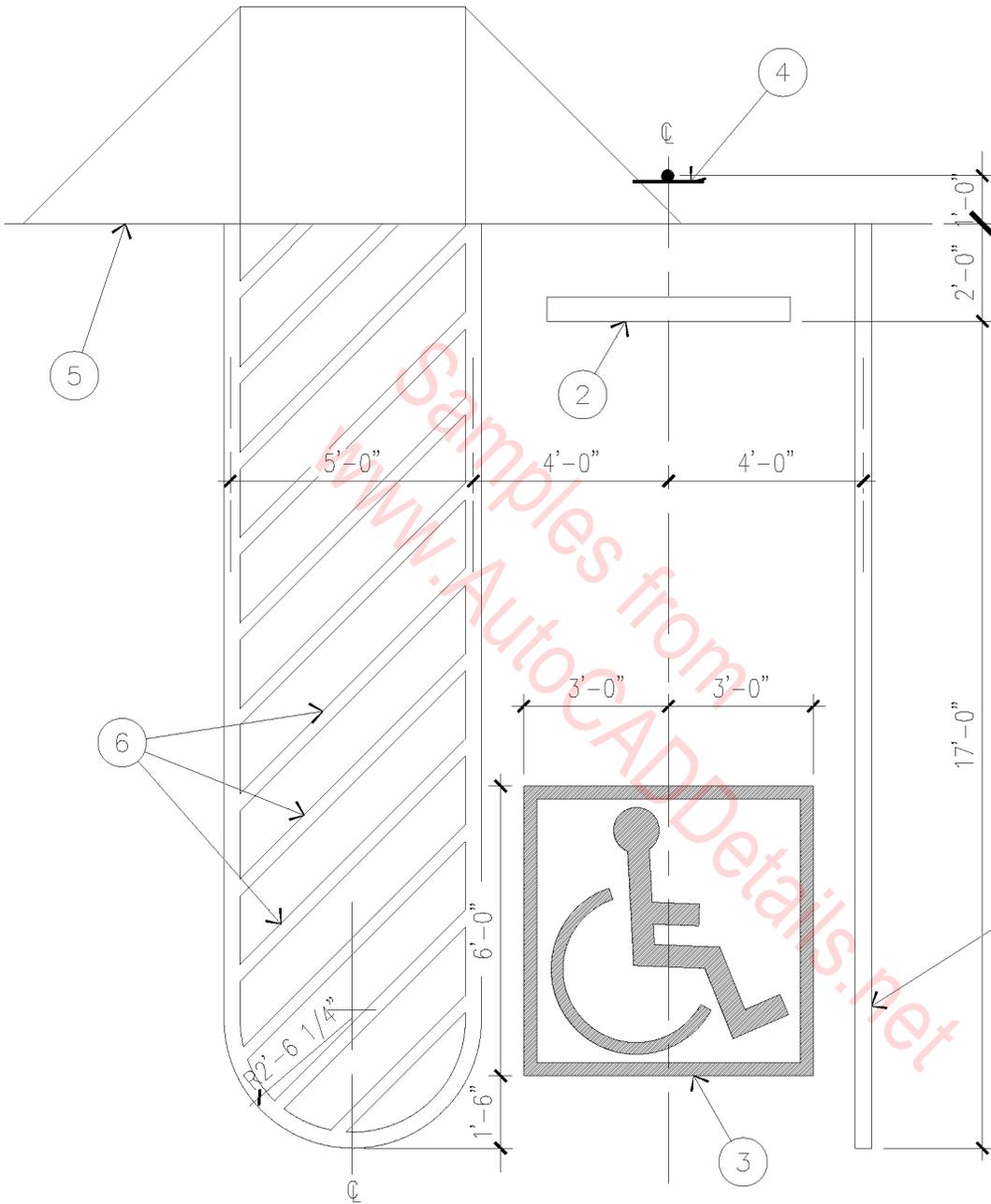
1. 4" PAINTED LINES.
2. DISABLED SYMBOL - WHITE ON BLUE BACKGROUND.
3. VAN ACCESSIBLE PARKING SIGNS.
4. ACCESSIBLE PARKING SIGNS.



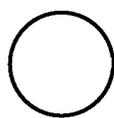
ACCESSIBLE STALLS

1/8" = 1'-0"

02B-2002



1. 4" WHITE PAINT STRIPE.
2. PRECAST CONCRETE CAR BUMPER.
3. HANDICAP SYMBOL PAINTED ON PAVING.
4. HANDICAP PARKING SIGN POST.
5. CONCRETE CURB.
6. 4" WHITE PAINT STRIPES @ 45 DEG. ANGLE @ 24" O.C.



ACCESSIBLE STALL

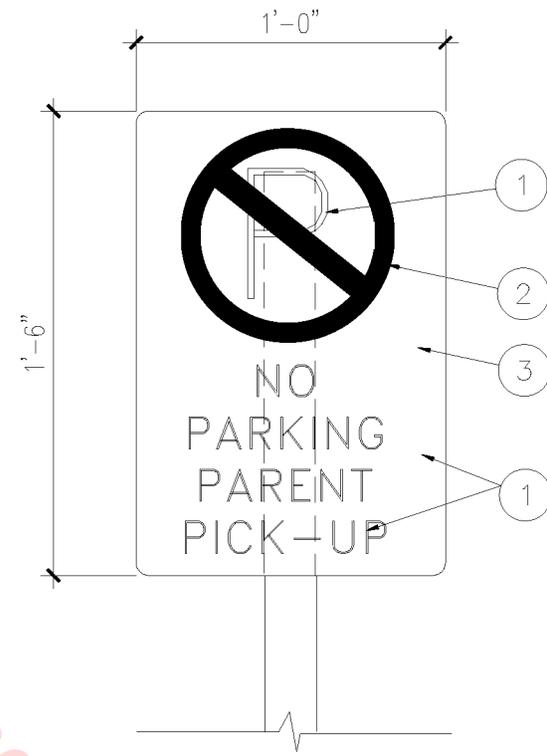
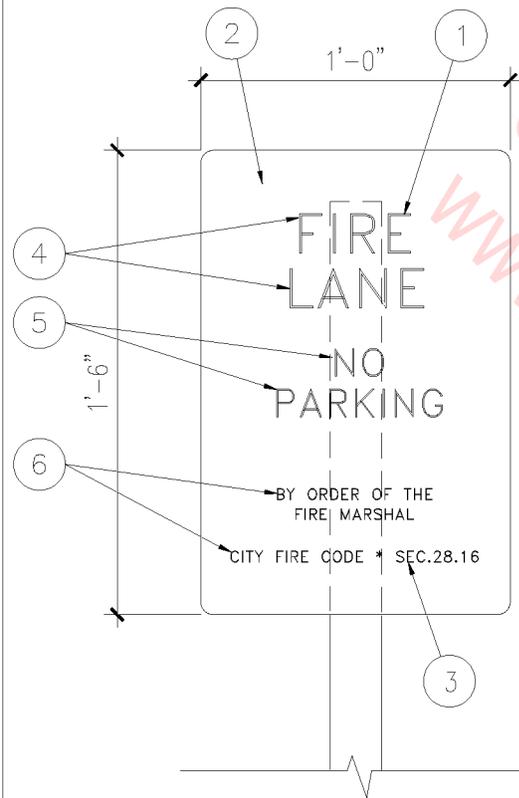
1/4" = 1'-0"

02B-2003

1. RED LETTERS.
2. WHITE BACKGROUND
3. ORDINANCE NO.
VERIFY WITH CITY.
4. 2" LETTERS.
5. 1 1/2" LETTERS.
6. 3/4" LETTERS.

1. BLUE.
2. WHITE.
3. ORDINANCE NO.
VERIFY WITH CITY.

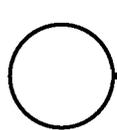
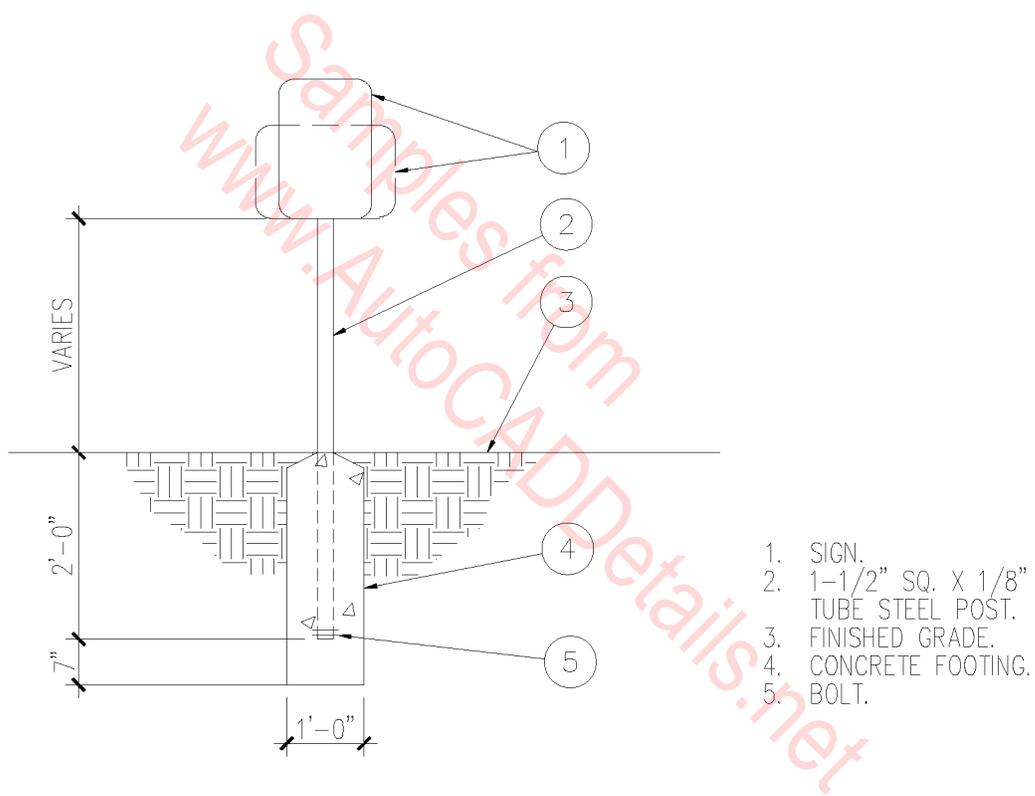
1. BLACK.
2. RED.
3. WHITE.



TYPICAL PARKING SIGN ELEVATIONS

SCALE: 1-1/2" = 1'-0"

02B-1001

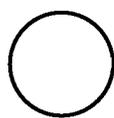


TYPICAL PARKING SIGN

SCALE: 3/8" = 1'-0"

02B-1002

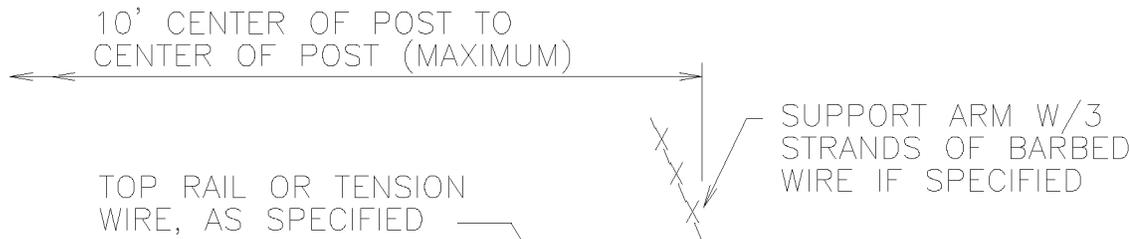
1. ADDITIONAL SIGN ONLY REQUIRED AT VAN ACCESSIBLE SPACES.
2. VERIFY WITH LOCAL CONDITIONS.
3. VERIFY SIZE, COLOR, WORDING, ETC. WITH TRAFFIC ENGINEERING DEPARTMENT



ACCESSIBILITY SIGN

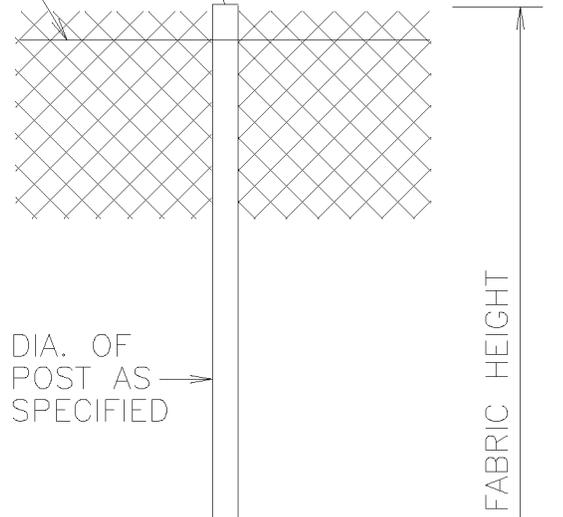
1/2" = 1'-0"

02B-1003



GATE POST

GATE LEAF WIDTH	GATE POST (OD)	FABRIC HEIGHT	"A" DIAM	"B" DEPTH	"C" POST EMBED.
3' TO 6'	2.875"	3' TO 5'	12"	38"	36"
		6' TO 9'	14"	42"	40"
		10' TO 12'	16"	46"	44"
7' TO 12'	4.000"	3' TO 5'	14"	38"	36"
		6' TO 9'	16"	42"	40"
		10' TO 12'	18"	46"	44"
13'	6.625"	8'-0"	16"	42"	40"



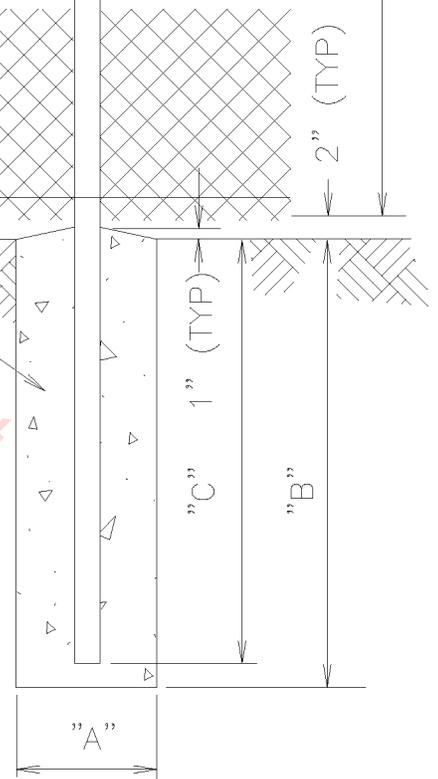
BOTTOM RAIL OR TENSION WIRE, AS SPECIFIED

GRADE

CONCRETE FOOTING

LINE AND TERMINAL POSTS

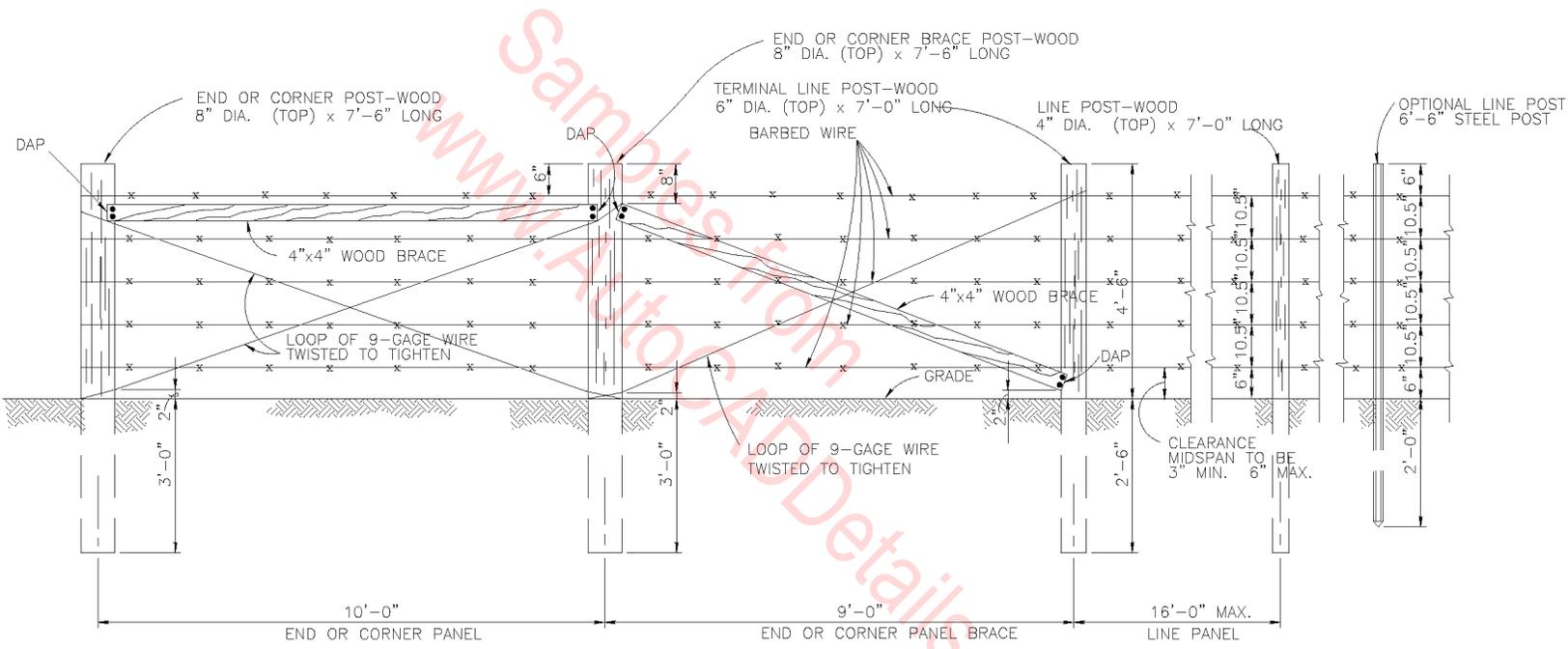
FABRIC HEIGHT	TYPE POST	"A" DIAM	"B" DEPTH	"C" POST EMBEDMENT
3'-0" TO 4'-0"	LINE	6"	26"	24"
	TERMINAL	10"	32"	30"
5'-0"	LINE	8"	32"	30"
	TERMINAL	10"	32"	30"
6'-0" TO 9'-0"	LINE	12"	38"	36"
	TERMINAL	12"	38"	36"
10'-0" TO 12'-0"	LINE	18"	38"	36"
	TERMINAL	18"	38"	36"
13'-0" TO 18'-0"	LINE	24"	42"	40"
	TERMINAL	24"	42"	40"



NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND PULL POSTS

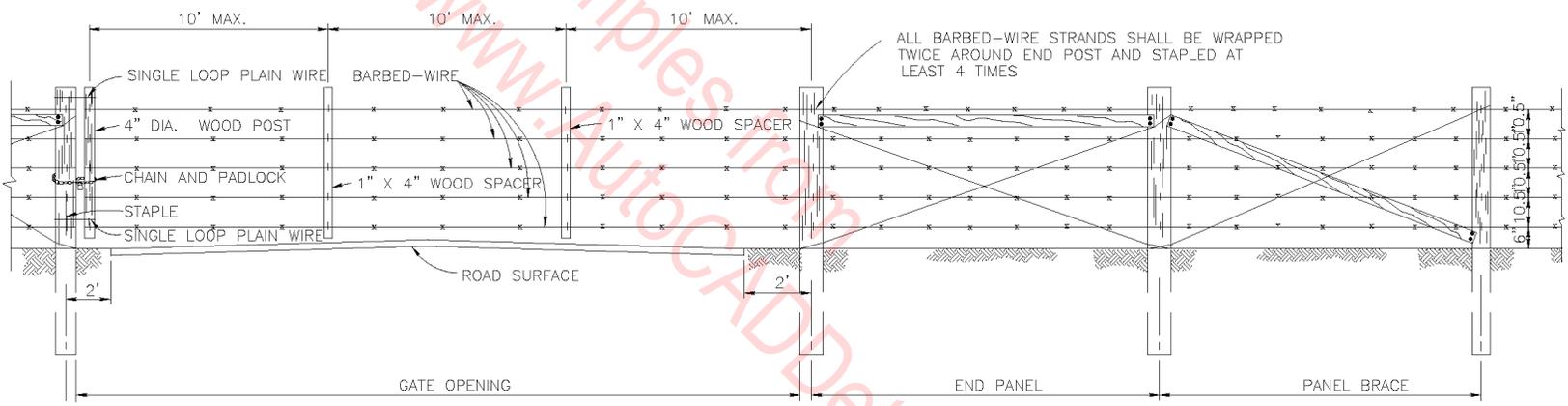
CHAIN LINK FENCE FOUNDATION

N.T.S.



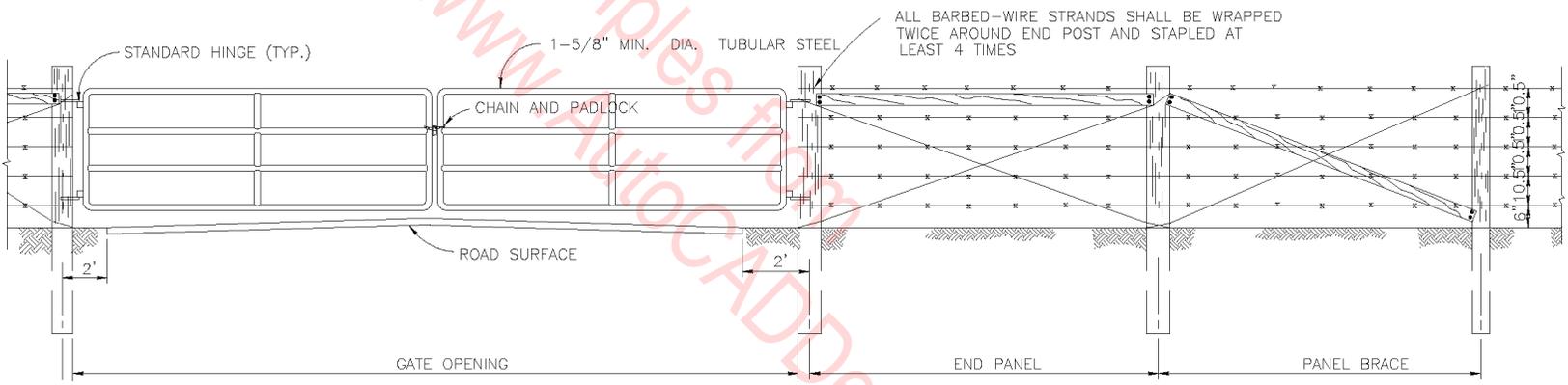
TYPICAL LAYOUT-5 STRAND BARBED-WIRE FENCE

N.T.S.



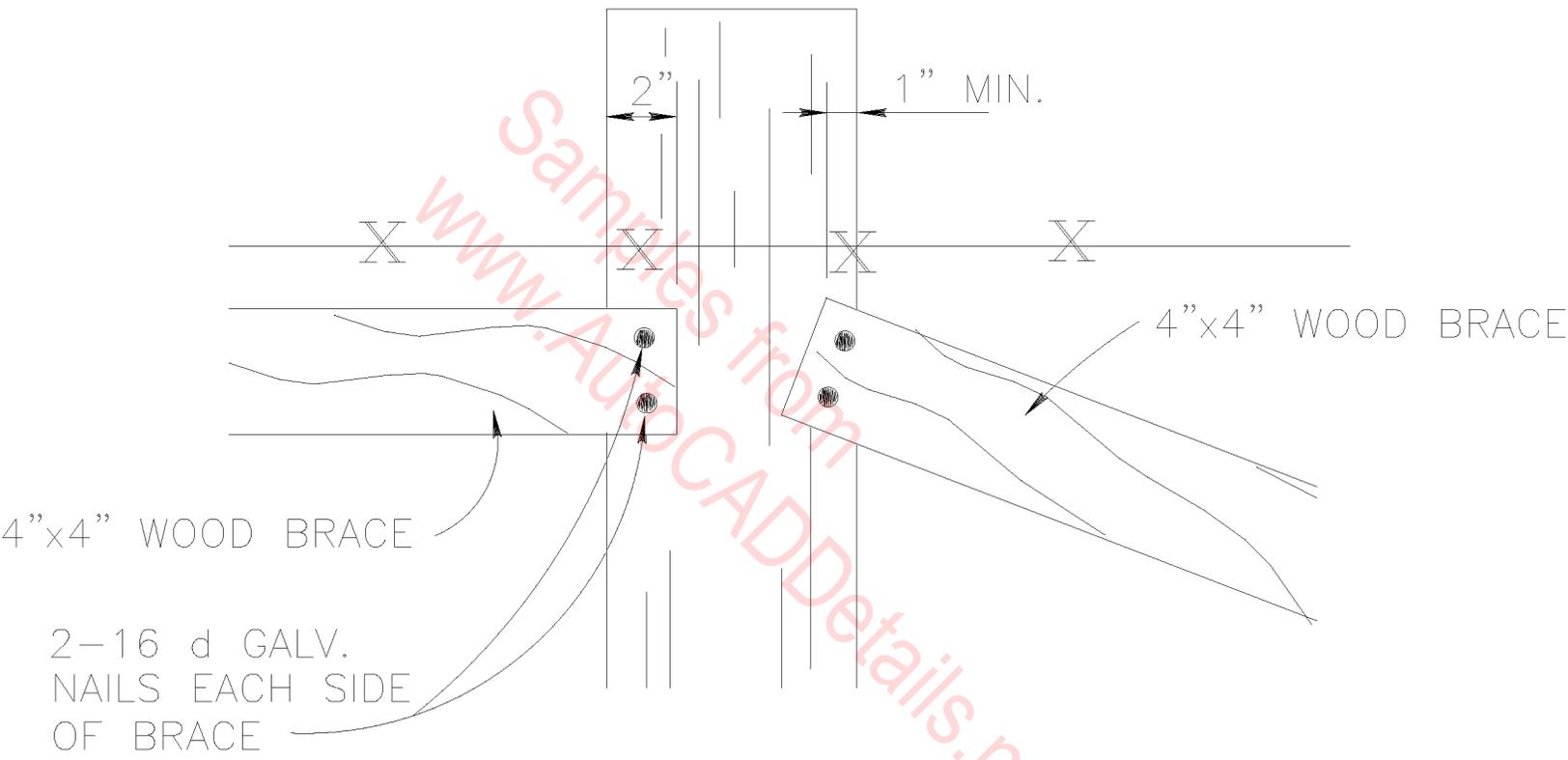
TYPICAL BARBED-WIRE DROP GATE DETAIL

N.T.S.



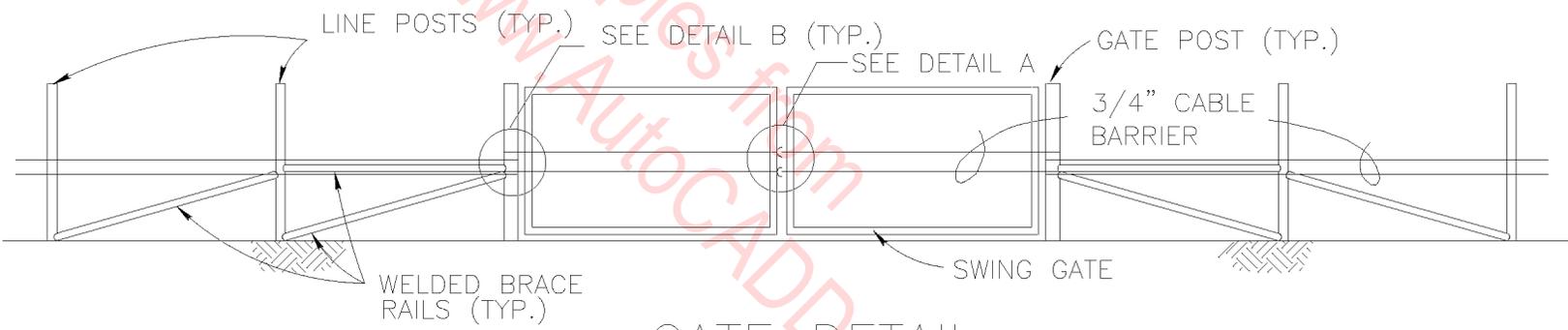
TYPICAL PANEL GATE DETAIL

N.T.S.



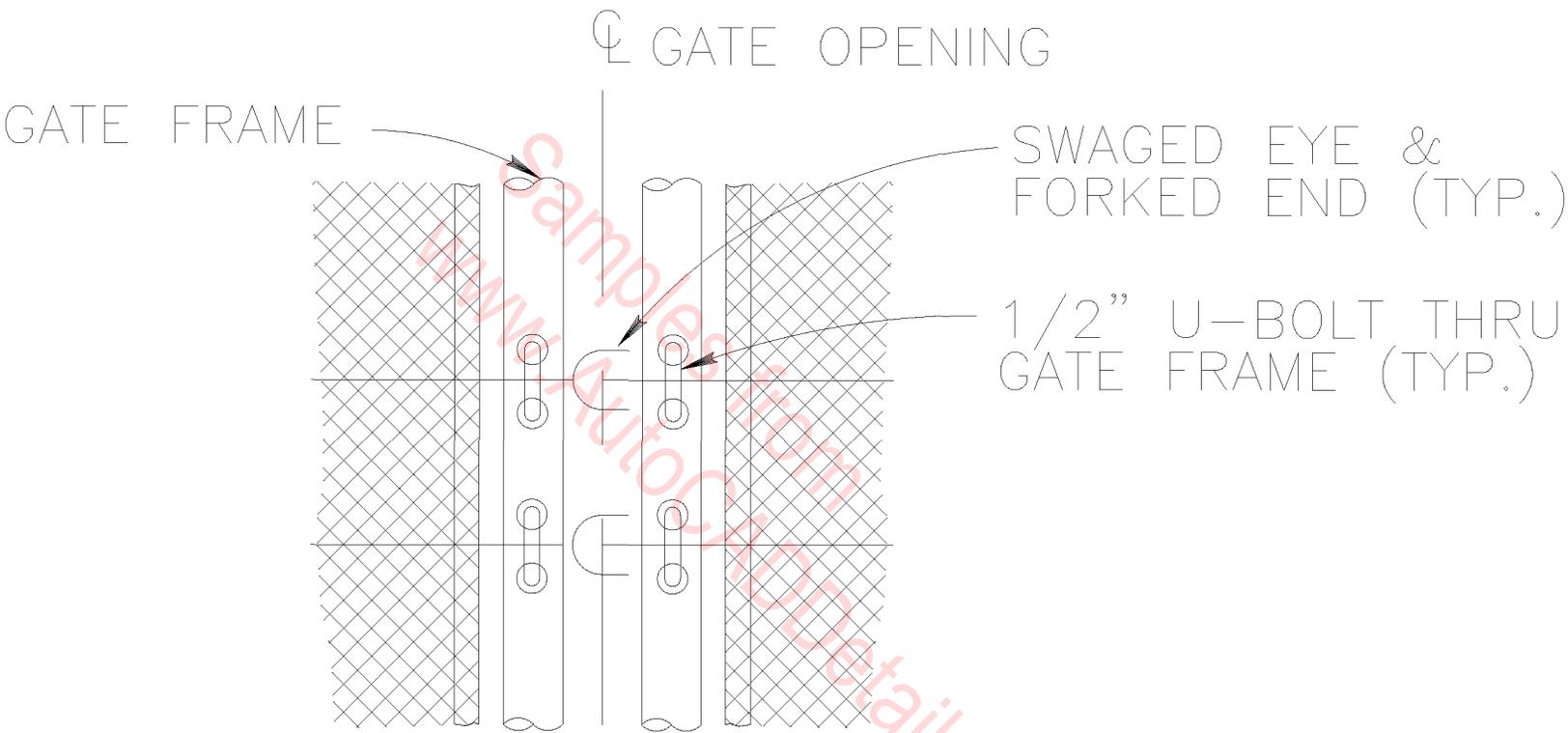
DAP DETAIL

N.T.S.



GATE DETAIL

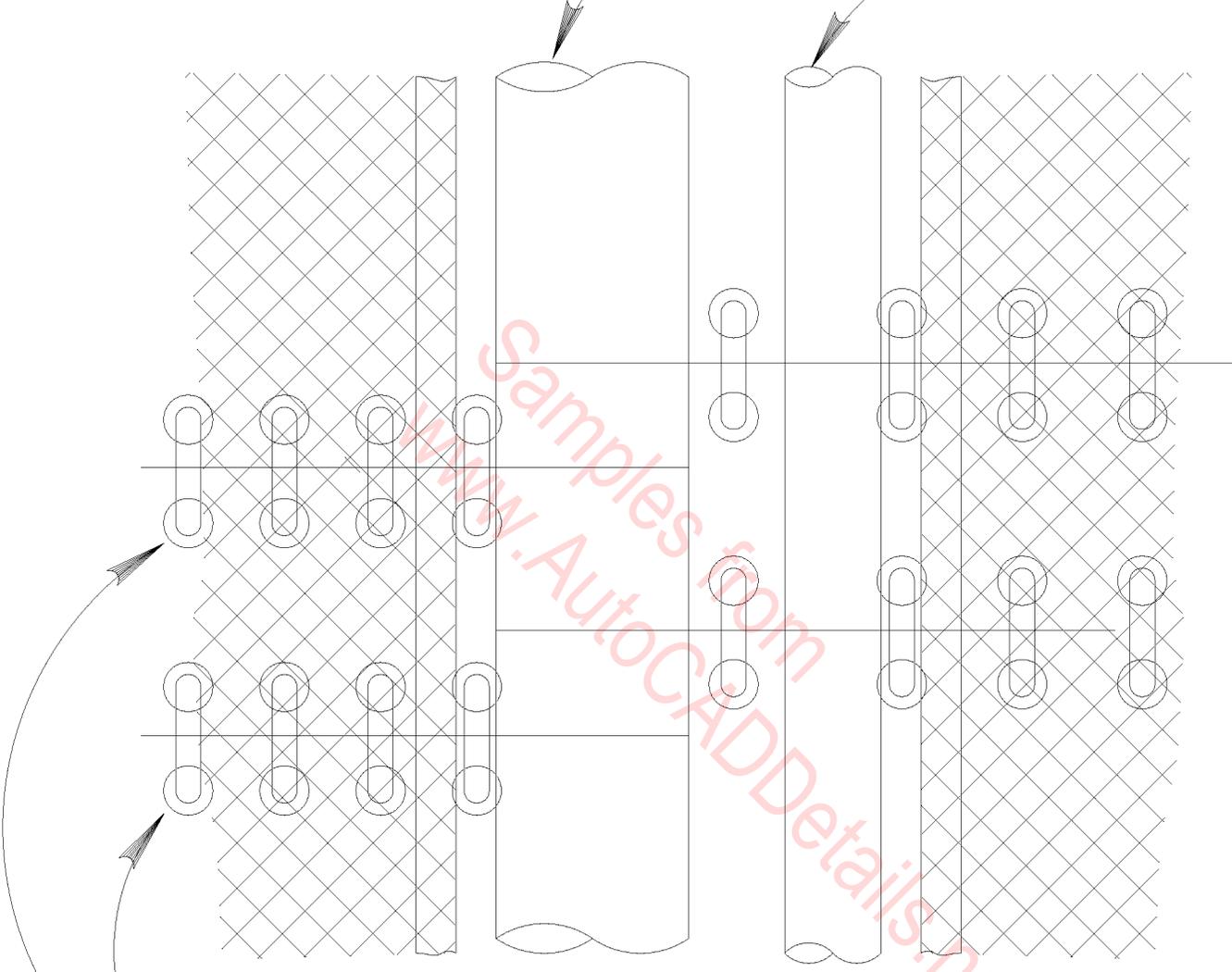
N.T.S.



DETAIL 
N.T.S.

GATE POST

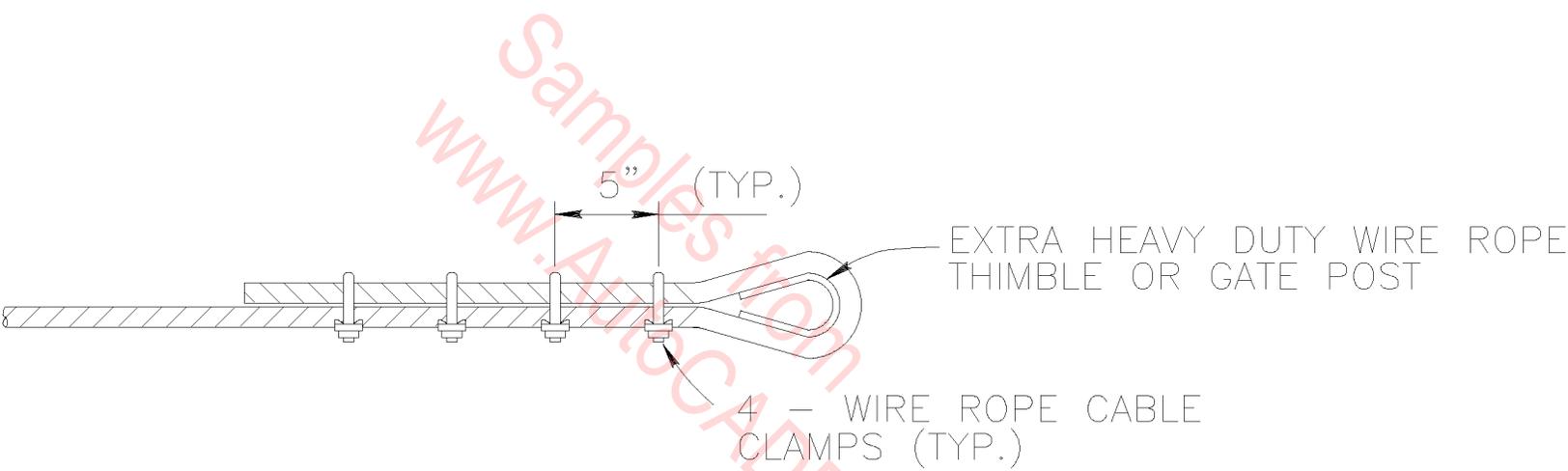
GATE FRAME



WIRE ROPE CLAMPS (TYP.)
SEE WIRE ROPE CLAMP
DETAIL

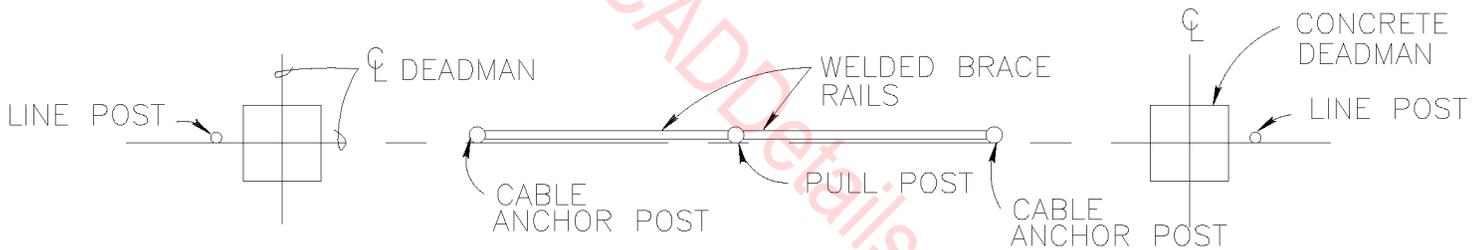
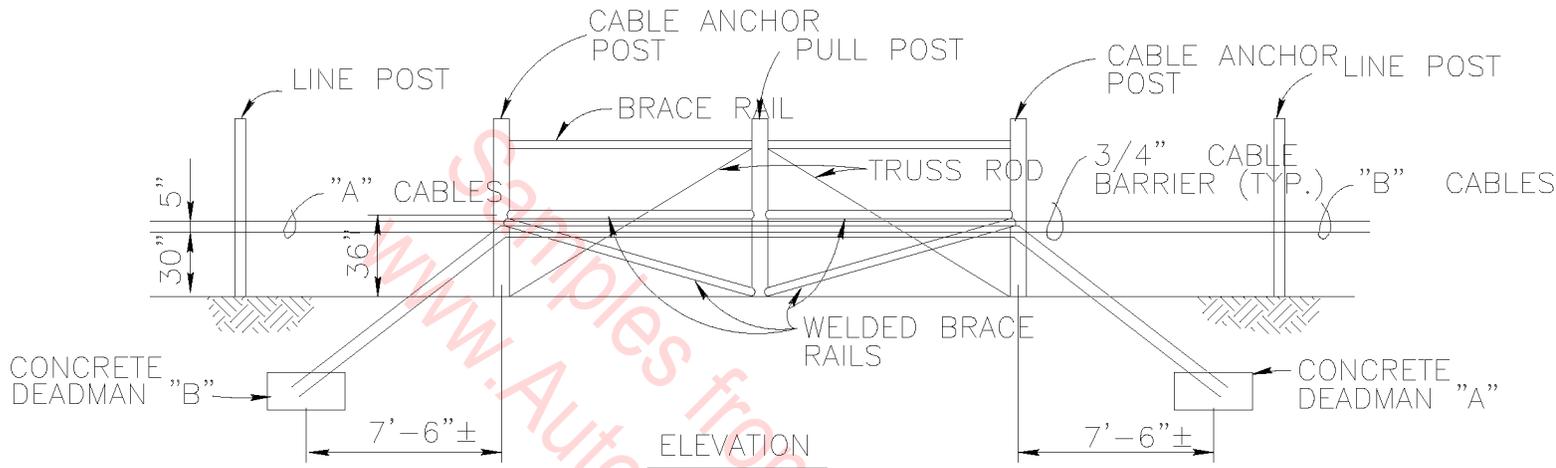
DETAIL 

N.T.S.



WIRE ROPE CLAMP DETAIL

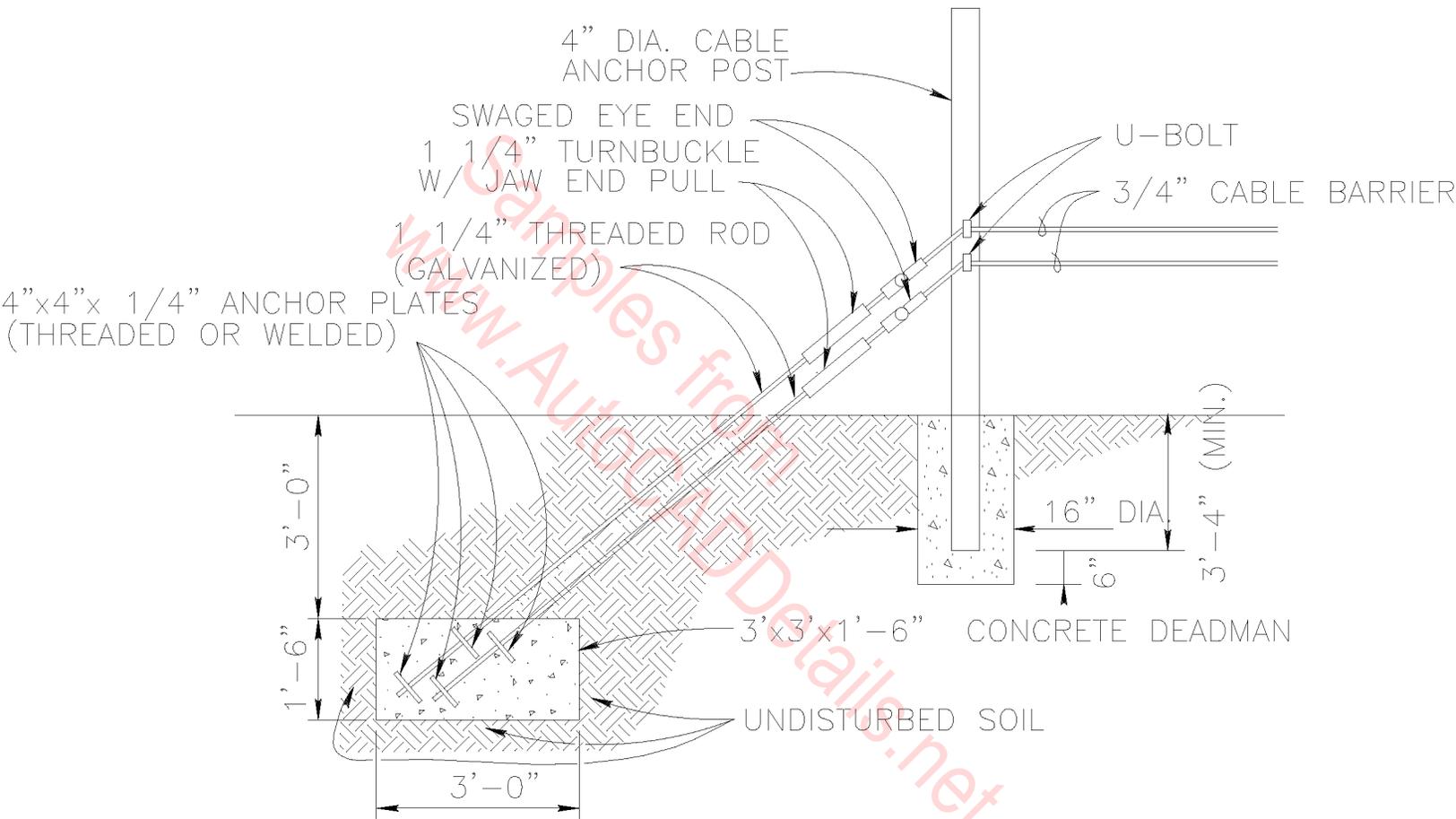
N.T.S.



NOTE: CABLE "A" & "B" DESIGNATION IS FOR CLARIFICATION OF ROUTING OF CABLES.

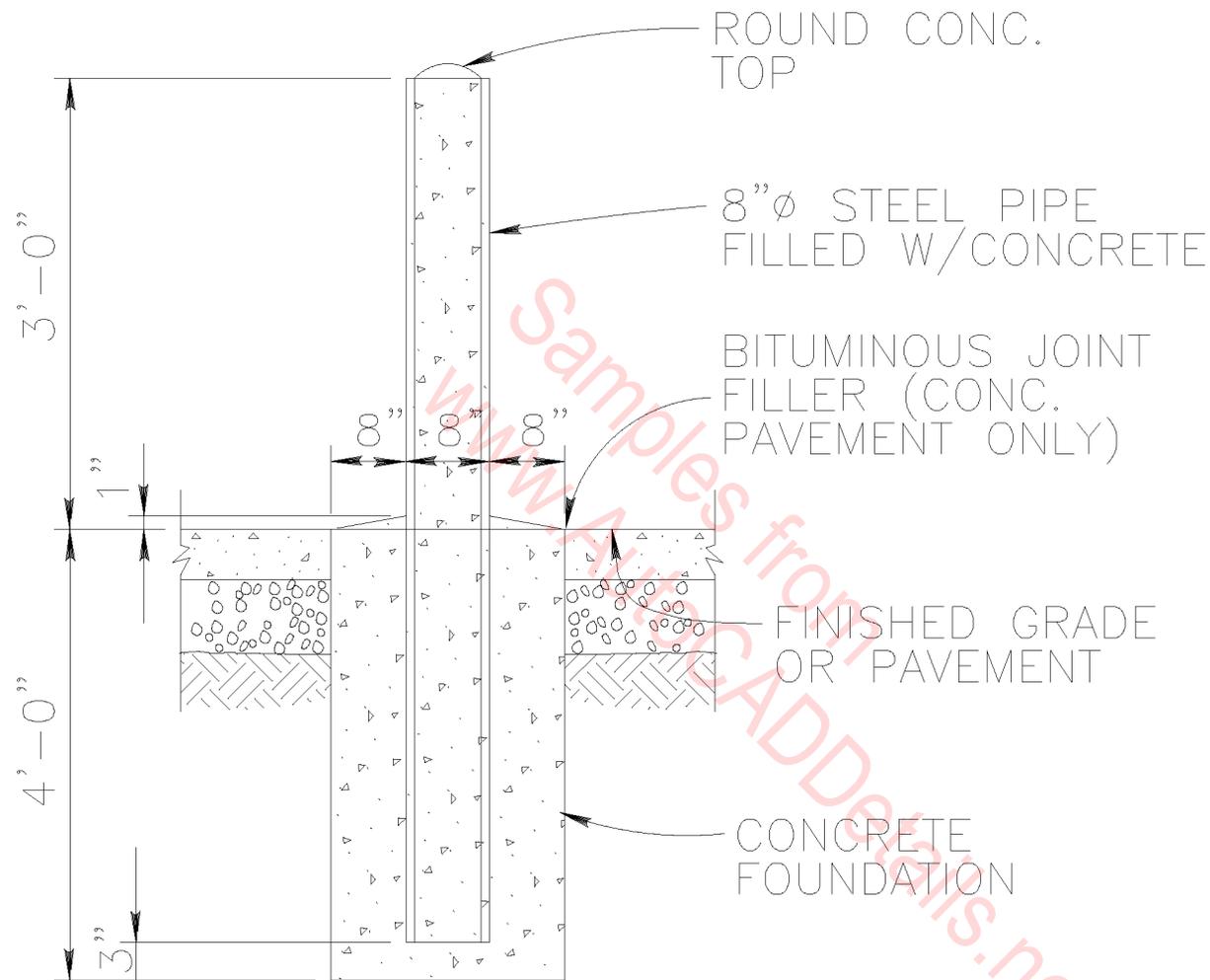
BRACE PANEL W/DEADMEN DETAIL

N.T.S.



DEADMAN DETAIL

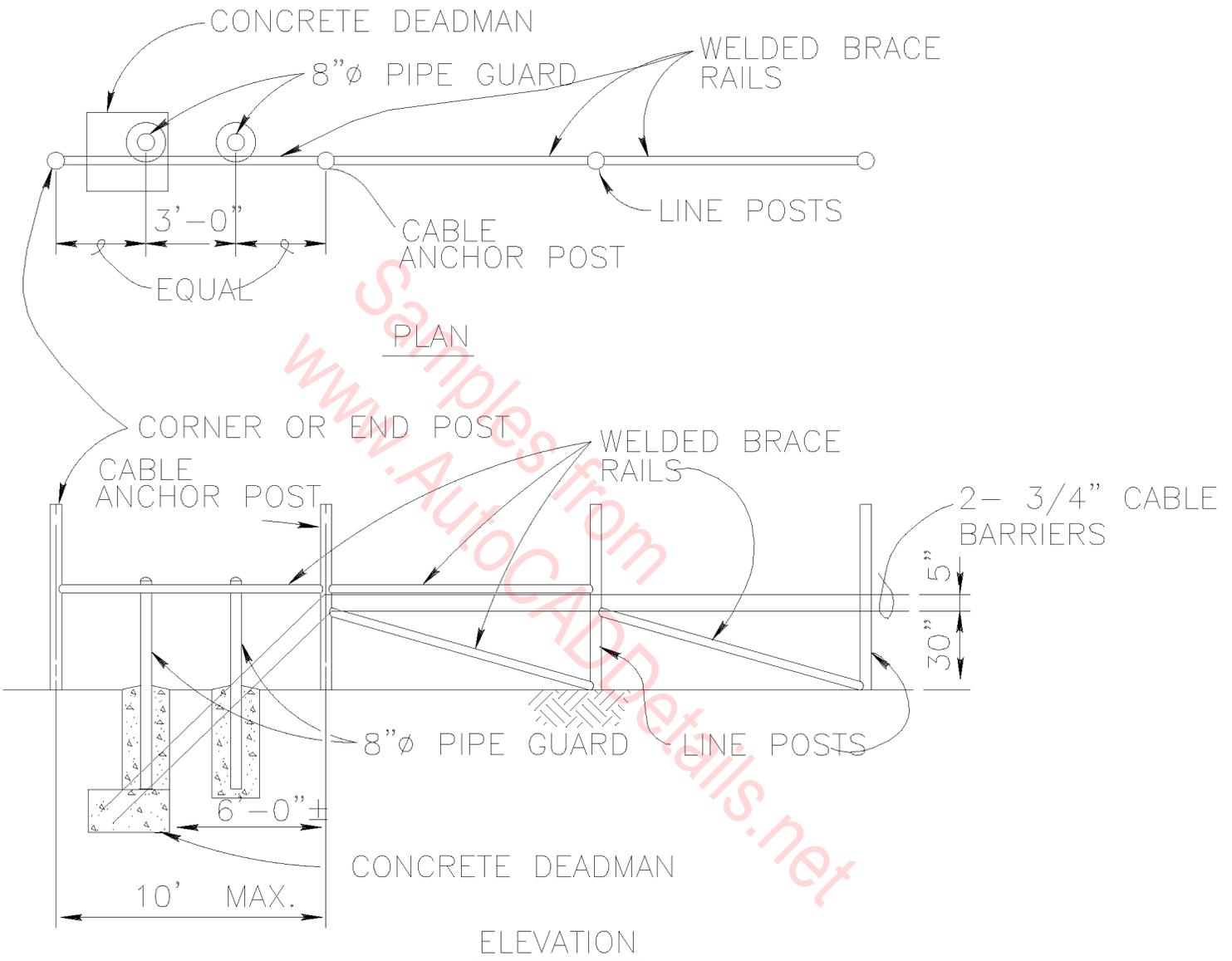
N.T.S.



PIPE GUARD DETAIL

N.T.S.

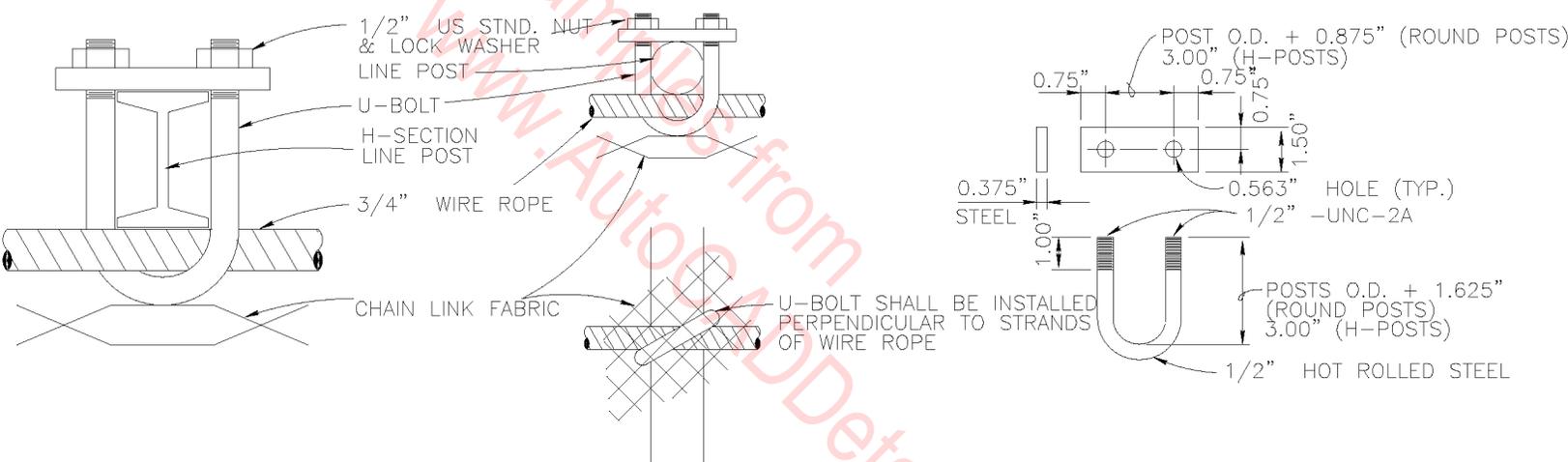
NOTE: STEEL PIPE SHALL BE GALVANIZED (2.0 OZ. ZINC/SQ. FT.) & HAVE A MINIMUM WALL THICKNESS OF 0.322 INCHES.



NOTE: PIPE GUARD FOUNDATION AND CONCRETE DEADMAN MAY BE PLACED AS ONE CONCRETE FOUNDATION.

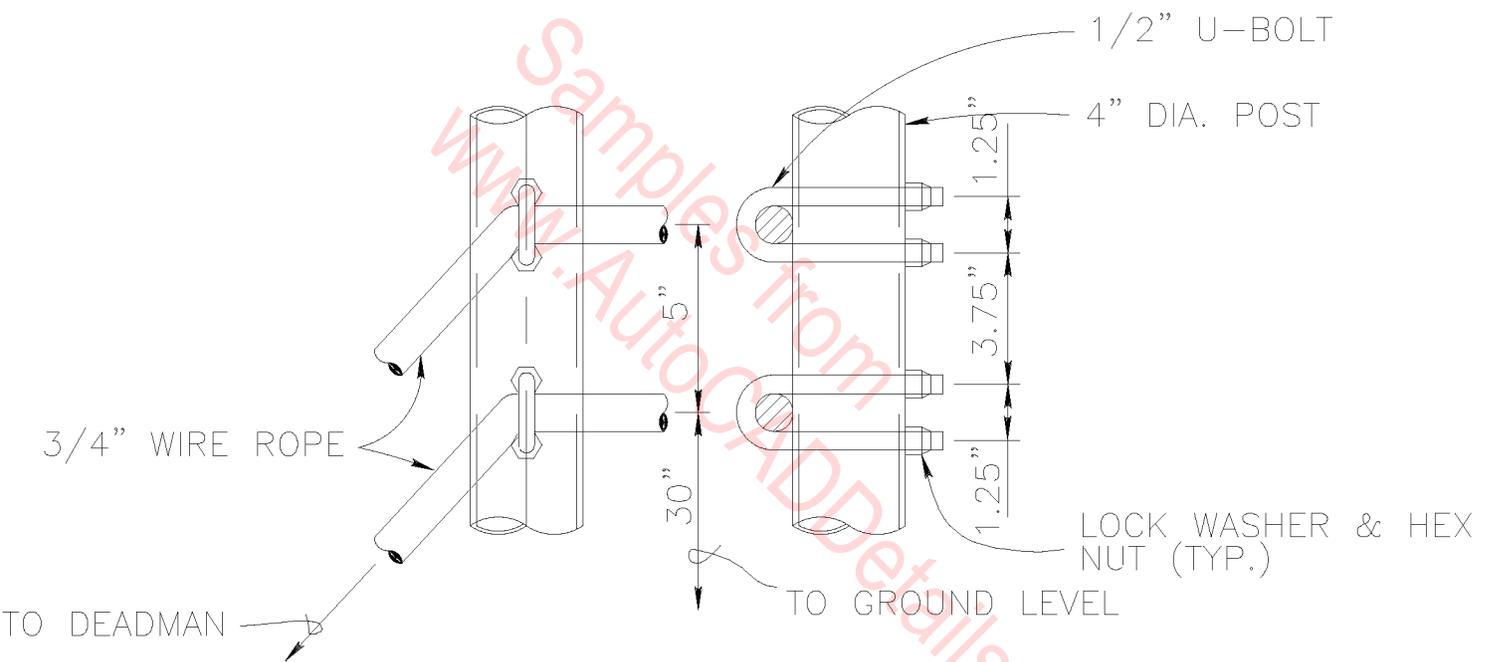
CORNER OR END DETAIL WITH DEADMAN

N.T.S.



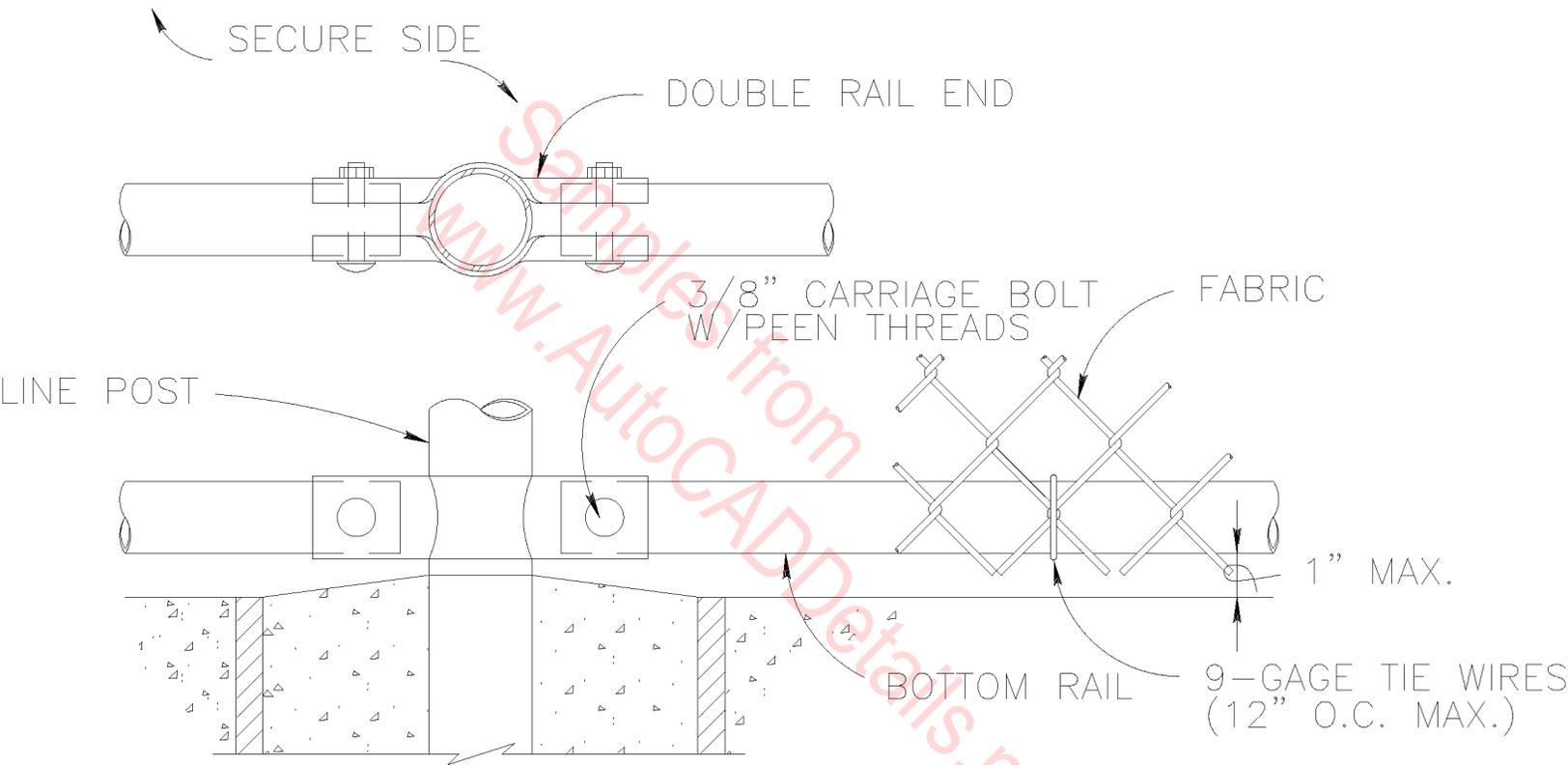
U-BOLT AT LINE POST DETAILS

N.T.S.



U-BOLT AT CABLE ANCHOR POST DETAIL

N.T.S.

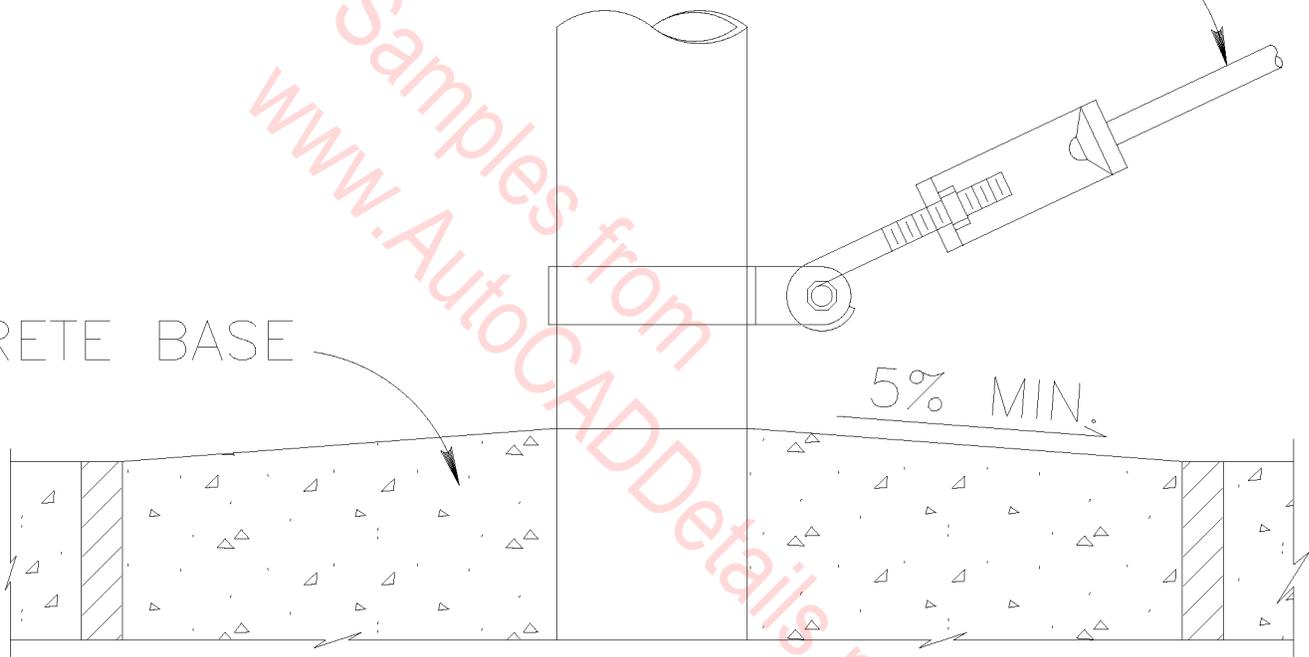


BOTTOM RAIL DETAILS

N.T.S.

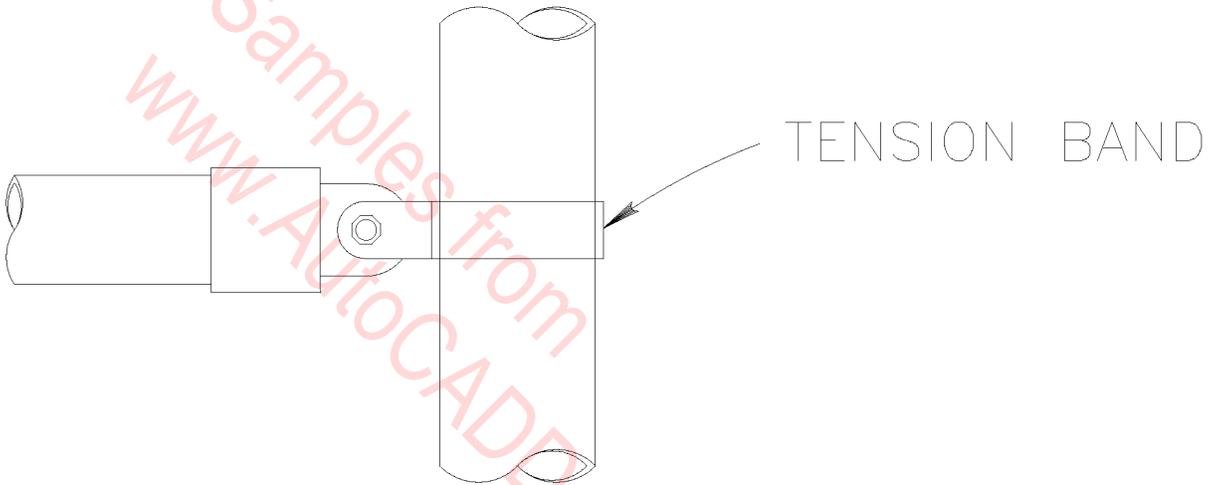
TRUSS ROD
(3/8" MIN. DIA.)

CONCRETE BASE



TRUSS ROD AND BAND

N.T.S.

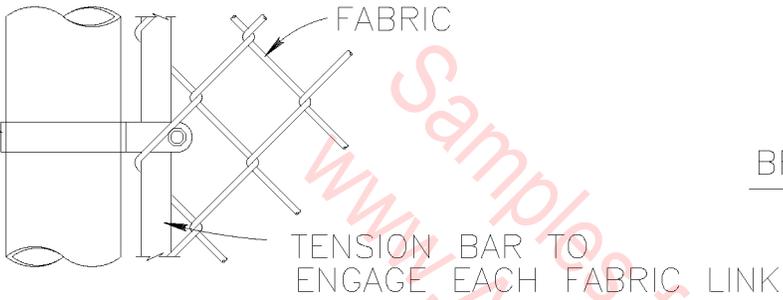


TENSION BAND

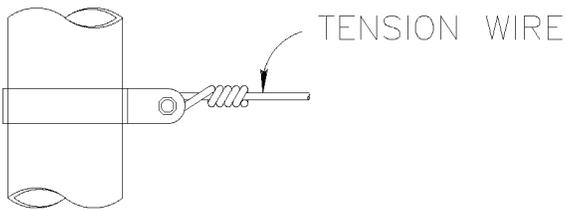
BRACE RAIL CLAMP DETAIL

N.T.S.

TENSION BAND
(15" O.C. MAX. AND WITHIN 4"
FROM BOTTOM OF FABRIC)

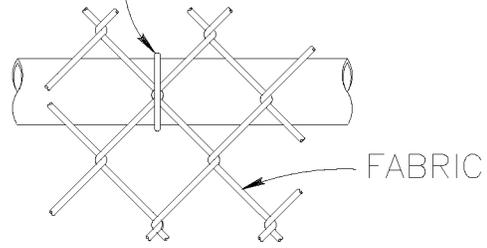


END OR GATE POST DETAIL

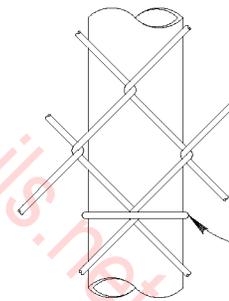
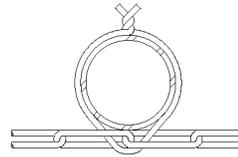


TENSION BAND DETAIL

9-GAGE TIE WIRES
(12" O.C. MAX.)



BRACE RAIL ATTACHMENT

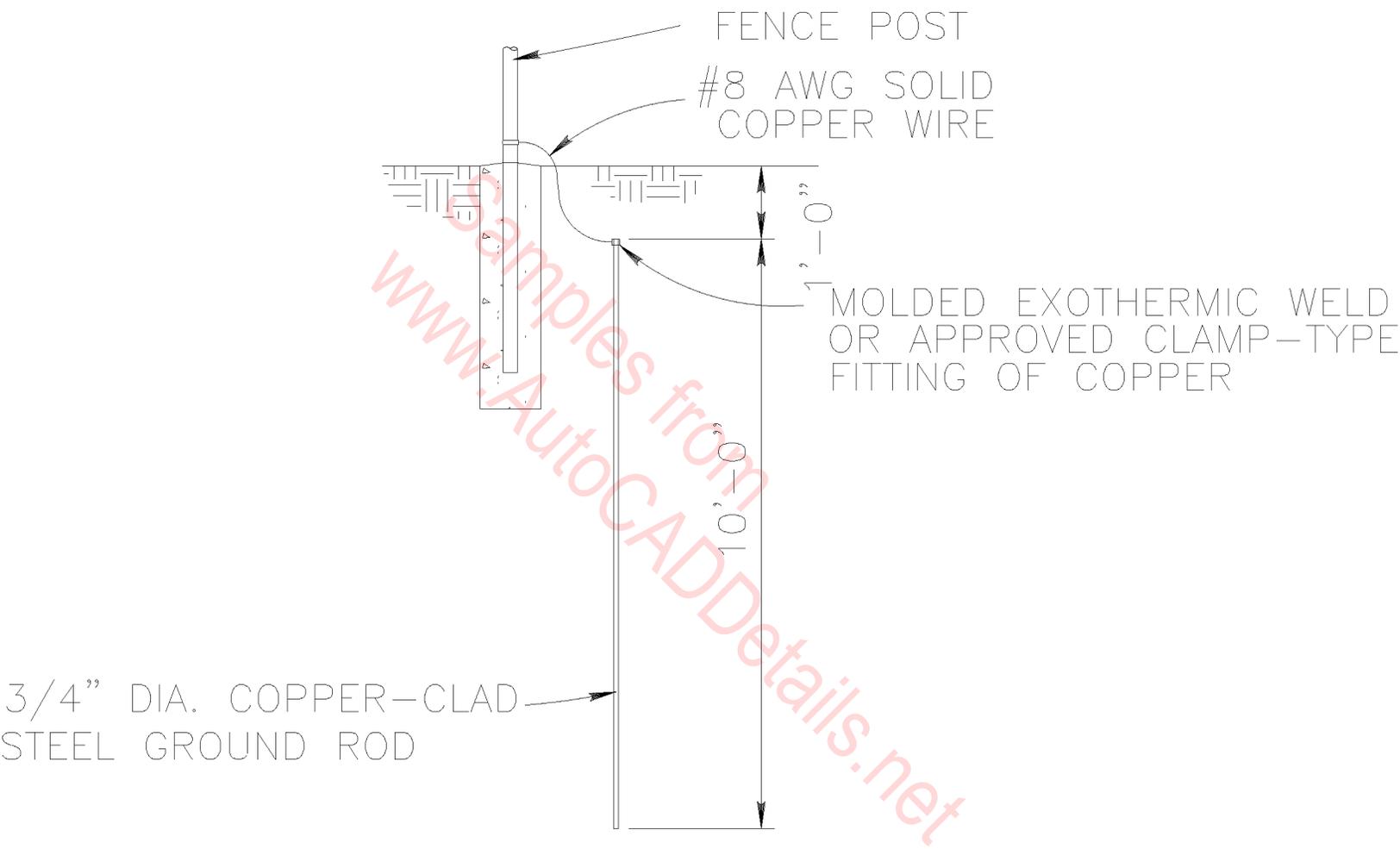


TIE WIRE
(15" O.C. MAX. AND
WITHIN 4" FROM
BOTTOM OF FABRIC)

LINE POST ATTACHMENTS

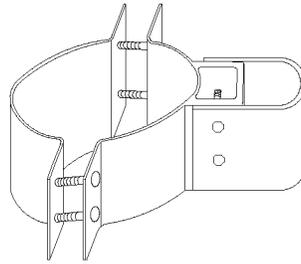
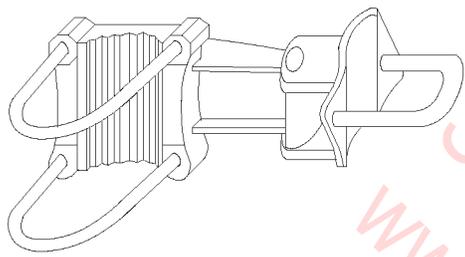
FASTENING DETAILS

N.T.S.

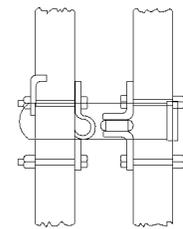
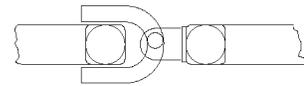
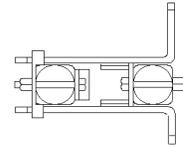


GROUNDING DETAIL

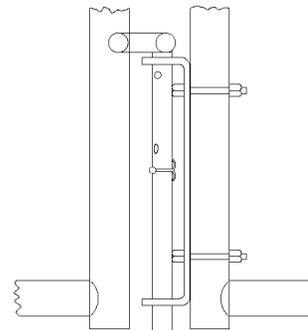
N.T.S.



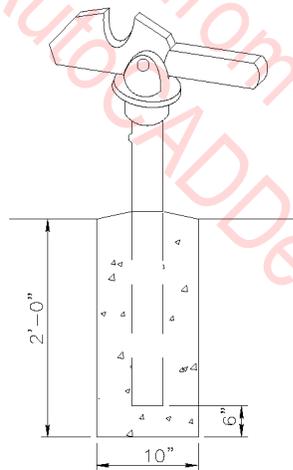
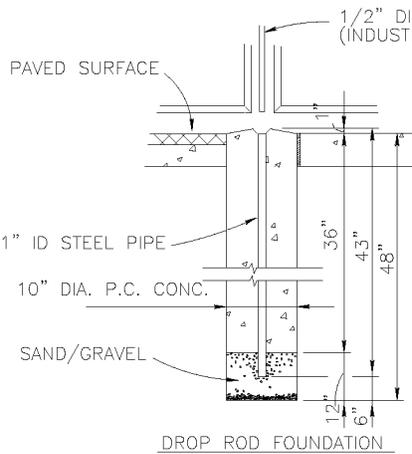
STANDARD HINGE



LATCH ASSEMBLY



DROP ROD ASSEMBLY



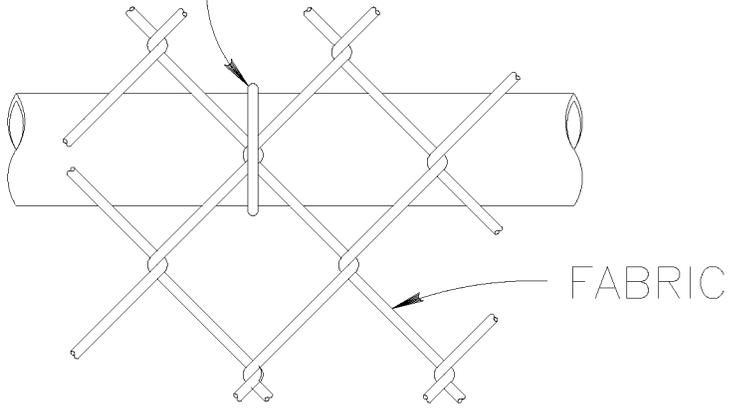
GATE KEEPER (TO HOLD GATE OPEN)

SWING GATE DETAILS

N.T.S.

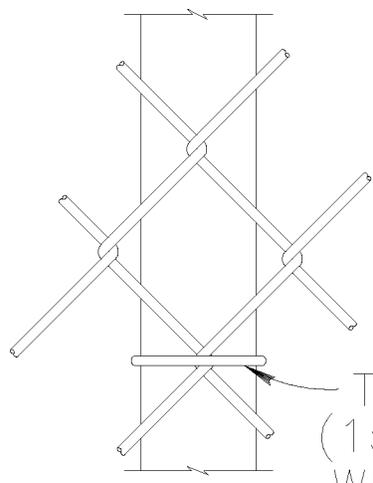
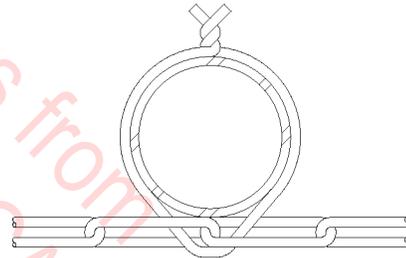
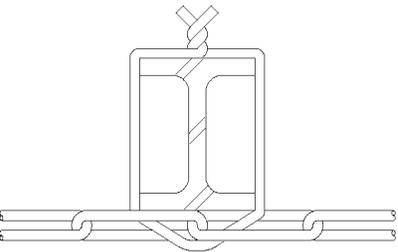
Samples from
www.AutoCADDetails.net

9-GAGE TIE WIRES
(2'-0" O.C. MAX.)



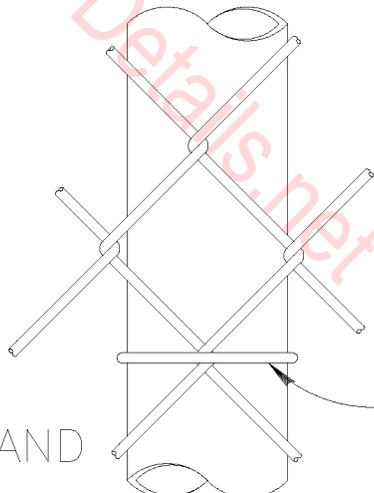
TOP OR BRACE RAIL ATTACHMENT

Samples from
www.AutoCADDetails.net



TIE WIRE
(15" O.C. MAX. AND
WITHIN 4" FROM
TOP AND BOTTOM
OF FABRIC)

H-BEAM

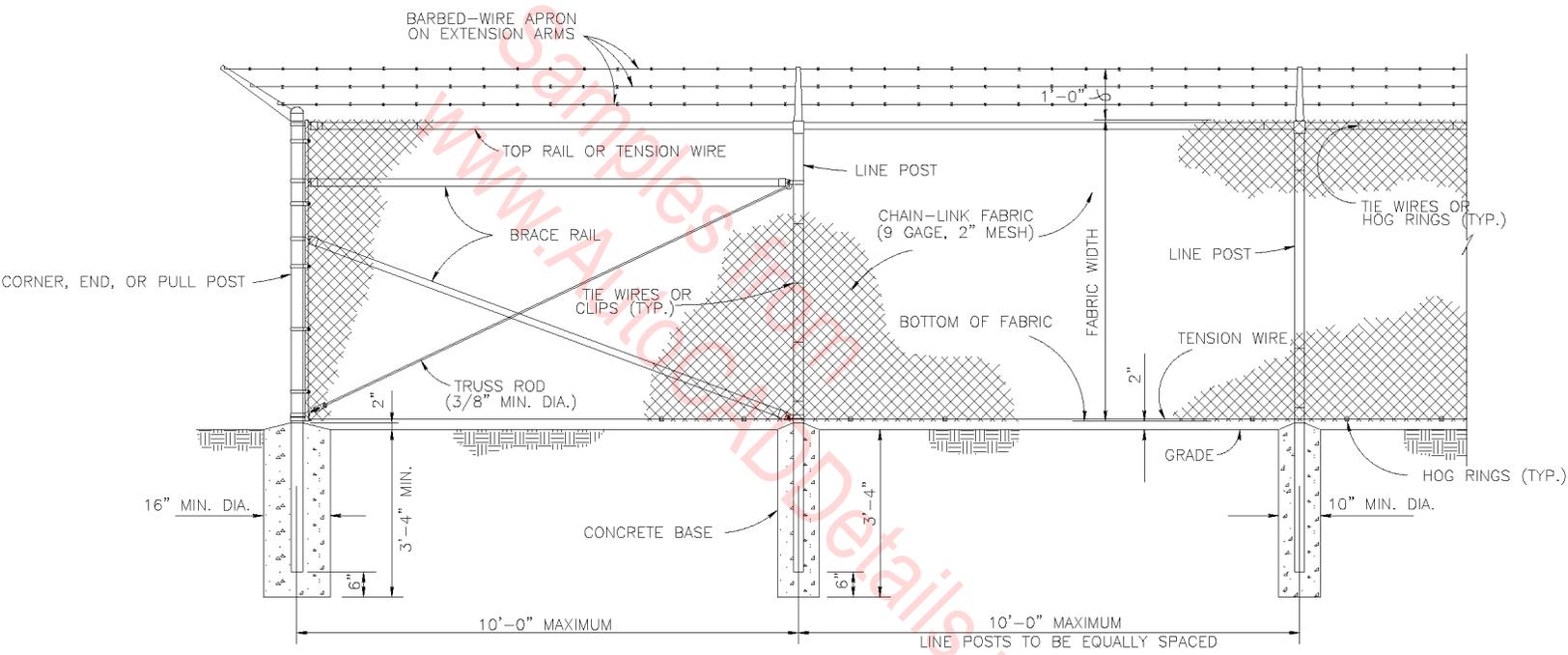


TIE WIRE
(15" O.C. MAX. AND
WITHIN 4" FROM
TOP AND BOTTOM
OF FABRIC)

ROUND POST

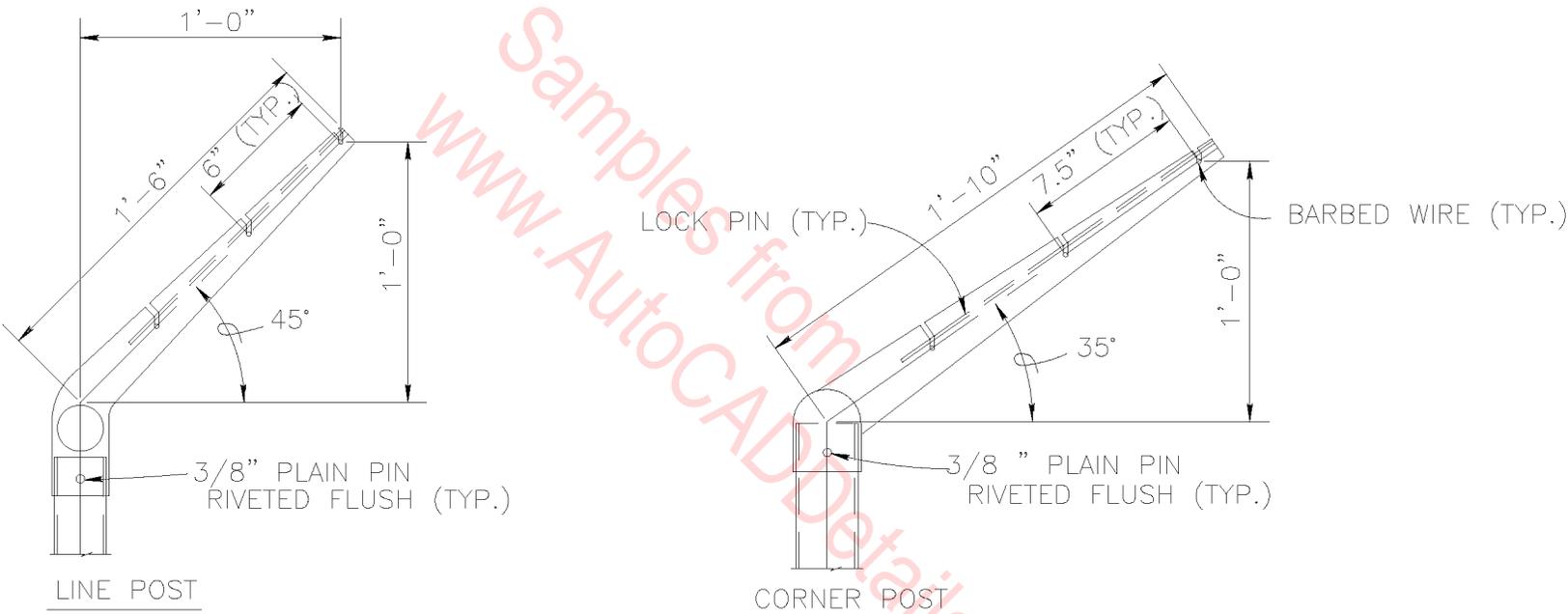
LINE POST ATTACHMENTS

N.T.S.



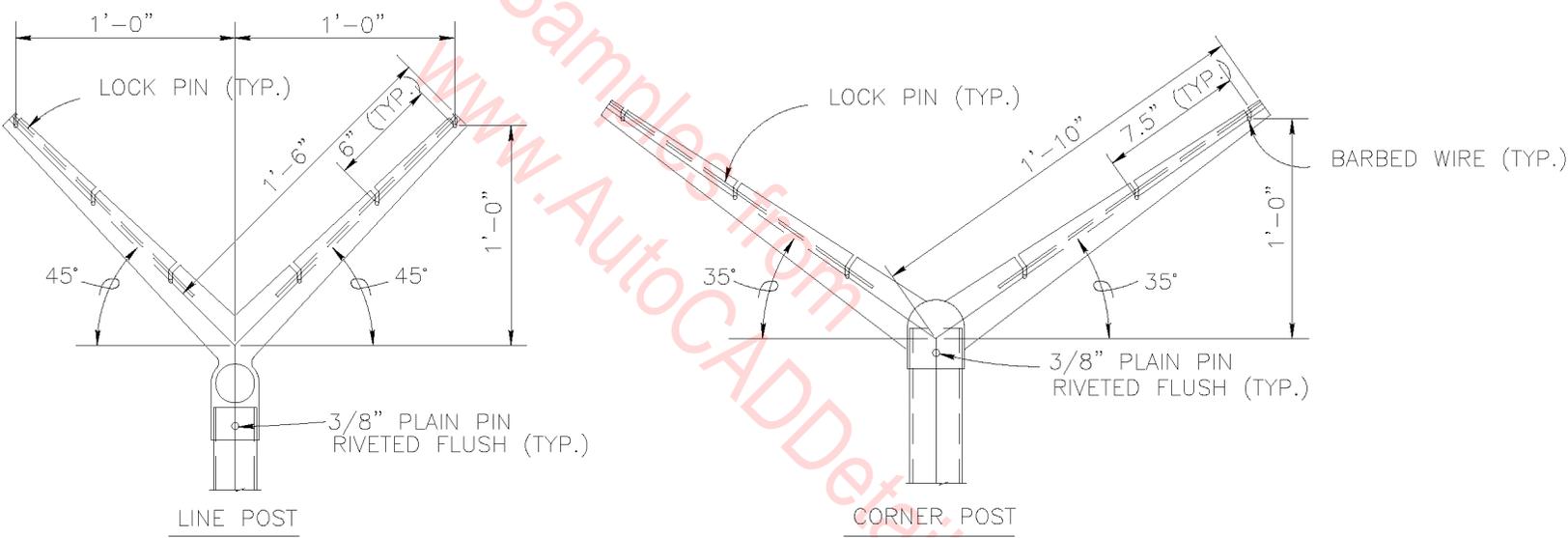
CHAIN-LINK SECURITY FENCE DETAIL

N.T.S.



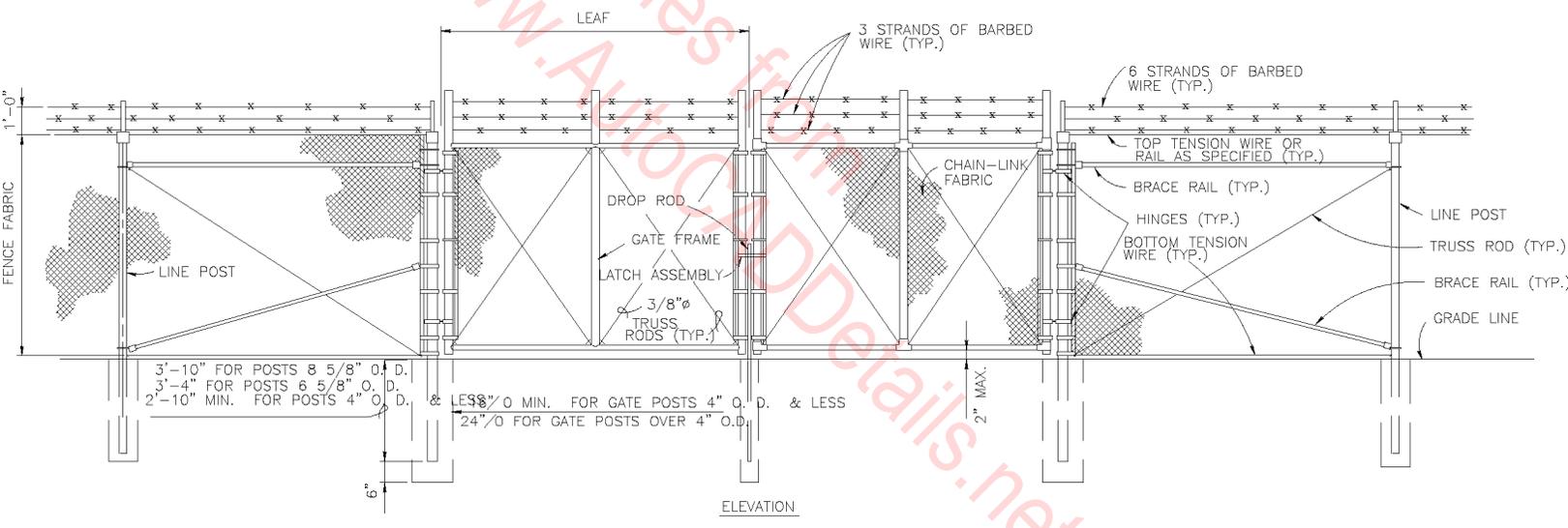
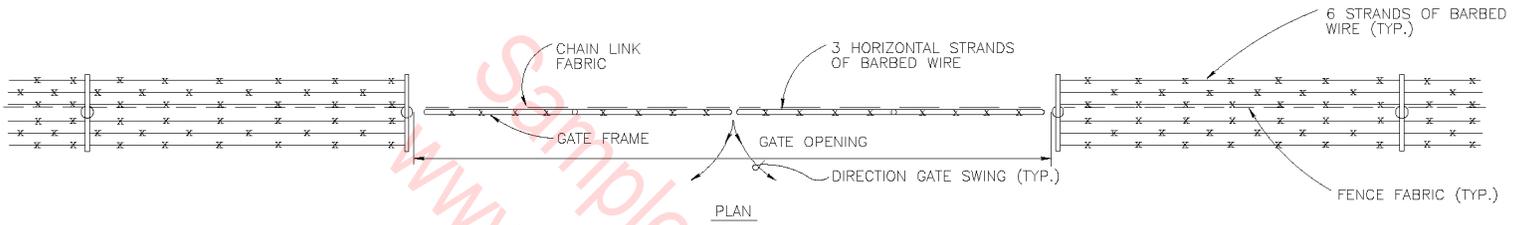
EXTENSION ARM DETAILS

N.T.S.



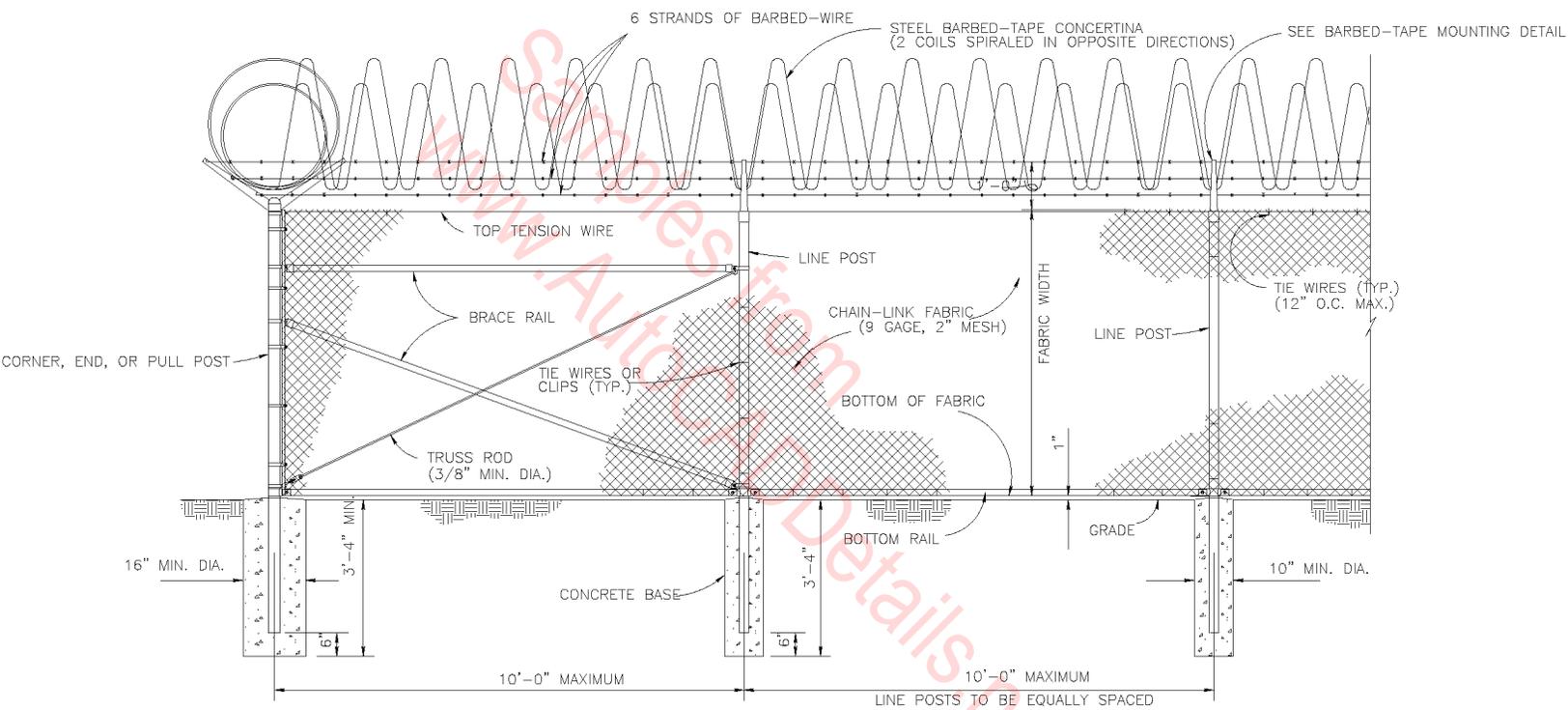
EXTENSION ARM DETAILS

N.T.S.

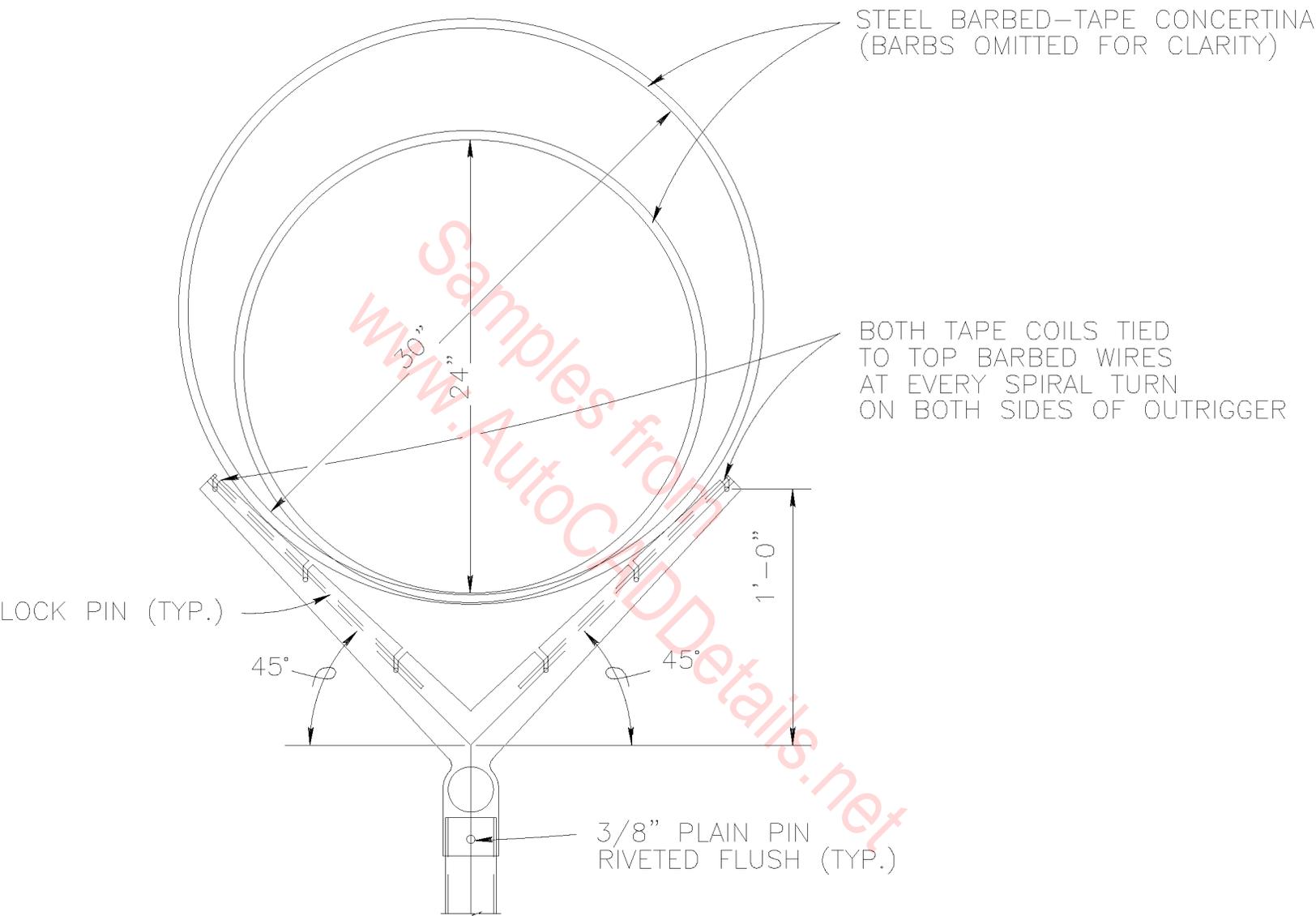


DOUBLE SWING GATE (TYPE FE7 FENCE)

N.T.S.

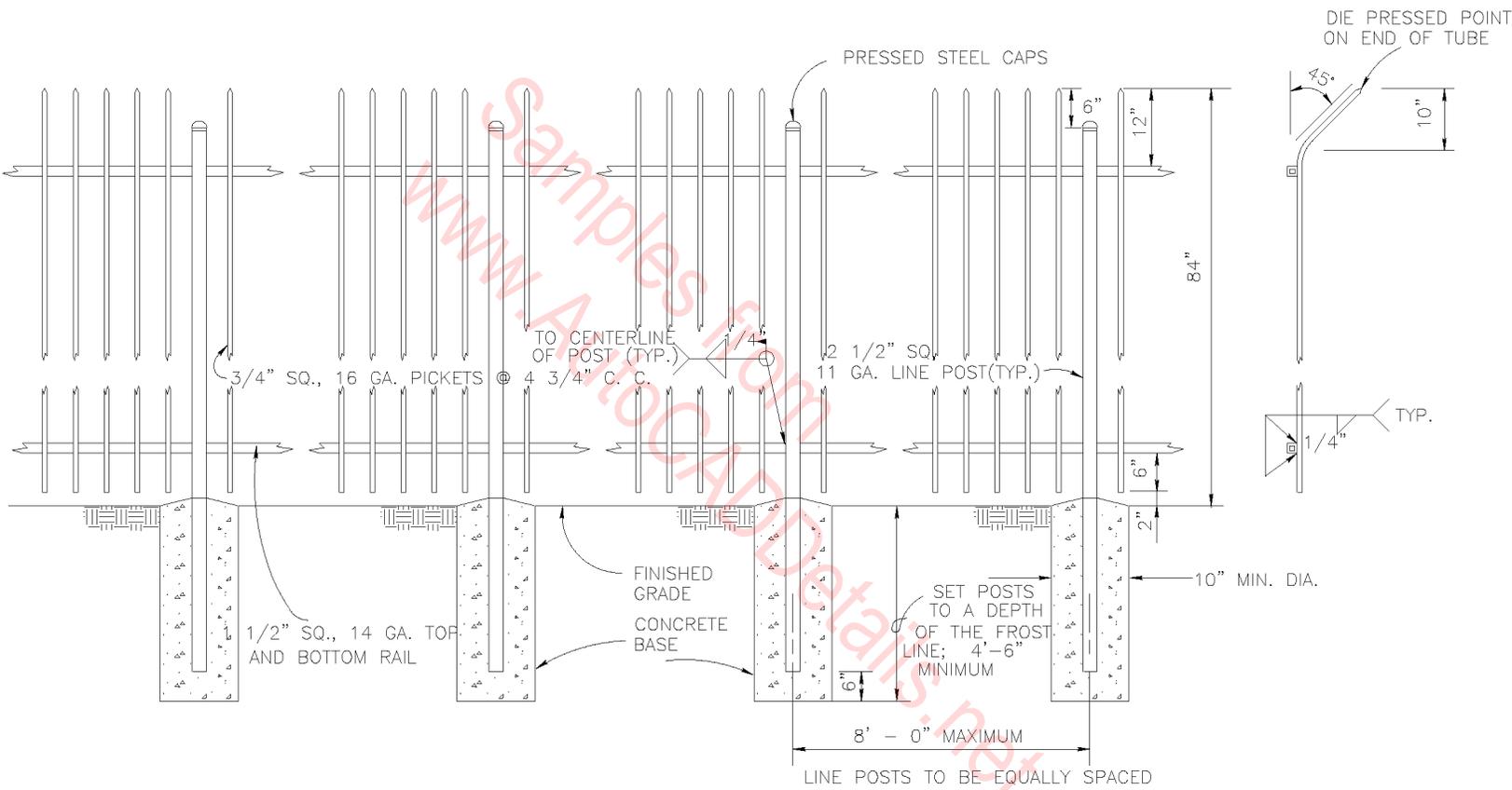


CHAIN-LINK SECURITY FENCE DETAIL
N.T.S.



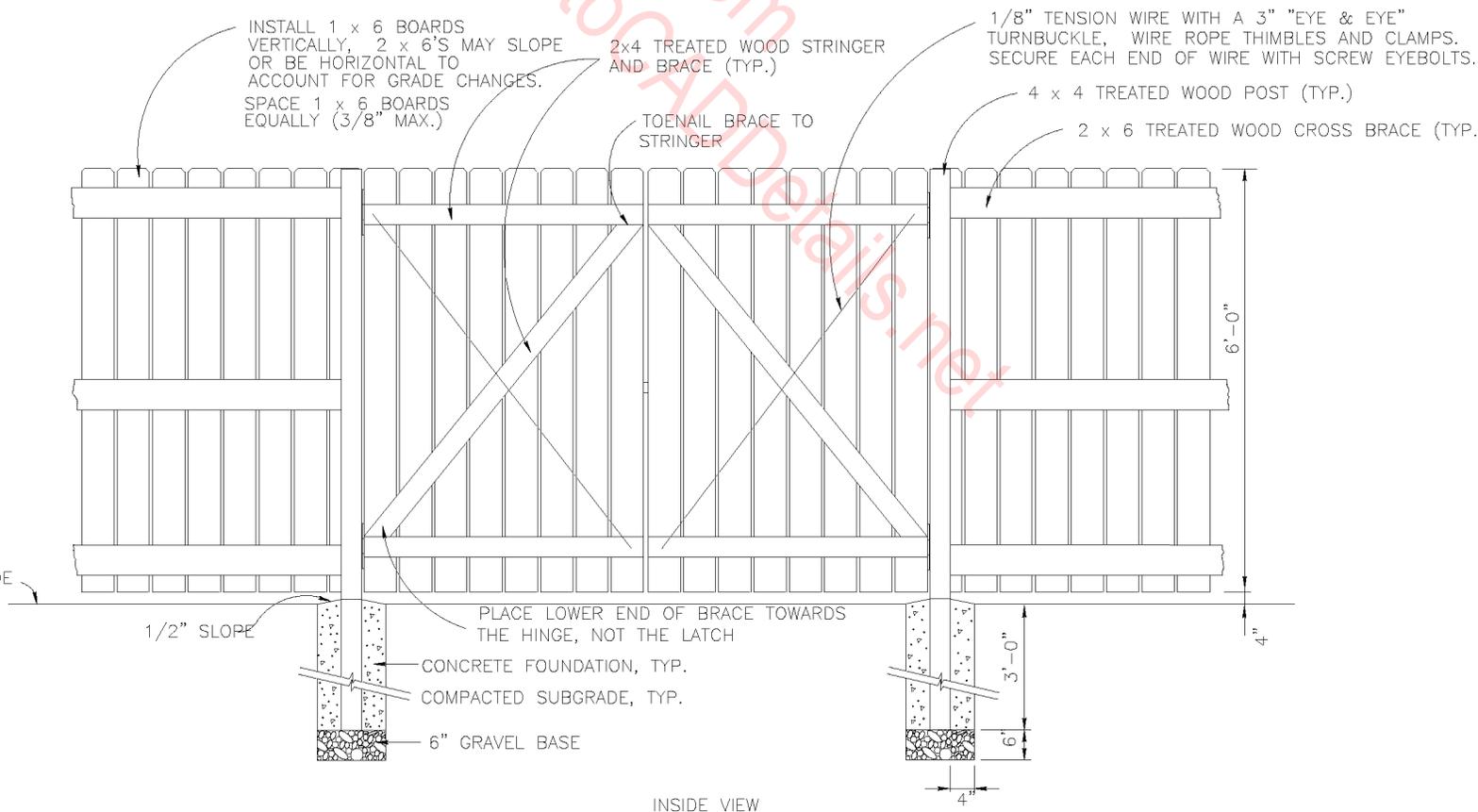
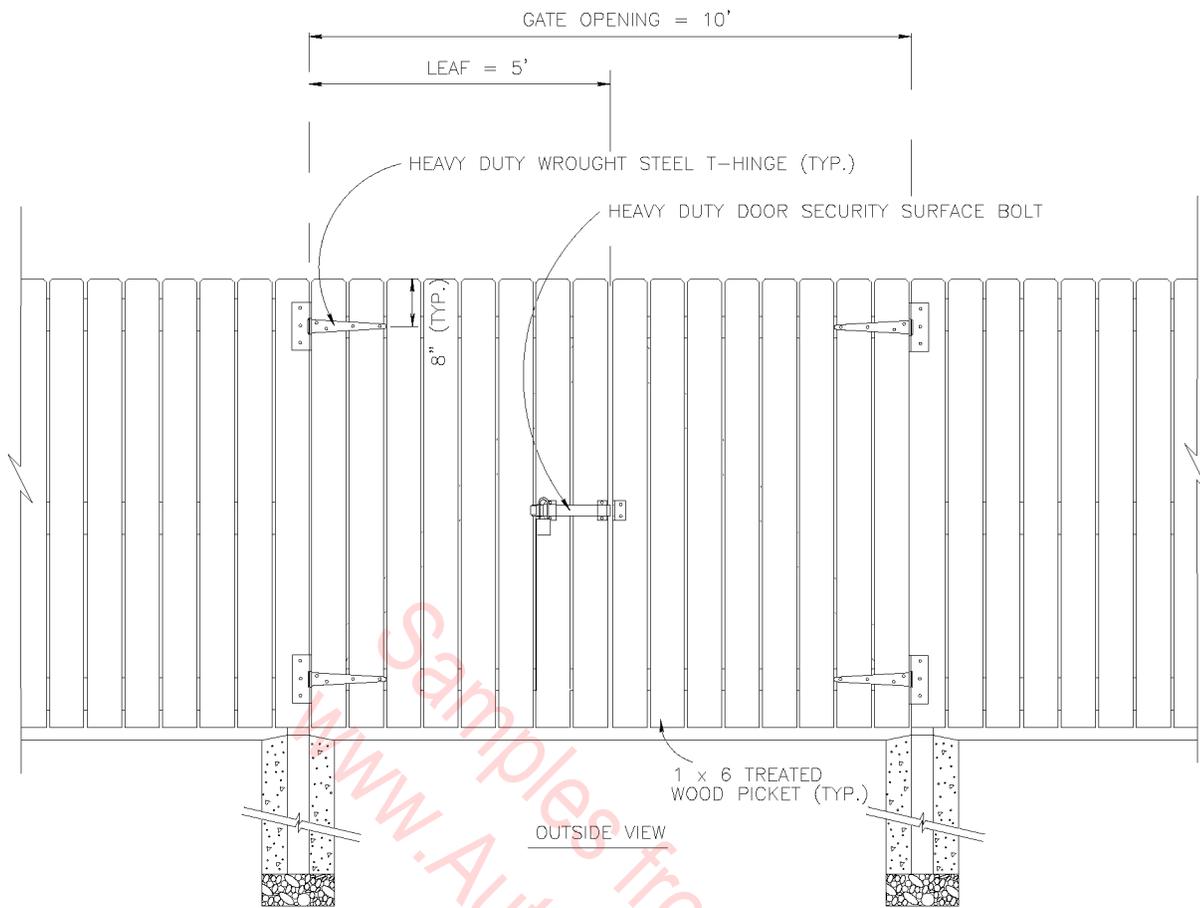
BARBED-TAPE MOUNTING DETAIL

N.T.S.



ORNAMENTAL IRON FENCE DETAIL

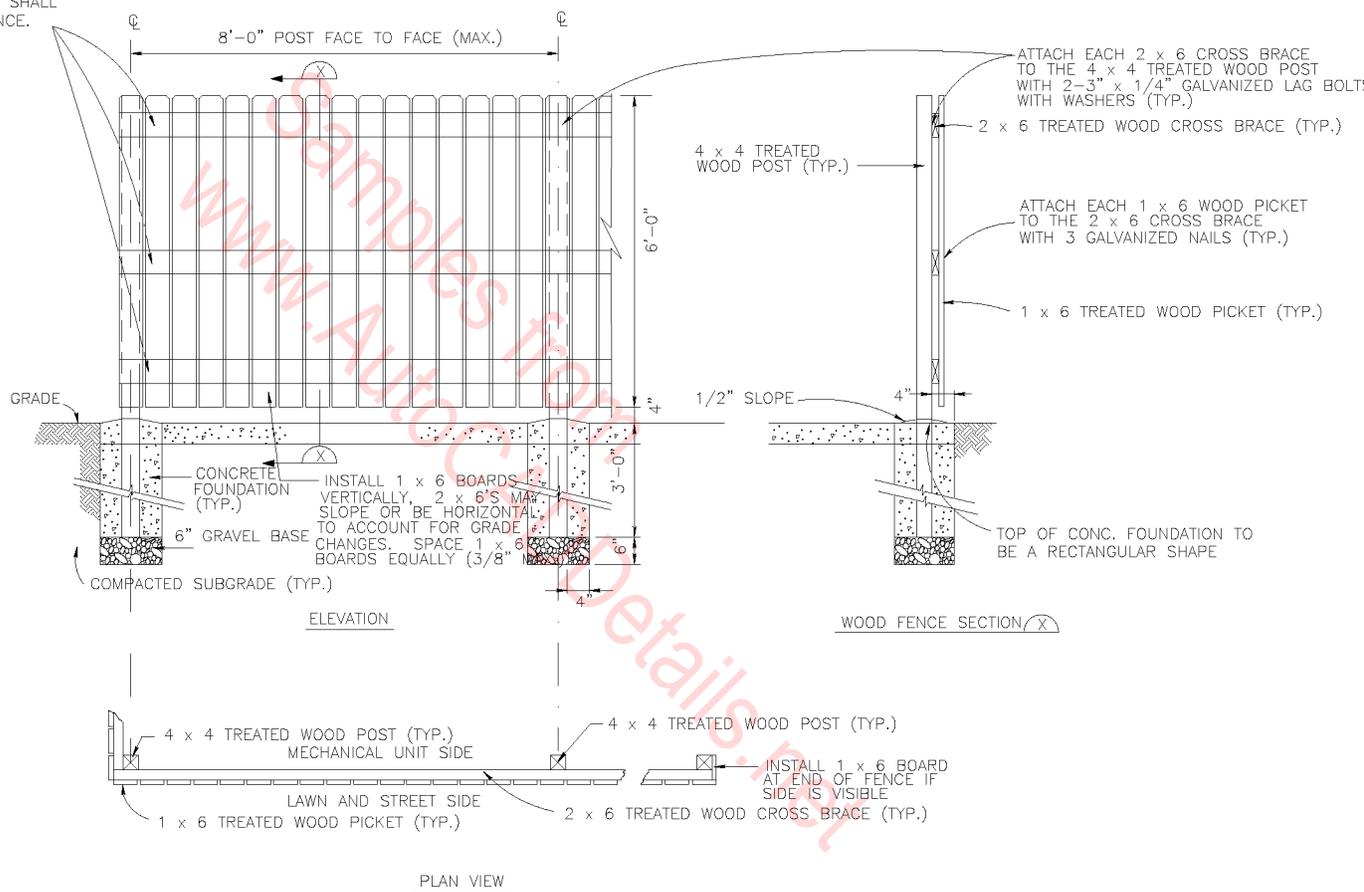
N.T.S.



WOOD FENCE GATE DETAILS

N.T.S.

THE TOP AND BOTTOM WOOD CROSS BRACES SHALL BE PLACED 6" FROM THE END OF THE WOOD PICKETS. THE MIDDLE BRACE SHALL BE CENTERED WITHIN THE FENCE.



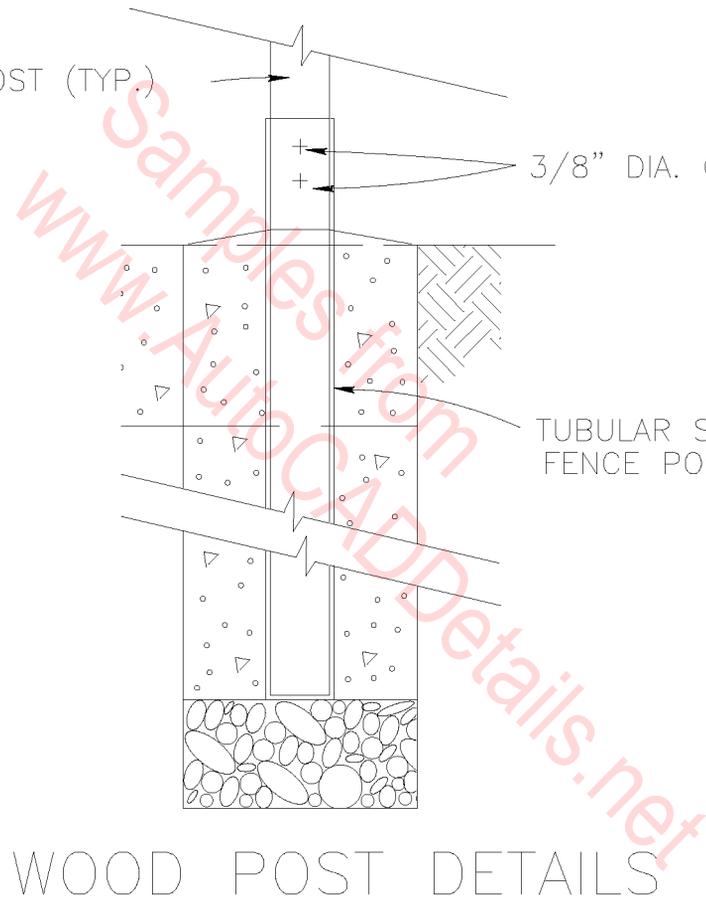
WOOD FENCE DETAILS

N.T.S.

x 4 TREATED WOOD POST (TYP.)

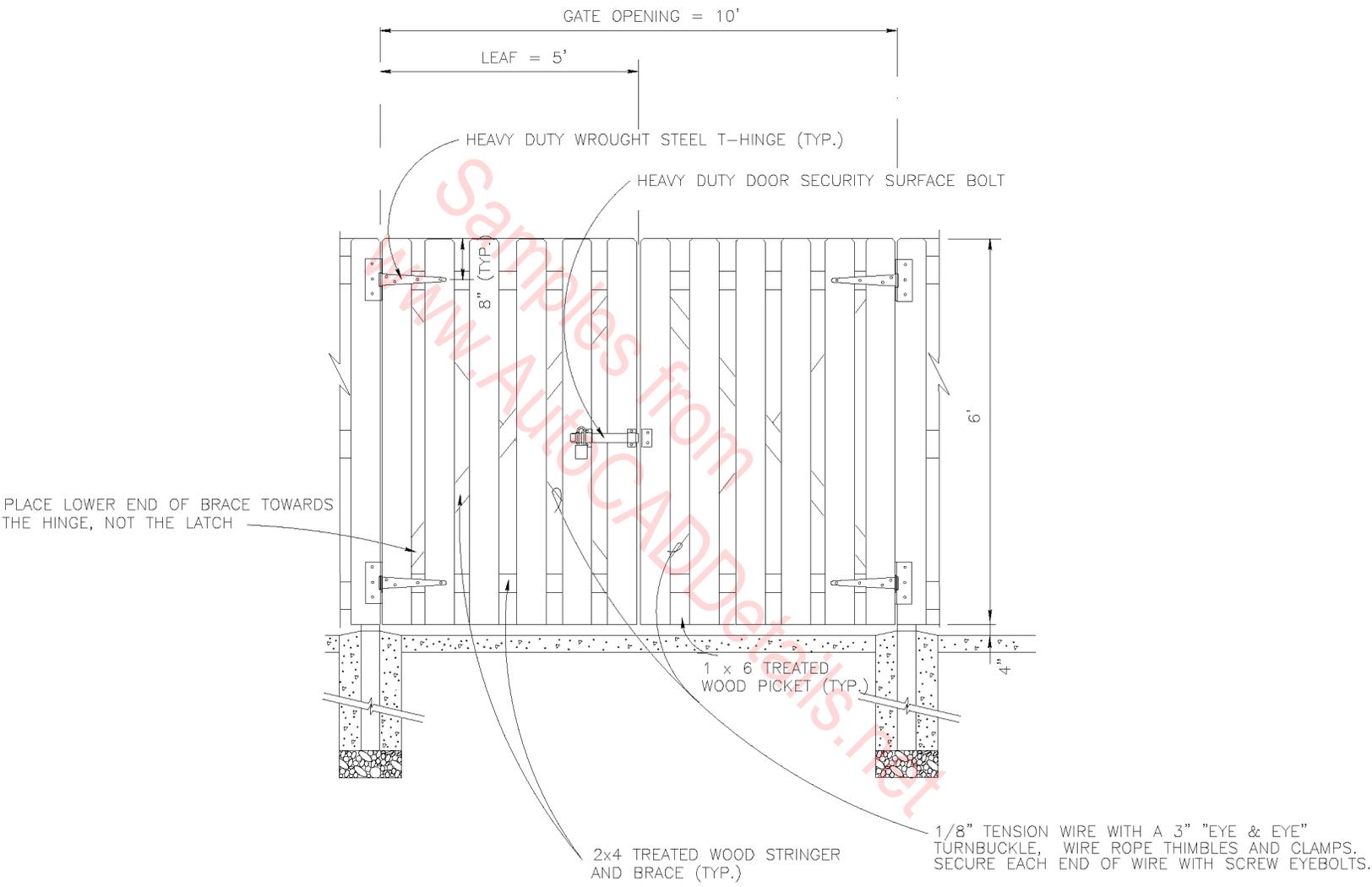
3/8" DIA. GALVANIZED A307 BOLTS (TYP.)

TUBULAR STEEL 4" x 4" x 1/4"
FENCE POST SLEEVE (TYP.)



WOOD POST DETAILS

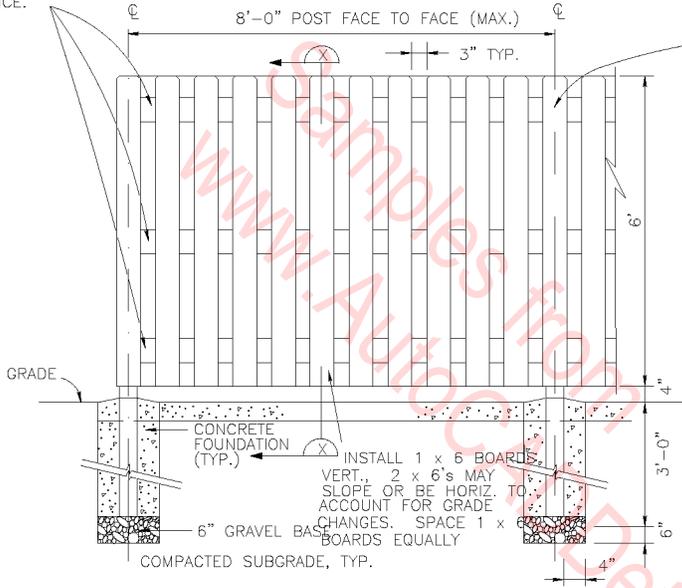
N.T.S.



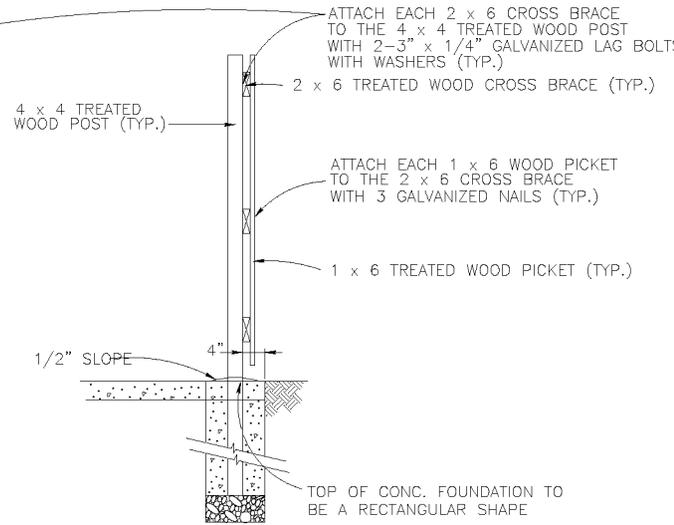
WOOD FENCE GATE DETAILS

N.T.S.

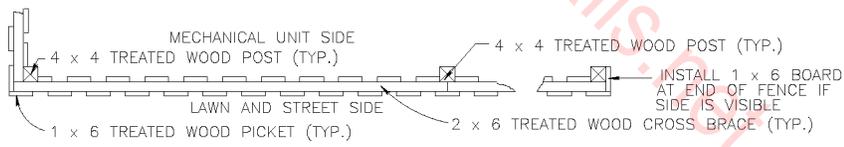
THE TOP AND BOTTOM WOOD CROSS BRACES SHALL BE PLACED 6" FROM THE END OF THE WOOD PICKETS. THE MIDDLE BRACE SHALL BE CENTERED WITHIN THE FENCE.



ELEVATION

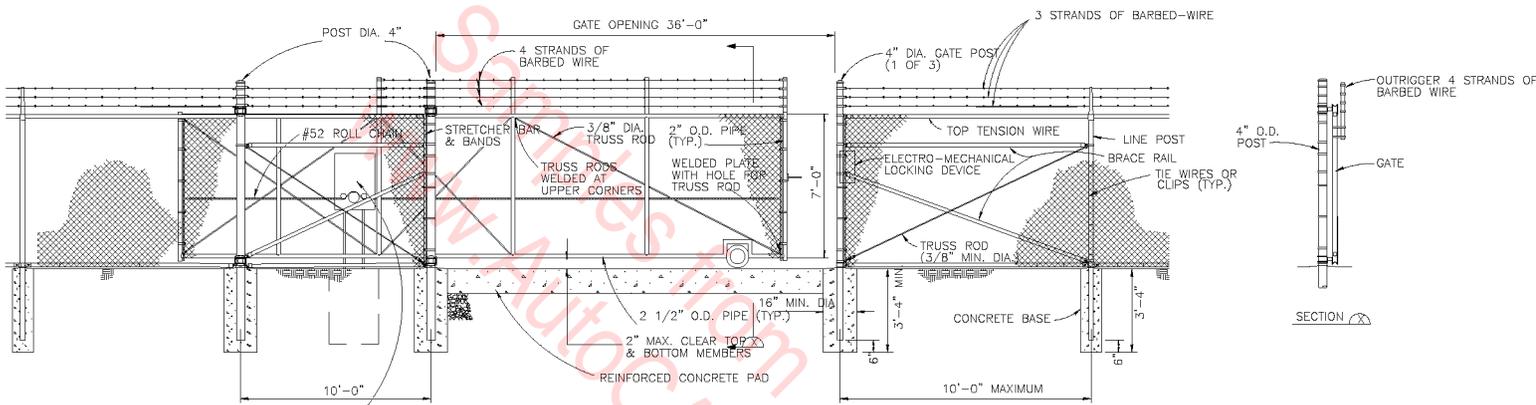


WOOD FENCE SECTION (X)



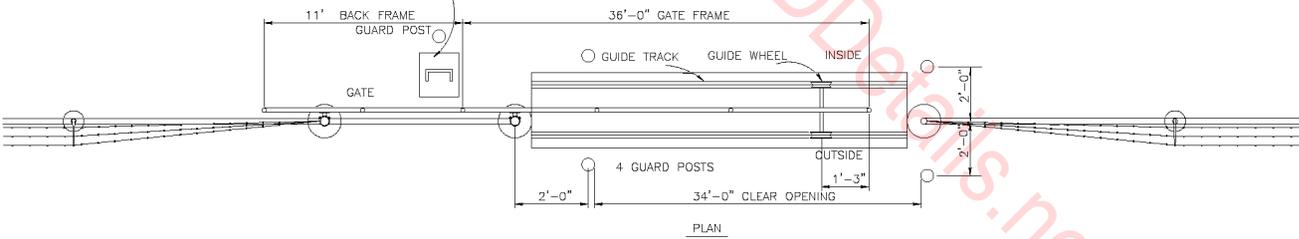
PLAN VIEW

WOOD FENCE DETAILS
N.T.S.



GATE OPERATOR ENCLOSURE
1 HP. 3 PHASE

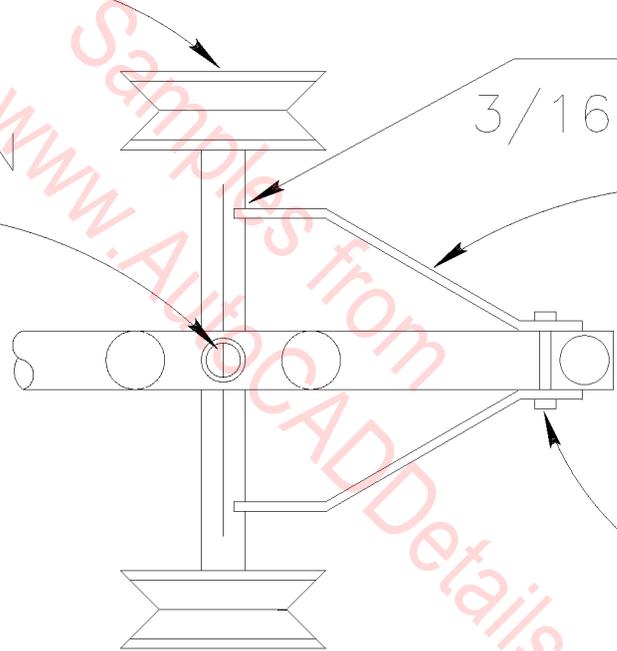
ELEVATION



SLIDING GATE DETAILS
N.T.S.

10"x3" "V"
GROOVED WHEEL

COMPRESSION
SPRING



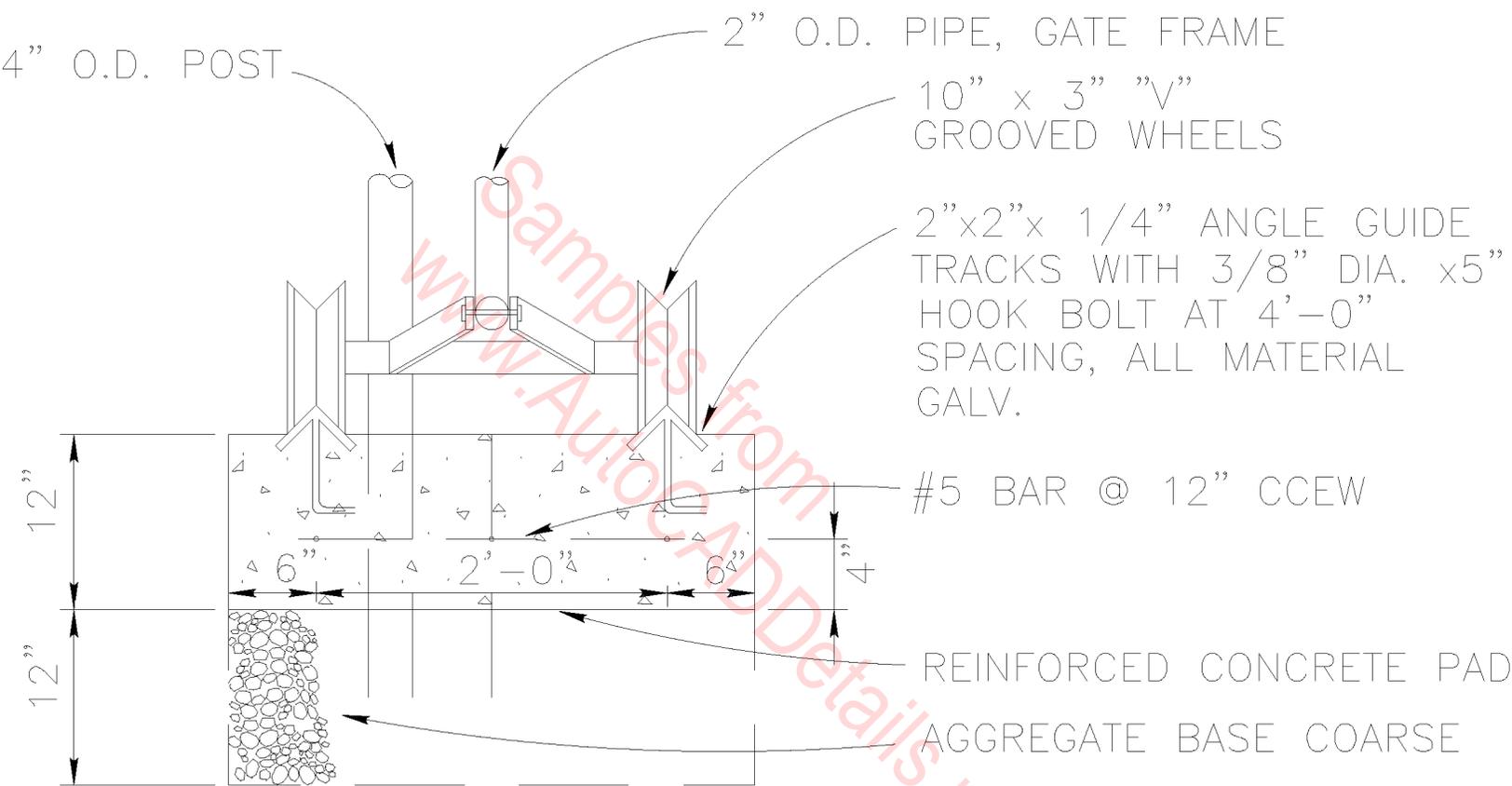
3/16" TYP.

1/4" x 2 1/2" F

5/8" BOLT

GUIDE WHEEL DETAIL

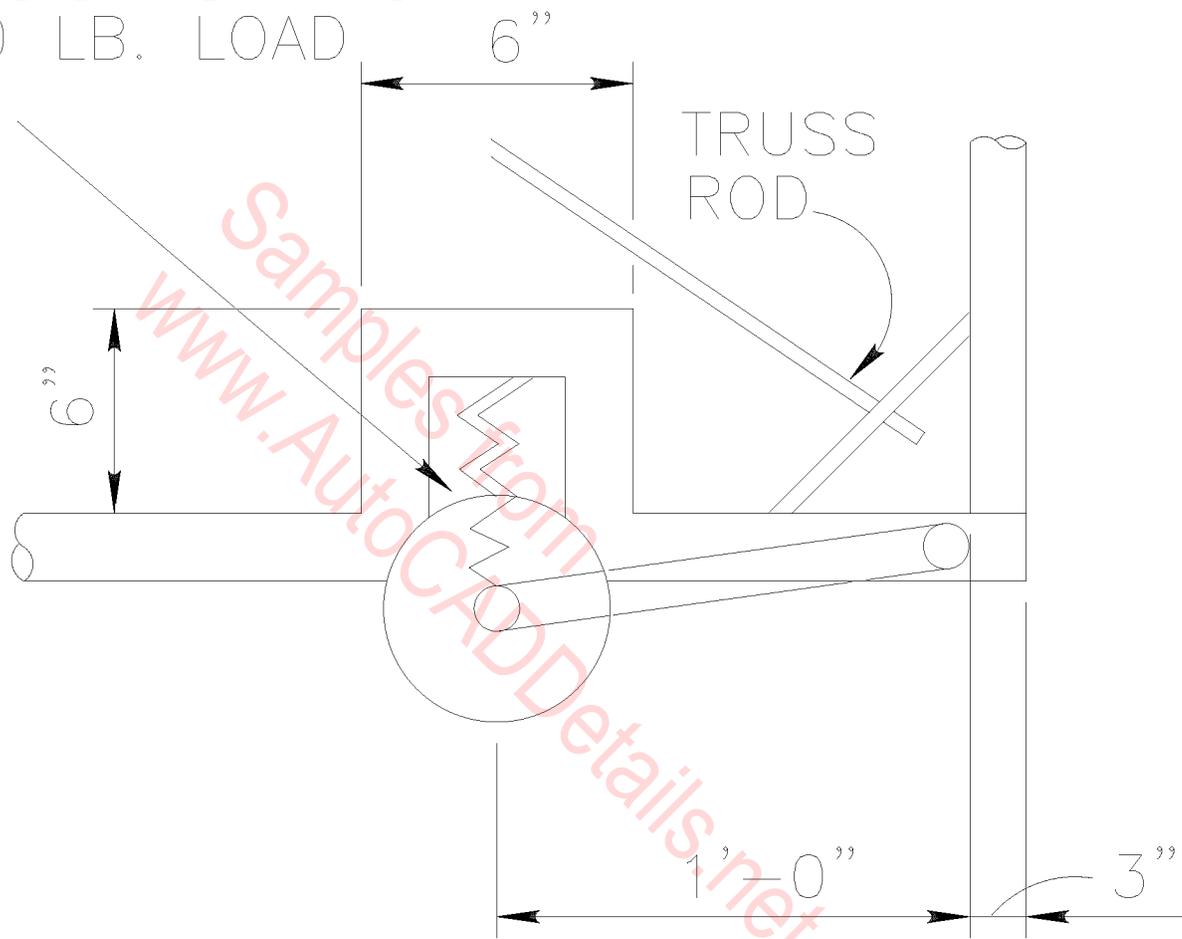
N.T.S.



SLIDE GATE DETAIL

N.T.S.

COMPRESSION SPRING
WITH 500 LB. LOAD
CAPACITY



GUIDE WHEEL DETAIL

N.T.S.

5/8" x 7" STEEL SEAT
FRAME

2-1/2" PHILLIPS HEAD
WOOD SCREWS COUNTERSUNK

2-1/2" X 2-1/2" CLEAR HEART
REDWOOD AS SPECIFIED

CONTINUOUS WELD

4" X 4" X 3/8" STEEL 'H' COLUMN
12" PER FOOT MIN.

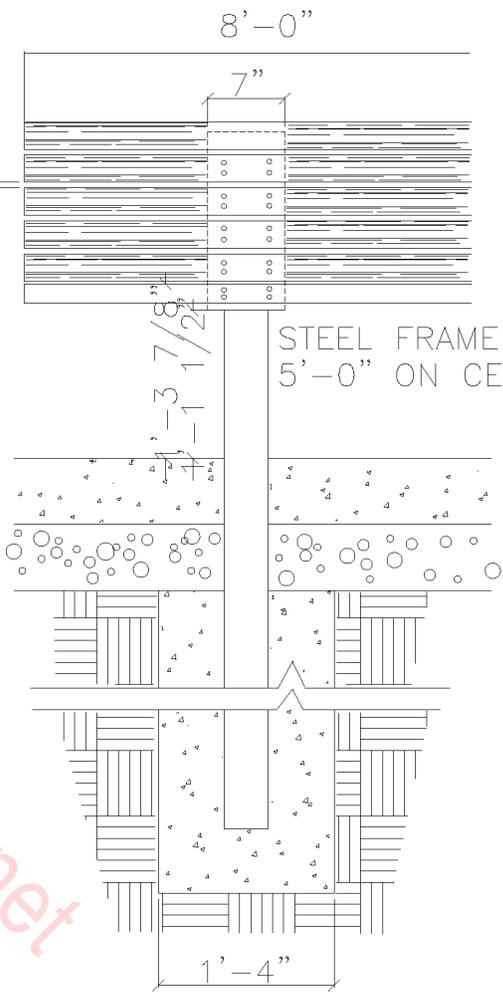
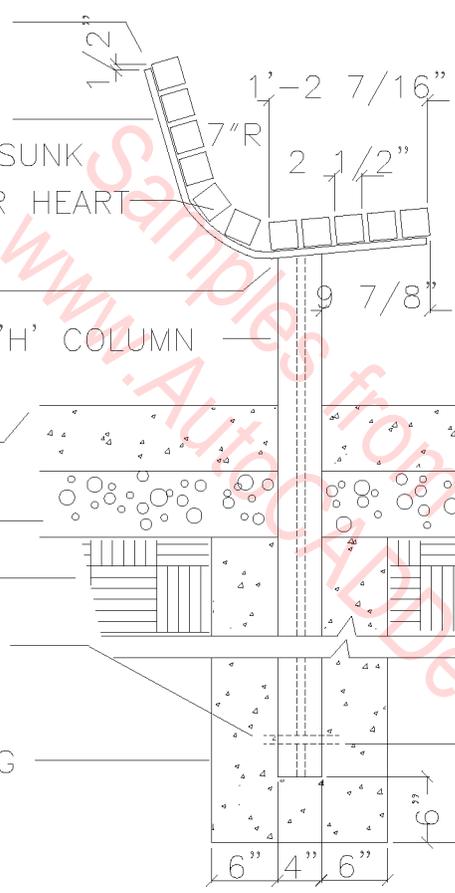
FINISHED GRADE OF
CONCRETE PAVEMENT

GRAVEL BEDDING

COMPACT SUBGRADE

8" X 3/4" ROD WELDED
IN PLACE

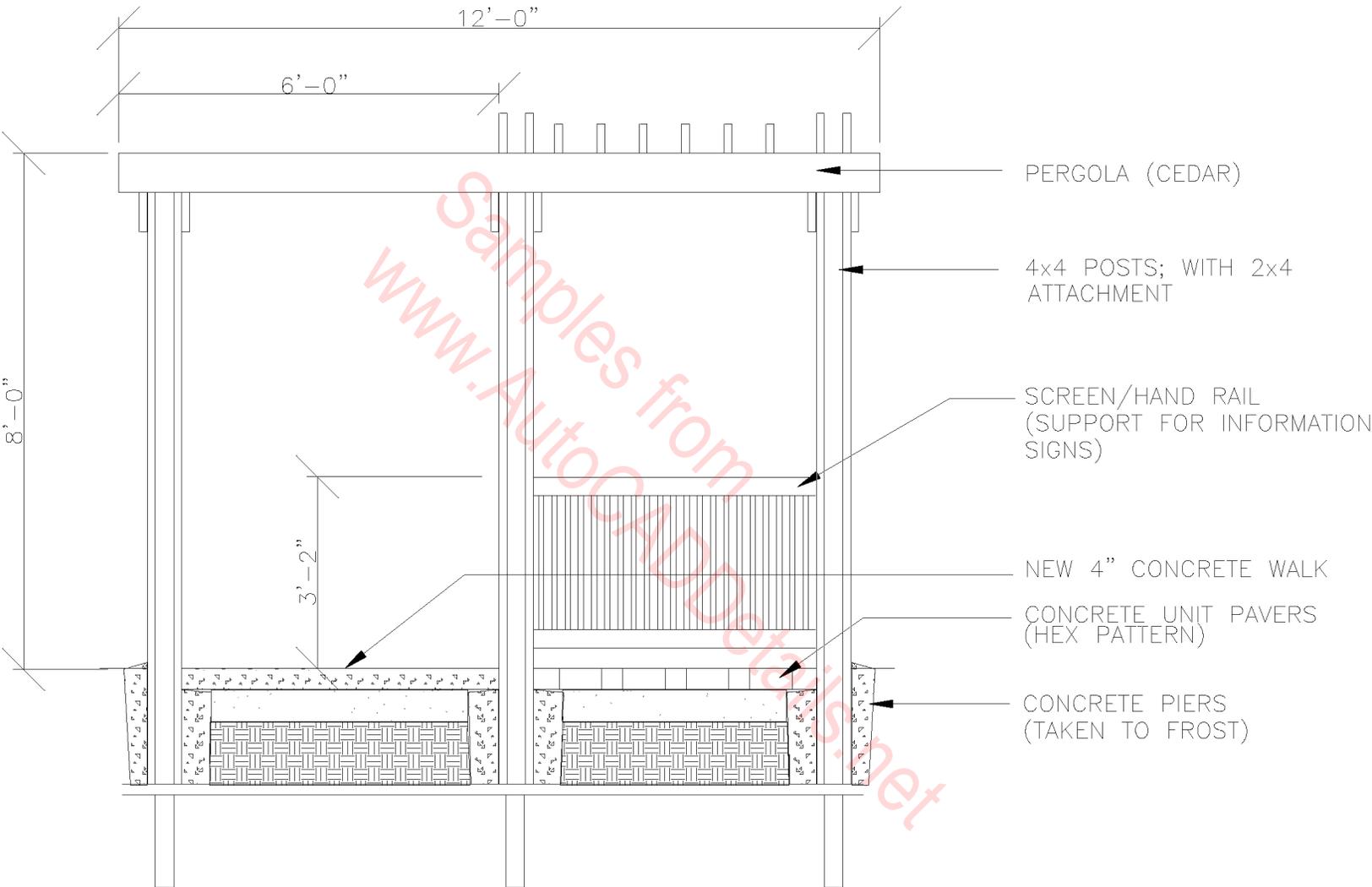
1'-4" CONCRETE FOOTING
TO FROST



STEEL FRAME IS
5'-0" ON CENTER

BENCH DETAIL

SCALE: 3/4"=1'-0"



PERGOLA (CEDAR)

4x4 POSTS; WITH 2x4 ATTACHMENT

SCREEN/HAND RAIL (SUPPORT FOR INFORMATION SIGNS)

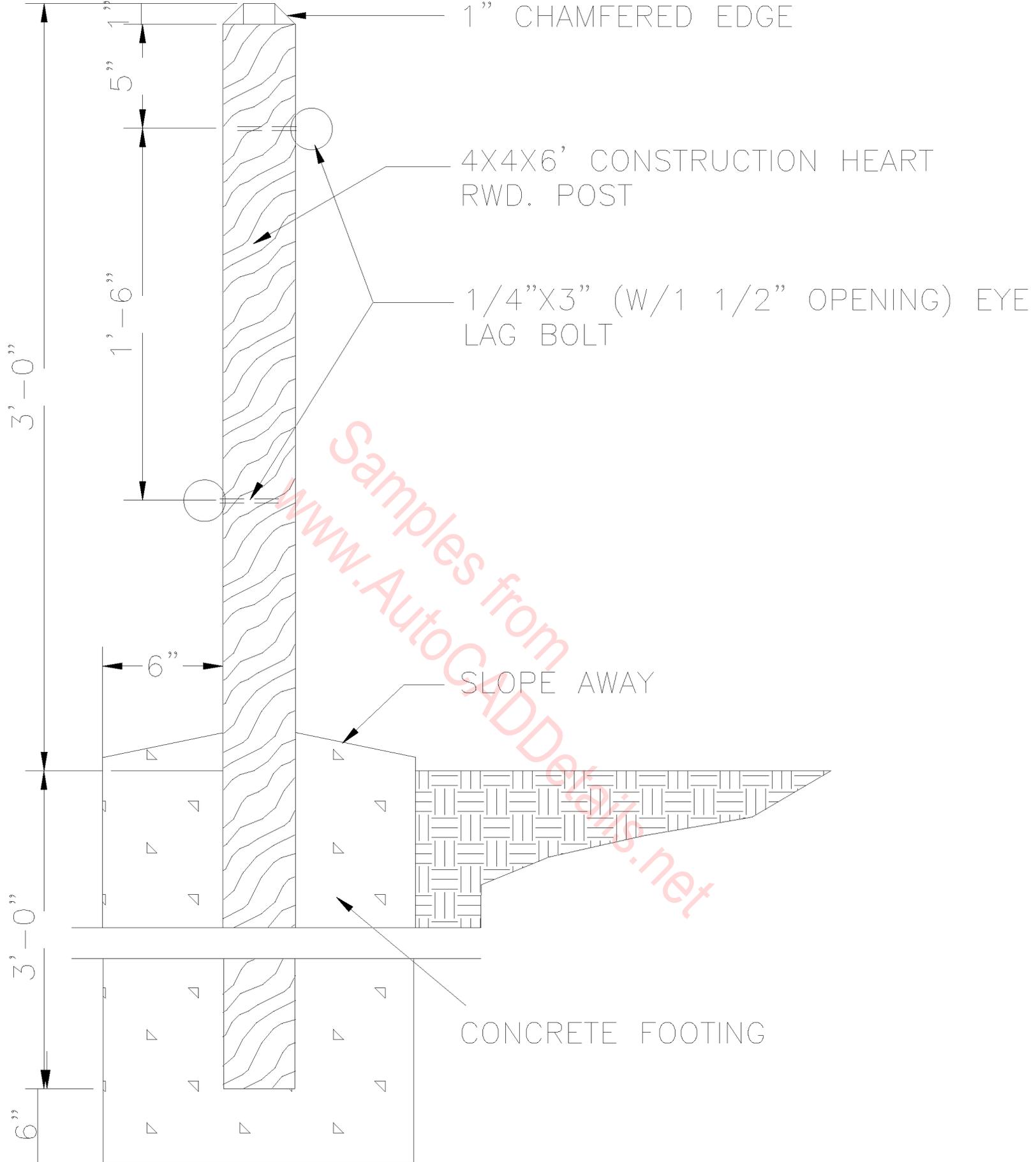
NEW 4" CONCRETE WALK

CONCRETE UNIT PAVERS (HEX PATTERN)

CONCRETE PIERS (TAKEN TO FROST)

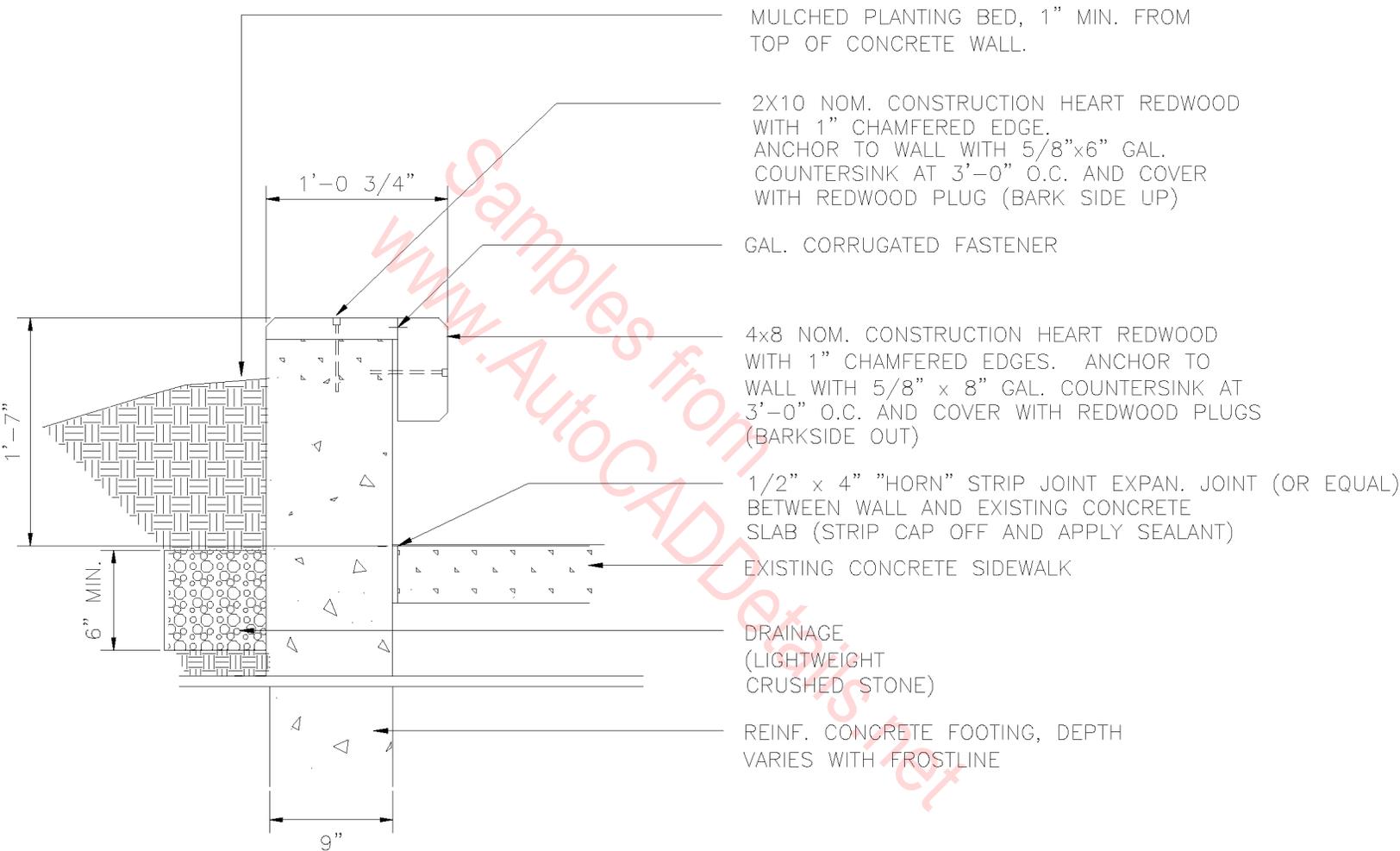
PERGOLA SECTION

SCALE: 1/2" = 1'-0"



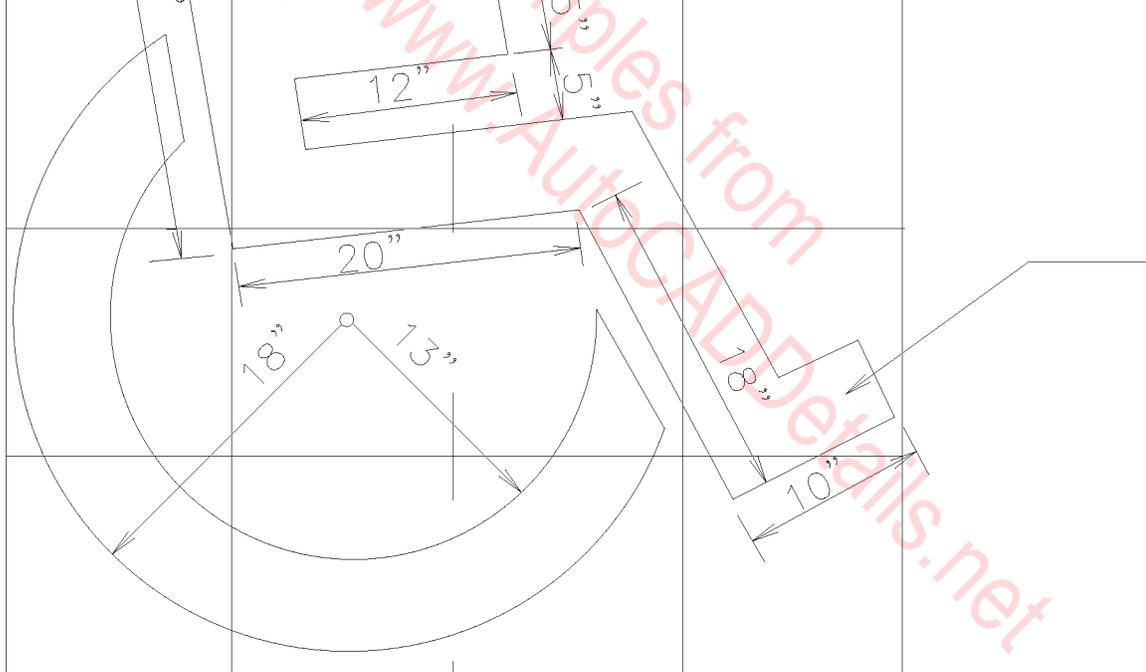
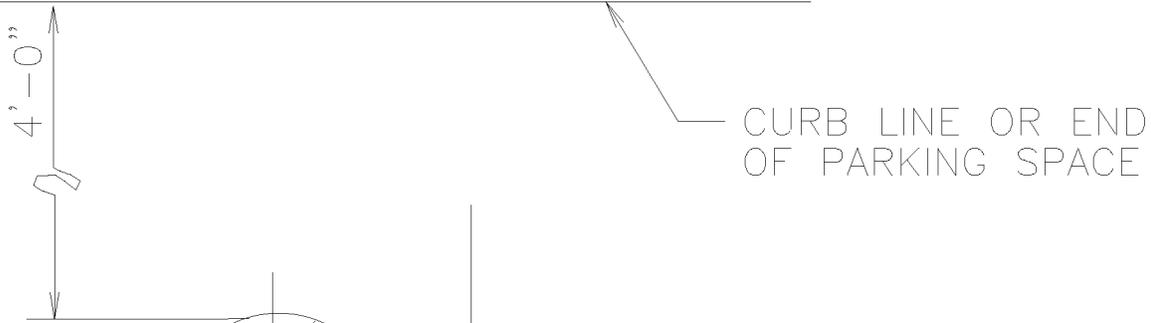
PET POST

SCALE: 1-1/2" = 1'-0"



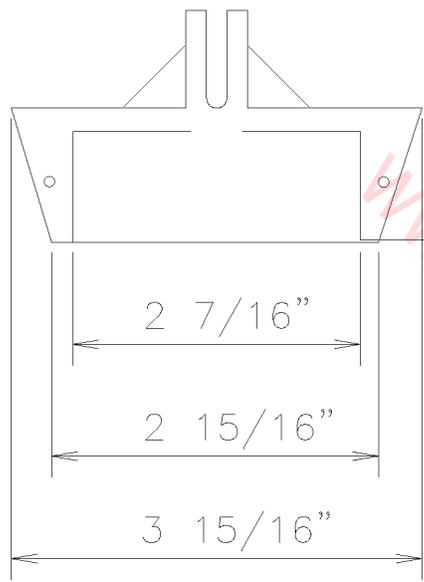
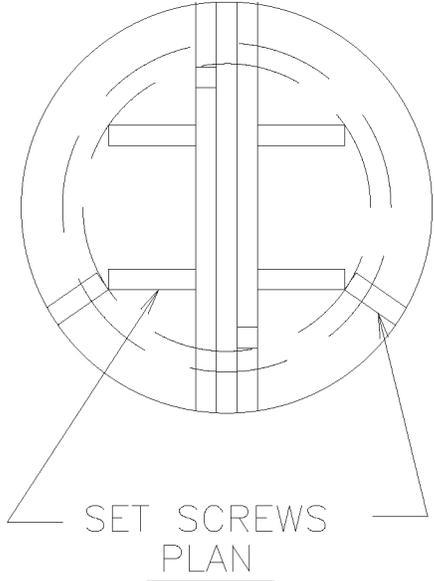
SEATWALL SECTION

SCALE: 1-1/2" = 1'-0"



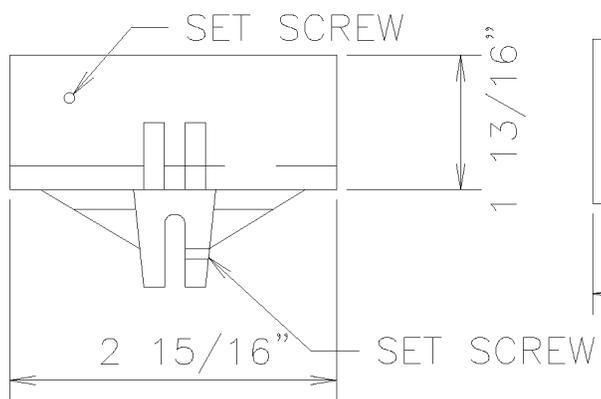
HANDICAP PARKING SYMBOL

N.T.S.

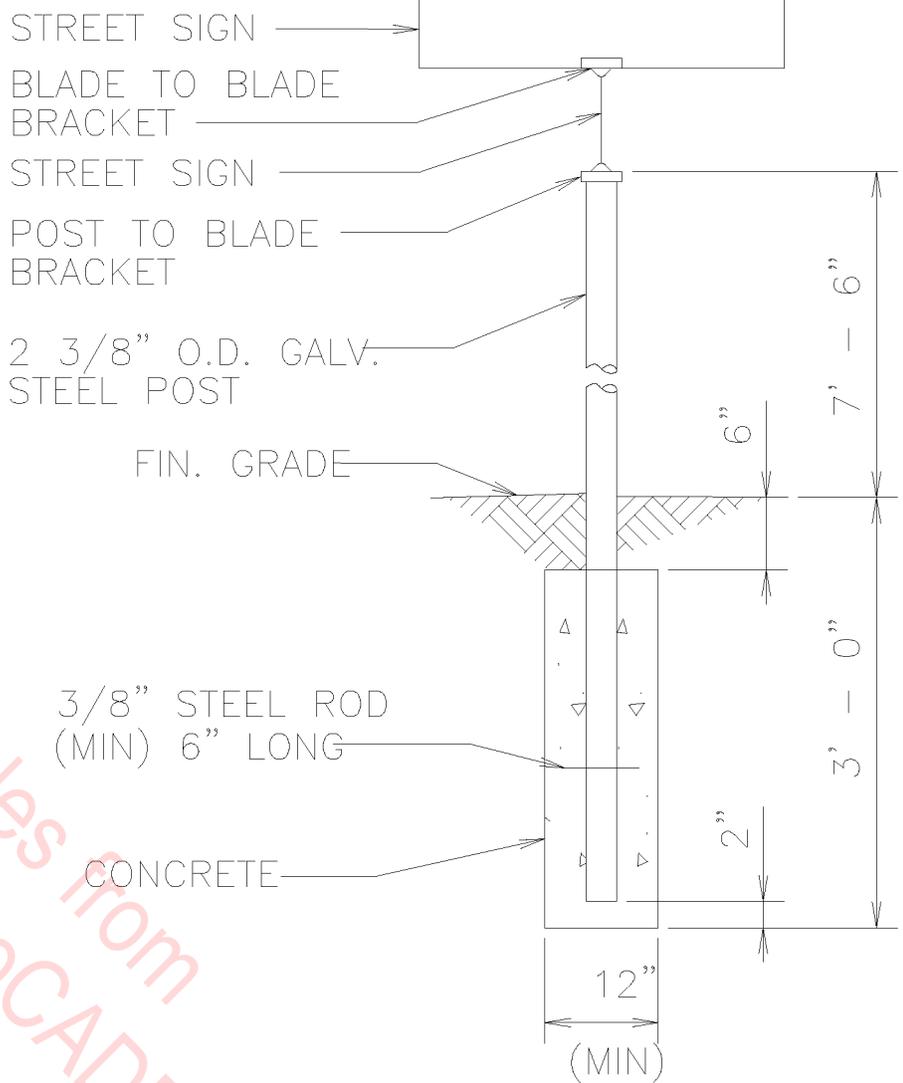


ELEV

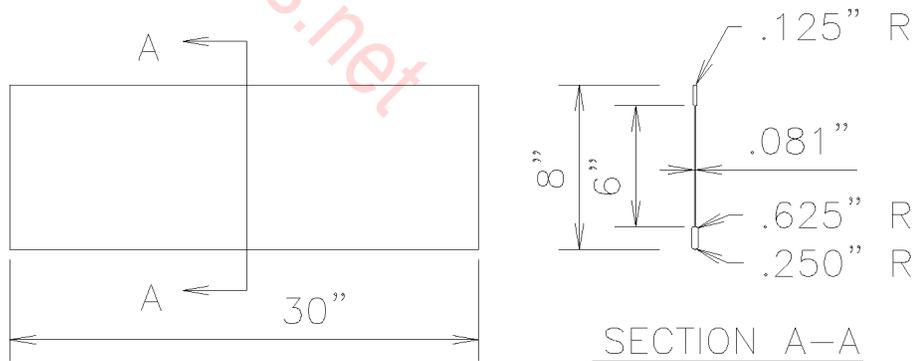
POST TO BLADE BRACKET



BLADE TO BLADE BRACKET



STREET SIGN POST

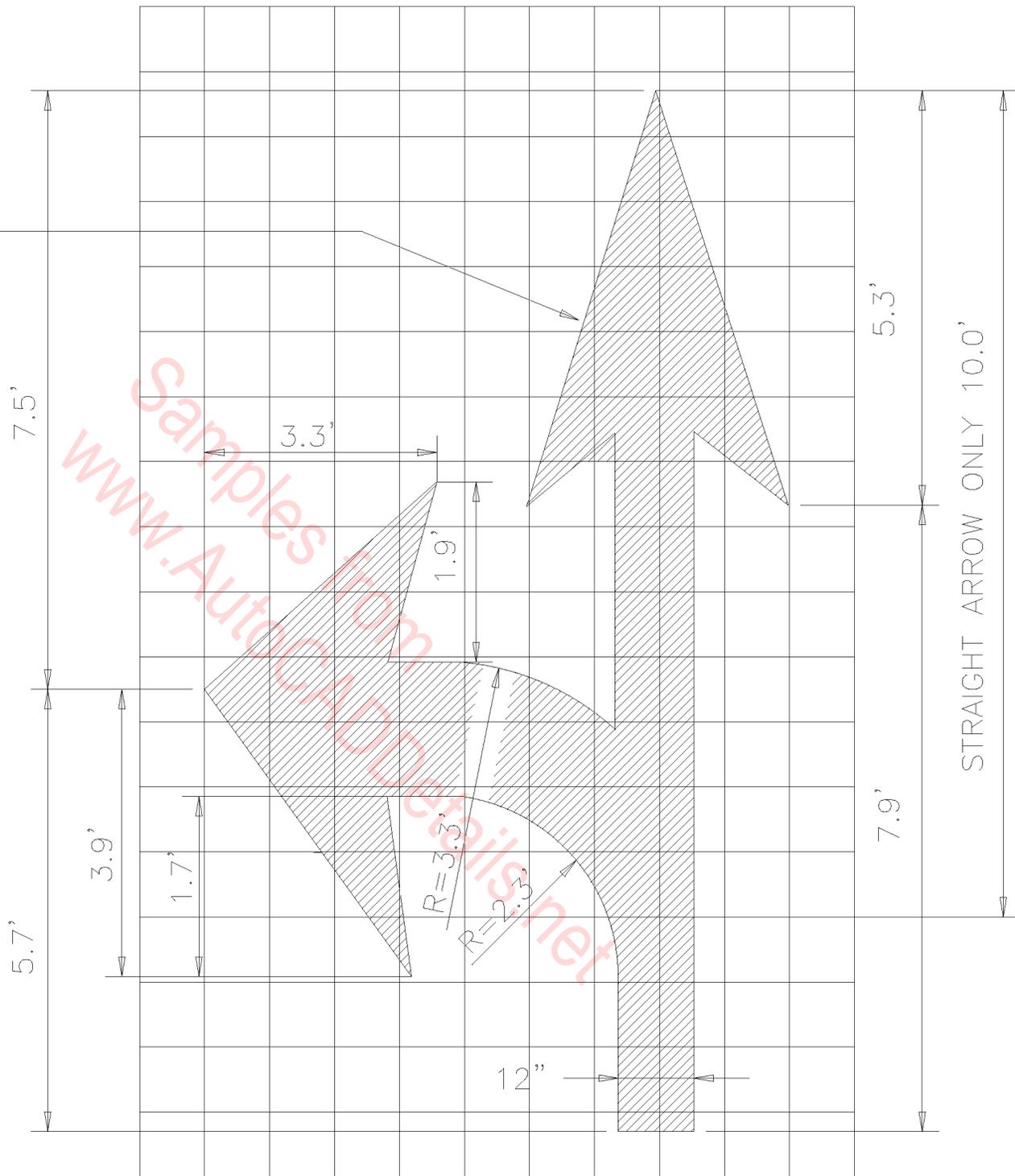


STREET SIGN

STREET SIGN POST

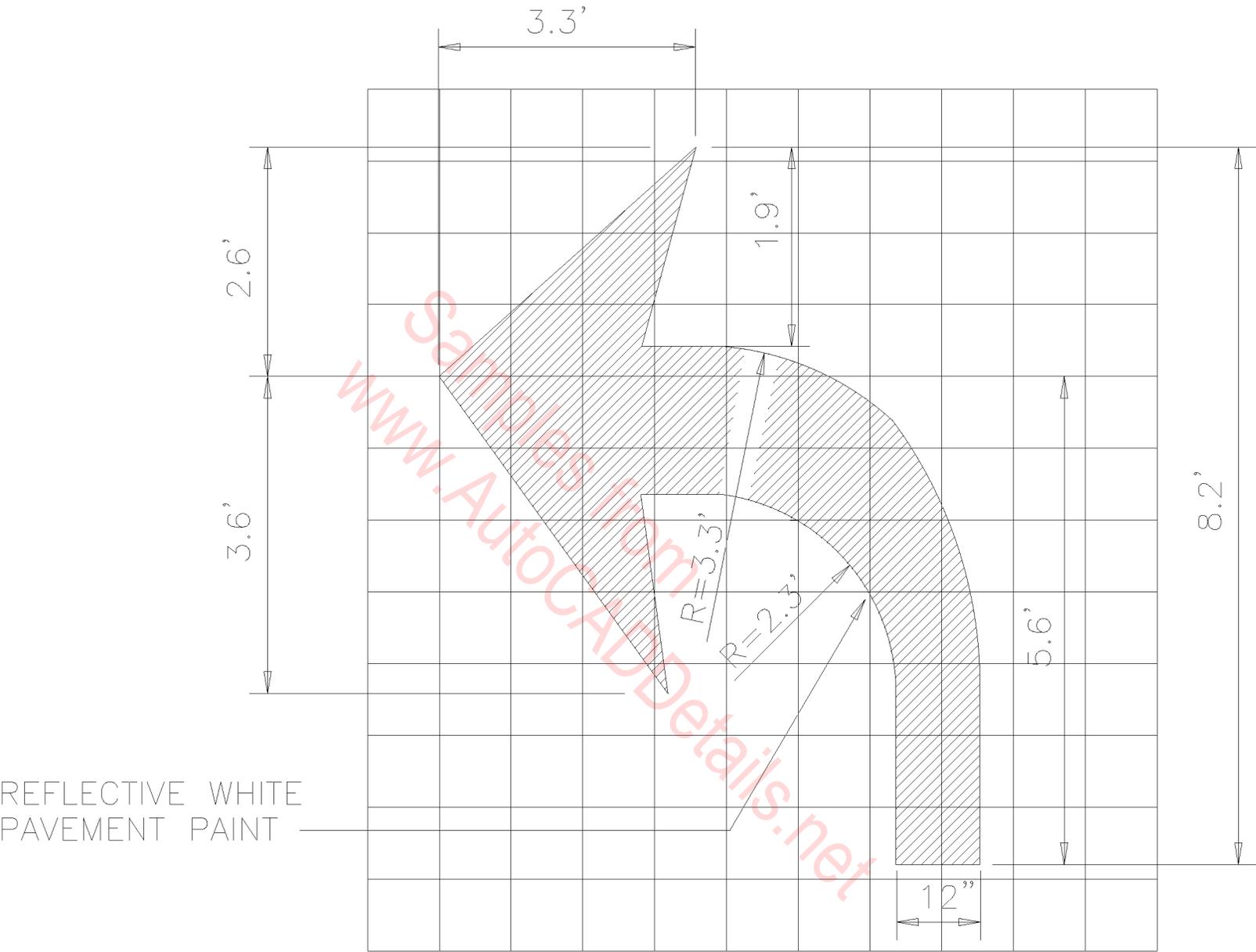
N.T.S.

REFLECTIVE WHITE
PAVEMENT PAINT



TURN & STRAIGHT ARROW

N.T.S.



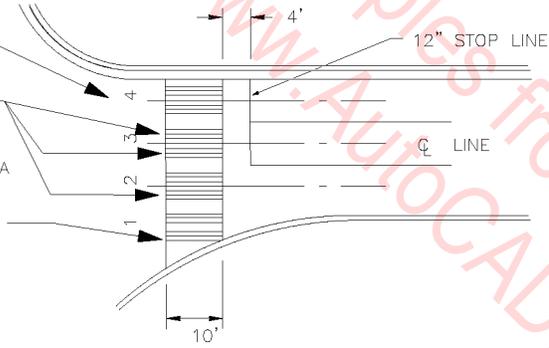
TYPICAL TURN ARROW

N.T.S.

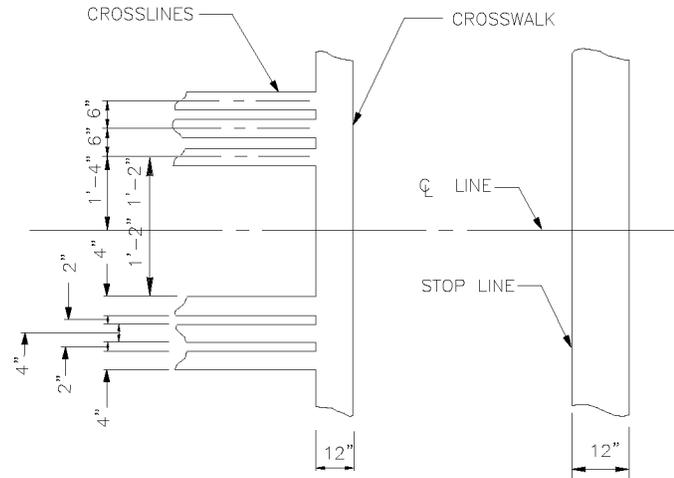
AMOUNT OF LINES
(FOR PAYMENT)

TWO (2) SETS
CROSSLINES PER LANE

SEE DETAIL A



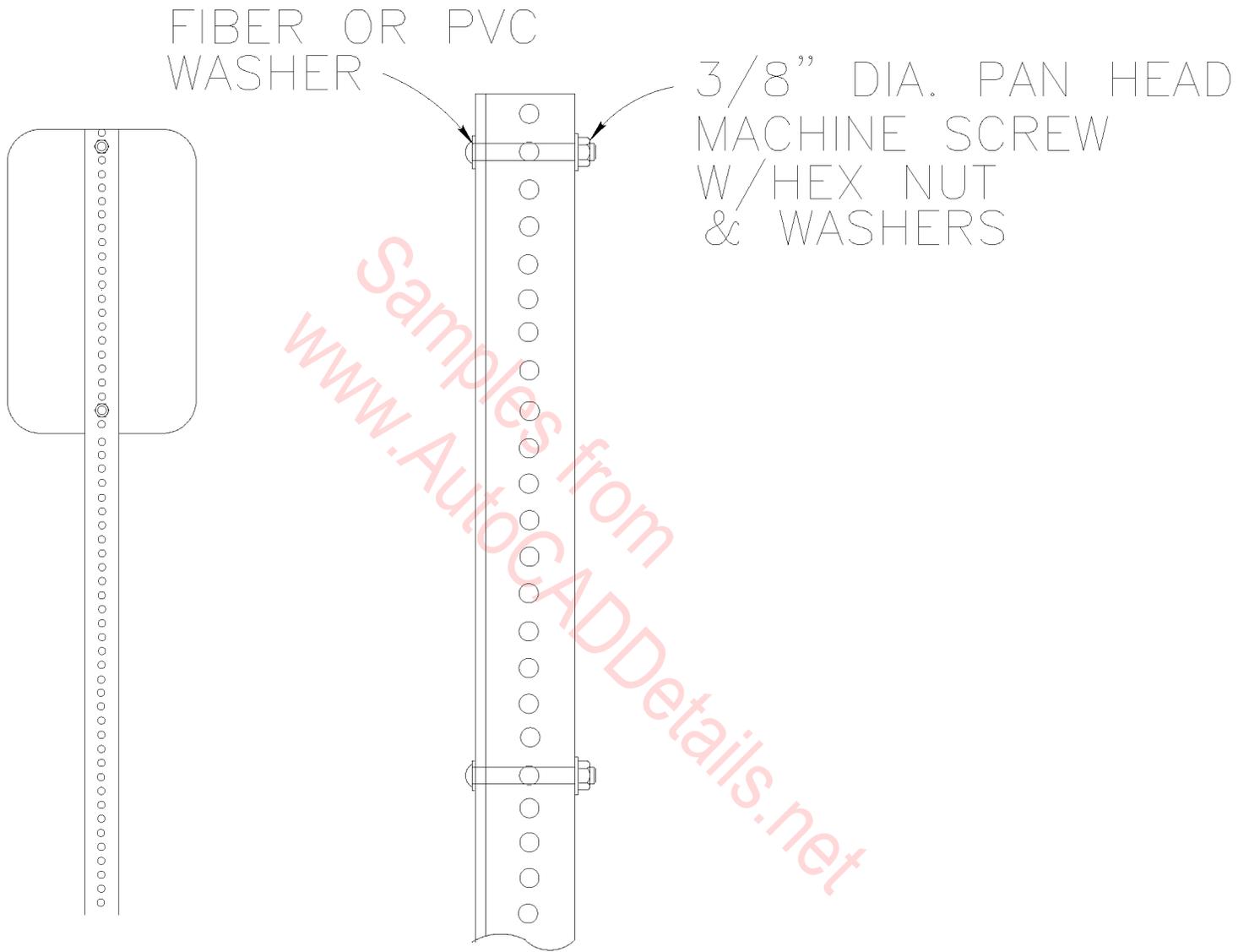
PLAN



DETAIL "A"

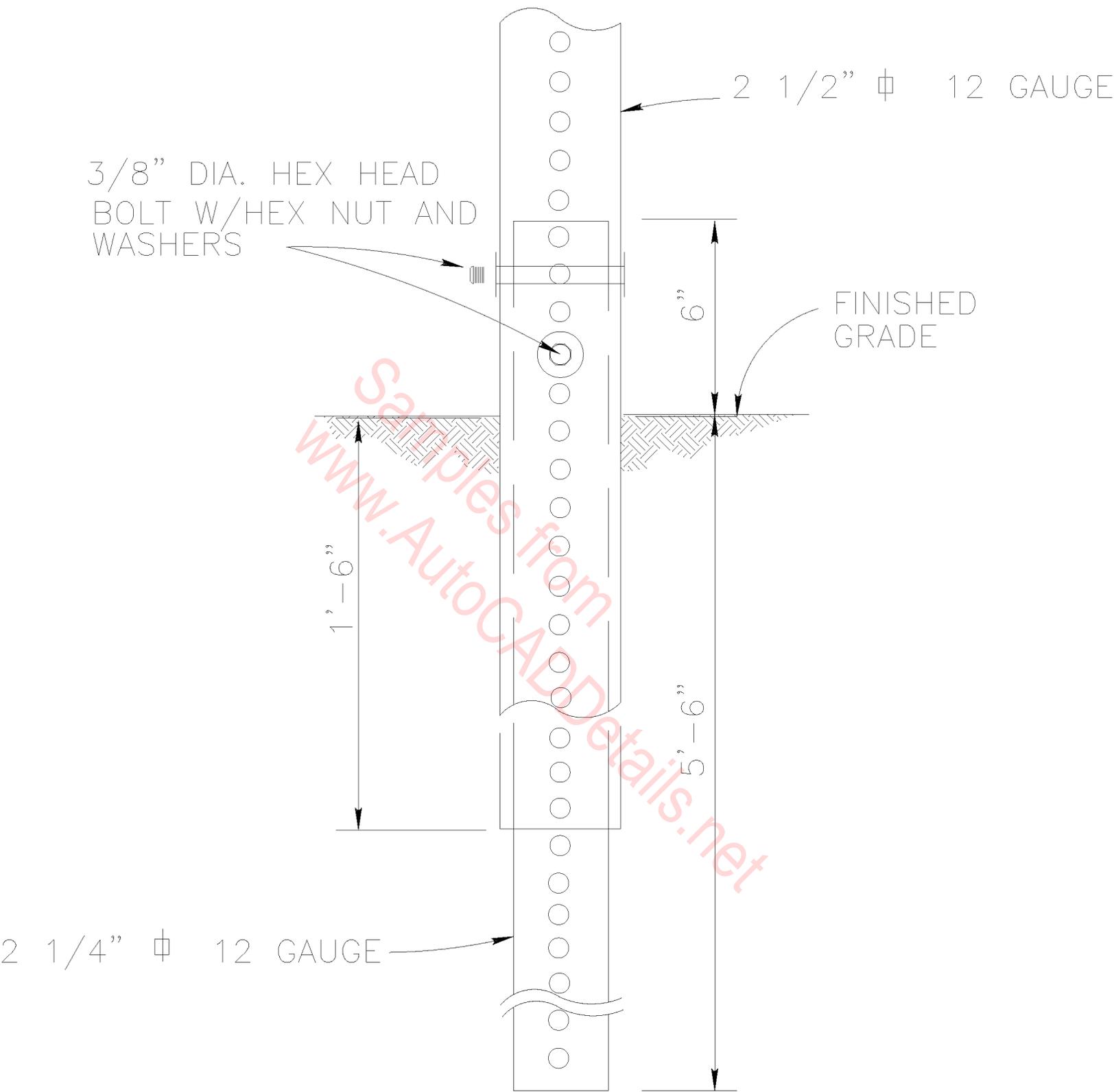
CROSSWALK AND STOP LINE

N.T.S.



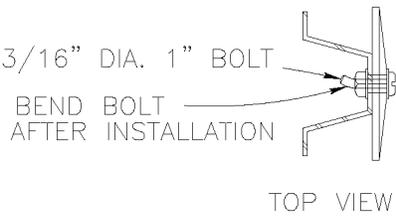
SIGN PANEL ATTACHMENT

N.T.S.



BREAK-AWAY DETAIL

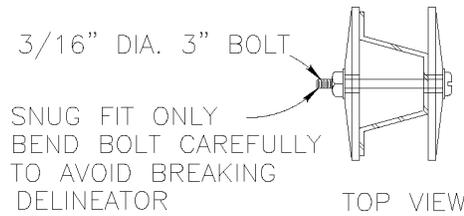
N.T.S.



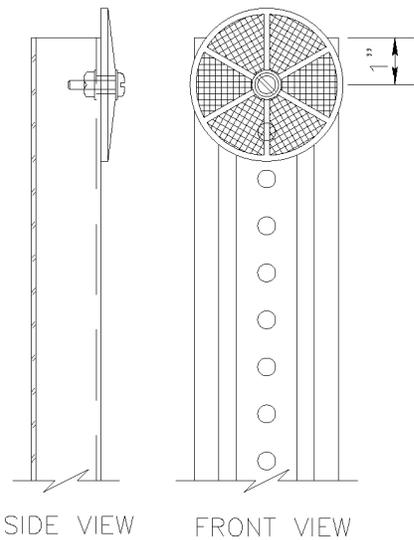
TOP VIEW



TOP VIEW



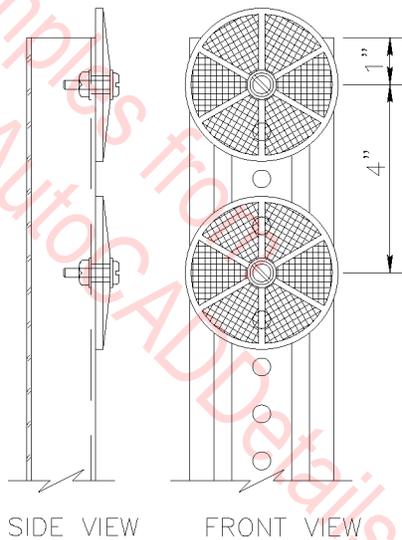
TOP VIEW



SIDE VIEW FRONT VIEW

TYPE I

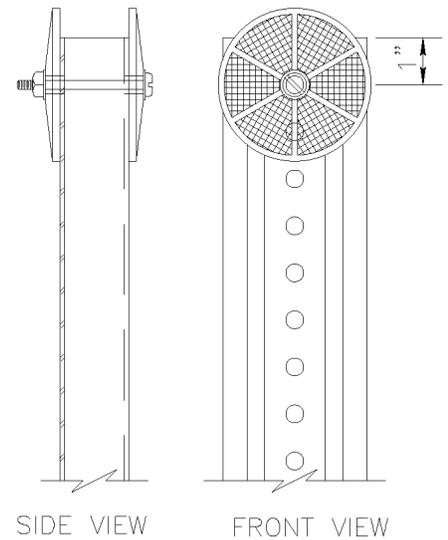
SINGLE DELINEATOR - ONE WAY



SIDE VIEW FRONT VIEW

TYPE II

DOUBLE DELINEATOR - ONE WAY



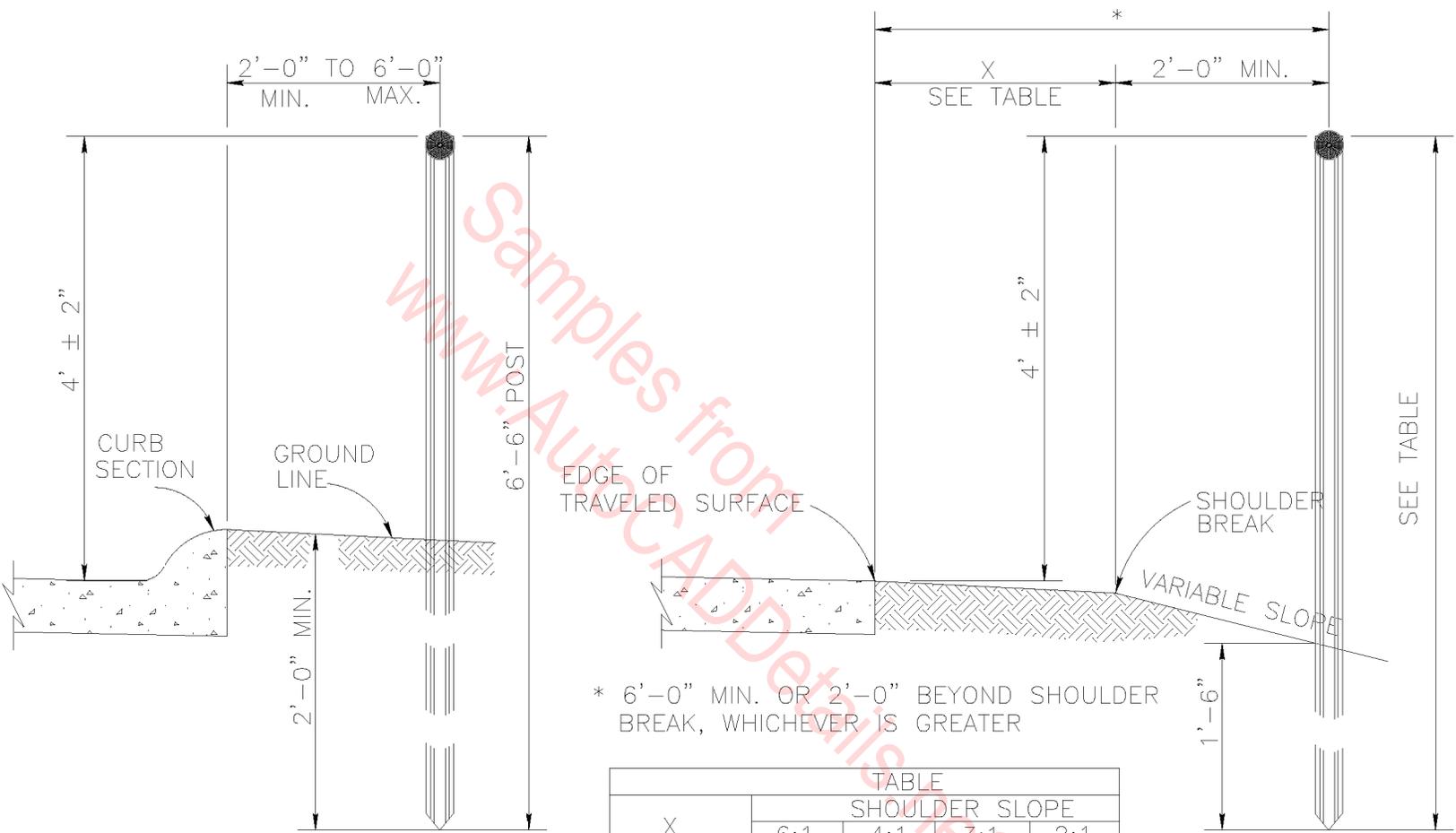
SIDE VIEW FRONT VIEW

TYPE III

SINGLE DELINEATOR - TWO WAY

TYPICAL DELINEATOR TYPES AND MOUNTINGS

N.T.S.



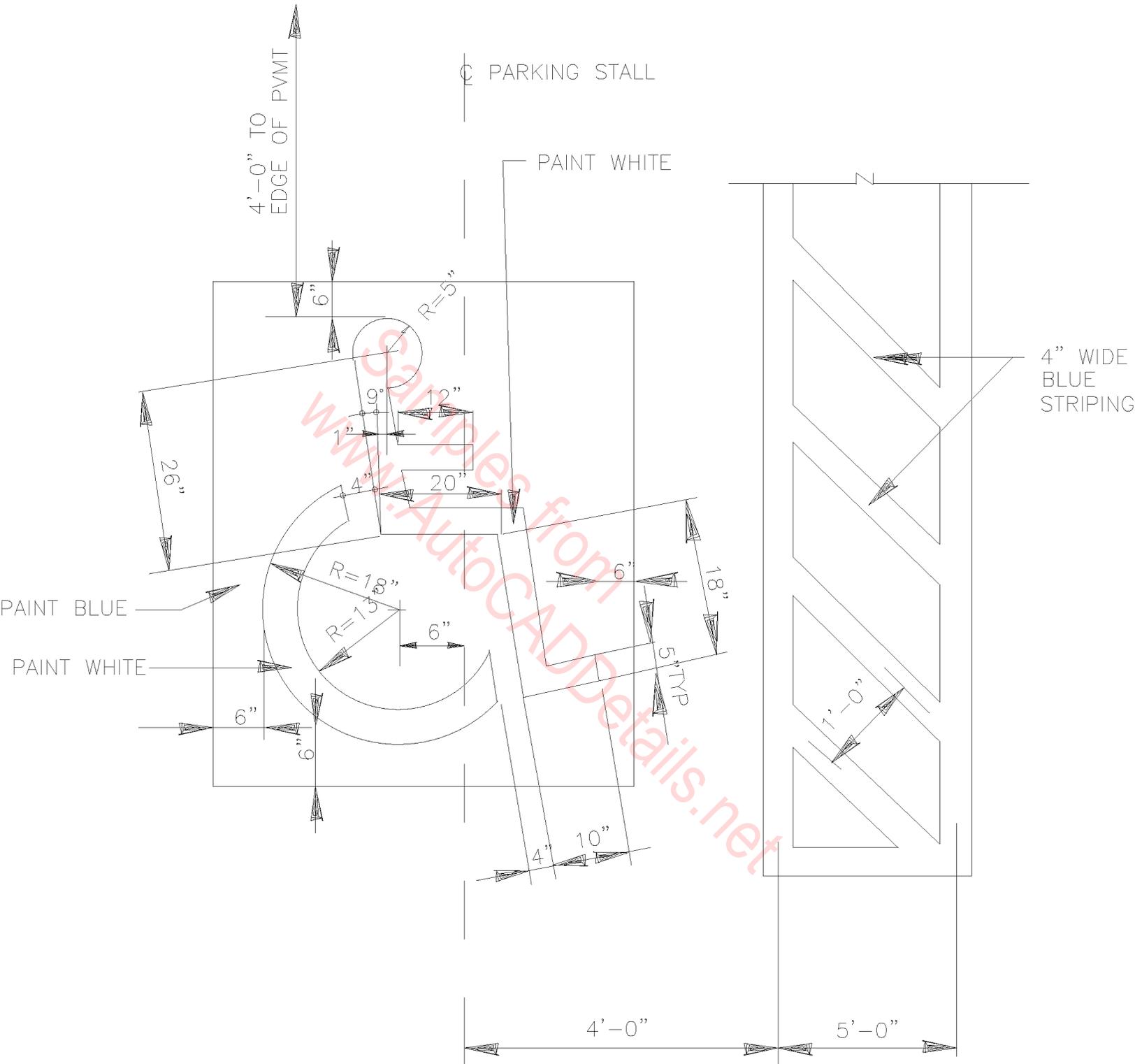
* 6'-0" MIN. OR 2'-0" BEYOND SHOULDER BREAK, WHICHEVER IS GREATER

X	SHOULDER SLOPE			
	6:1	4:1	3:1	2:1
2'	6 1/2	6 1/2	8	8
4' to 12'	6 1/2	6 1/2	6 1/2	8

POST LENGTHS IN FEET

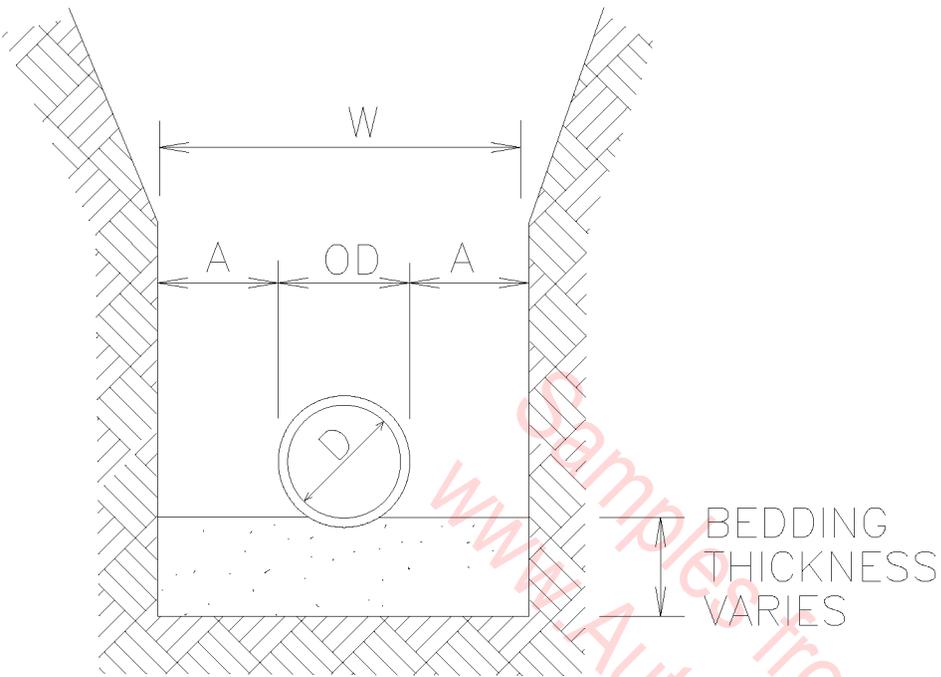
DELINEATOR POST LOCATIONS

N.T.S.



HANDICAPPED PARKING DETAIL

N.T.S.



PIPE DIA "D"	MAXIMUM "A"
6" TO 15"	8"
16" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	18"

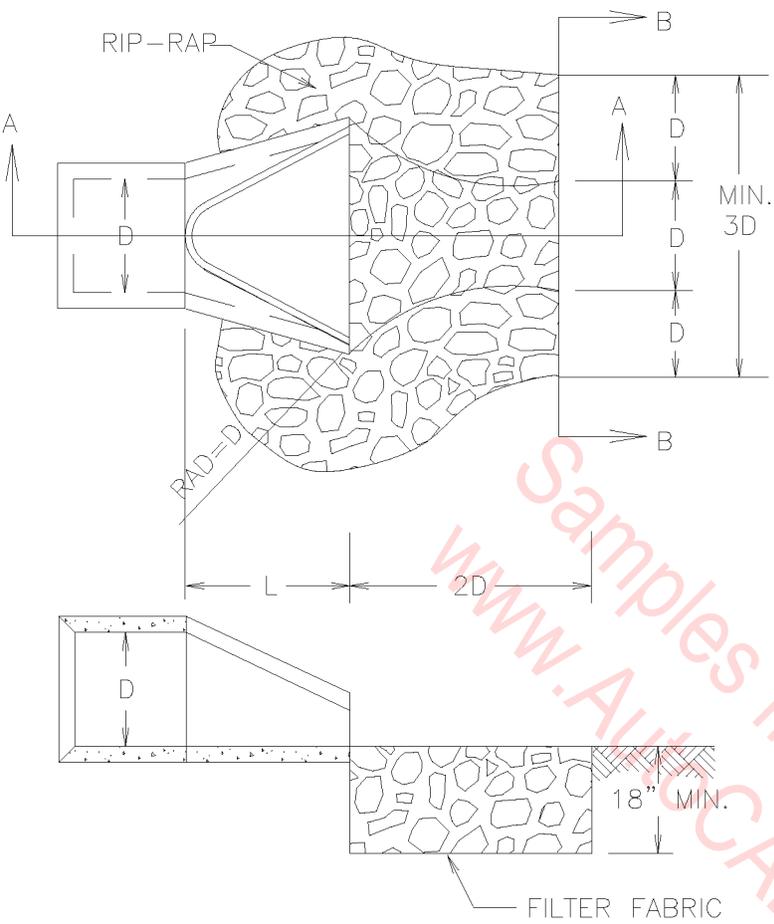
MAXIMUM TRENCH WIDTH "W"
TAKEN AT TOP OF PIPE

NOTE: PROVIDE BEDDING IN ACCORDANCE WITH
THE SPECIFICATIONS.

STANDARD PIPE TRENCH WIDTH

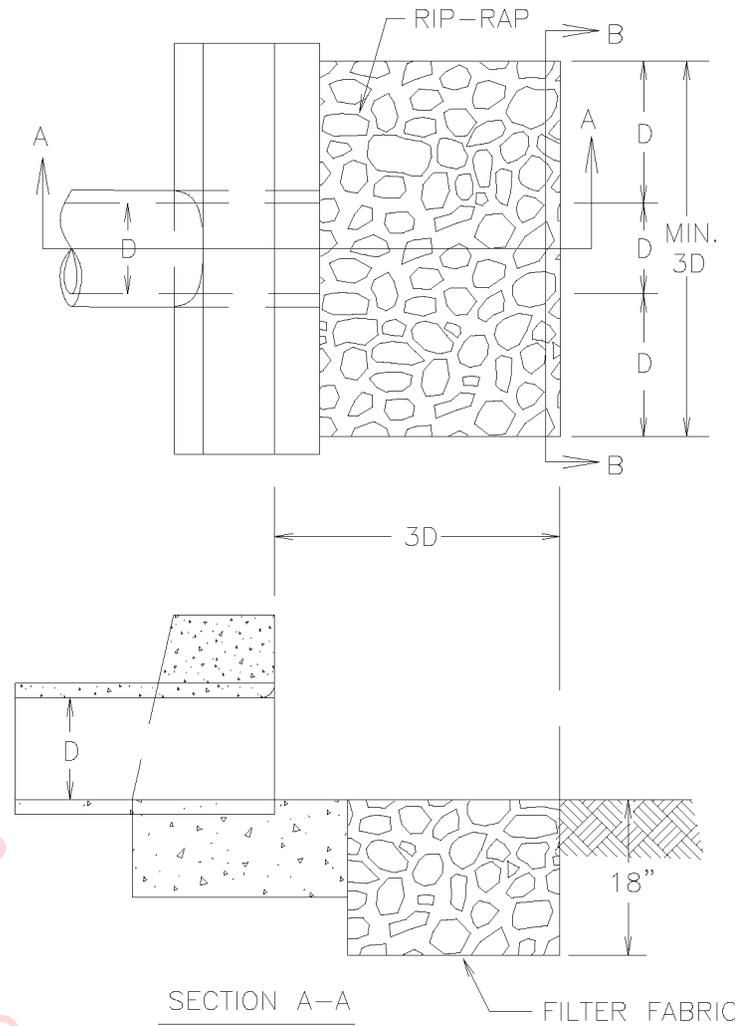
N.T.S.

FLARED END SECTION PLAN

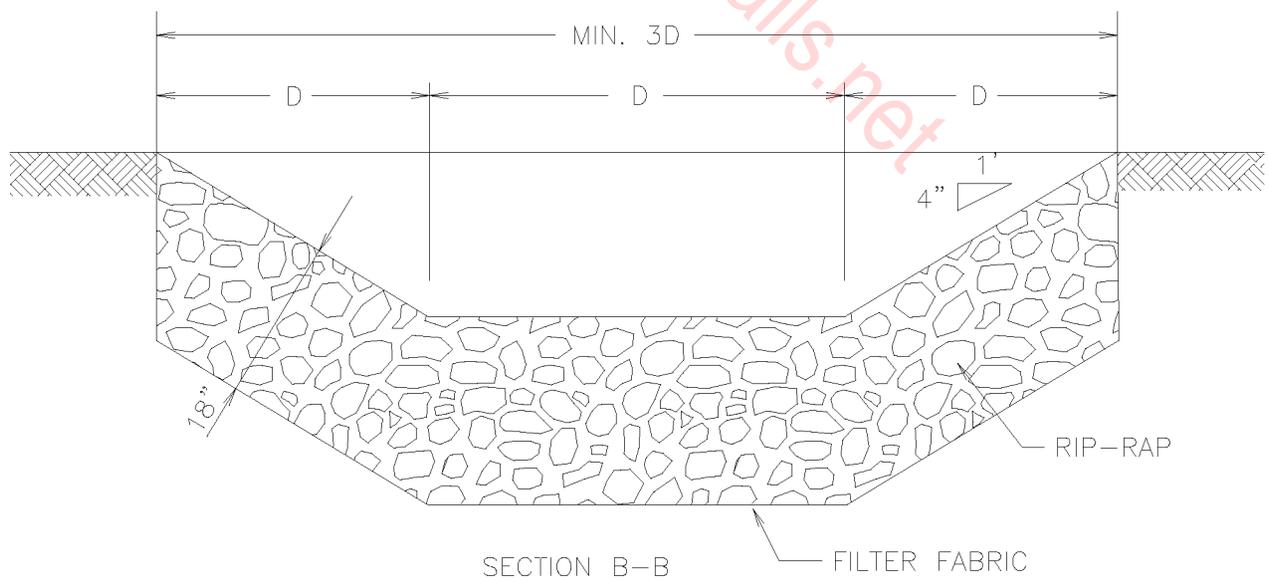


SECTION A-A

HEADWALL PLAN



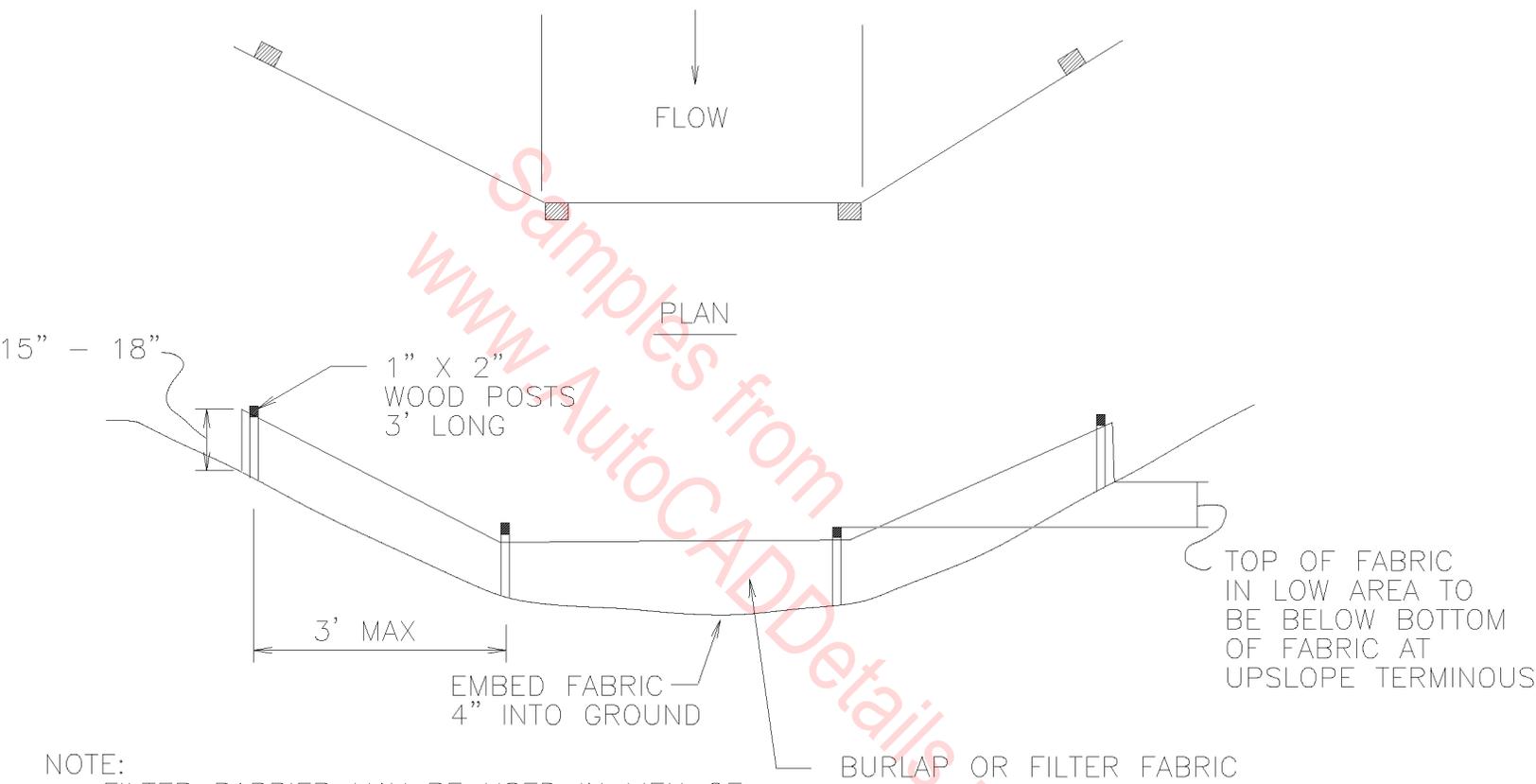
SECTION A-A



SECTION B-B

DISCHARGE AREA EROSION CONTROL DETAIL

N.T.S.



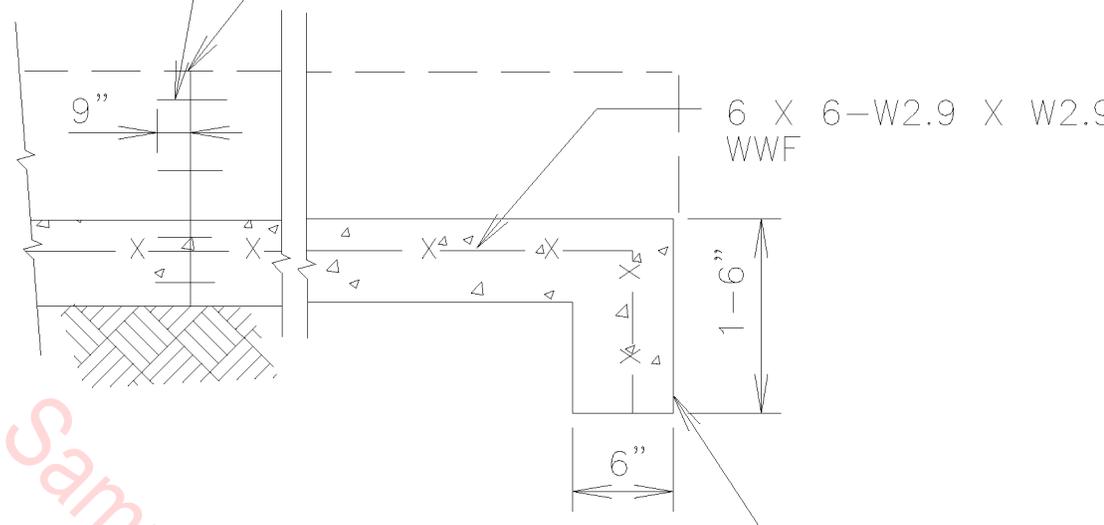
NOTE:
 FILTER BARRIER MAY BE USED IN LIEU OF
 STRAW BALE BARRIER.
 DO NOT USE IN DITCHES CONTAINING
 MAJOR WATER FLOWS.

FILTER BARRIER

N.T.S.

4 X 18" DOWELS
AT ALL JOINTS

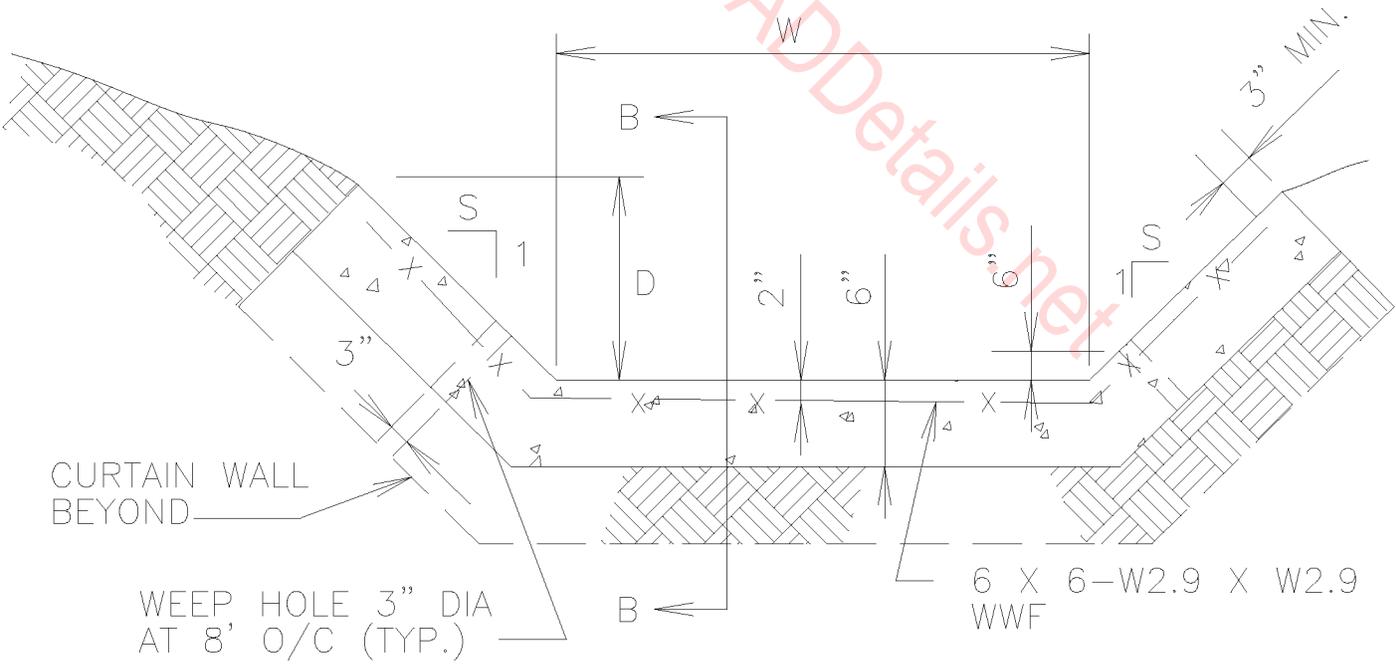
EXPANSION JOINTS
AT 90' C/C



W= _____
 D= _____
 S= _____

CURTAIN WALL
AT UPSTREAM END

SECTION B-B



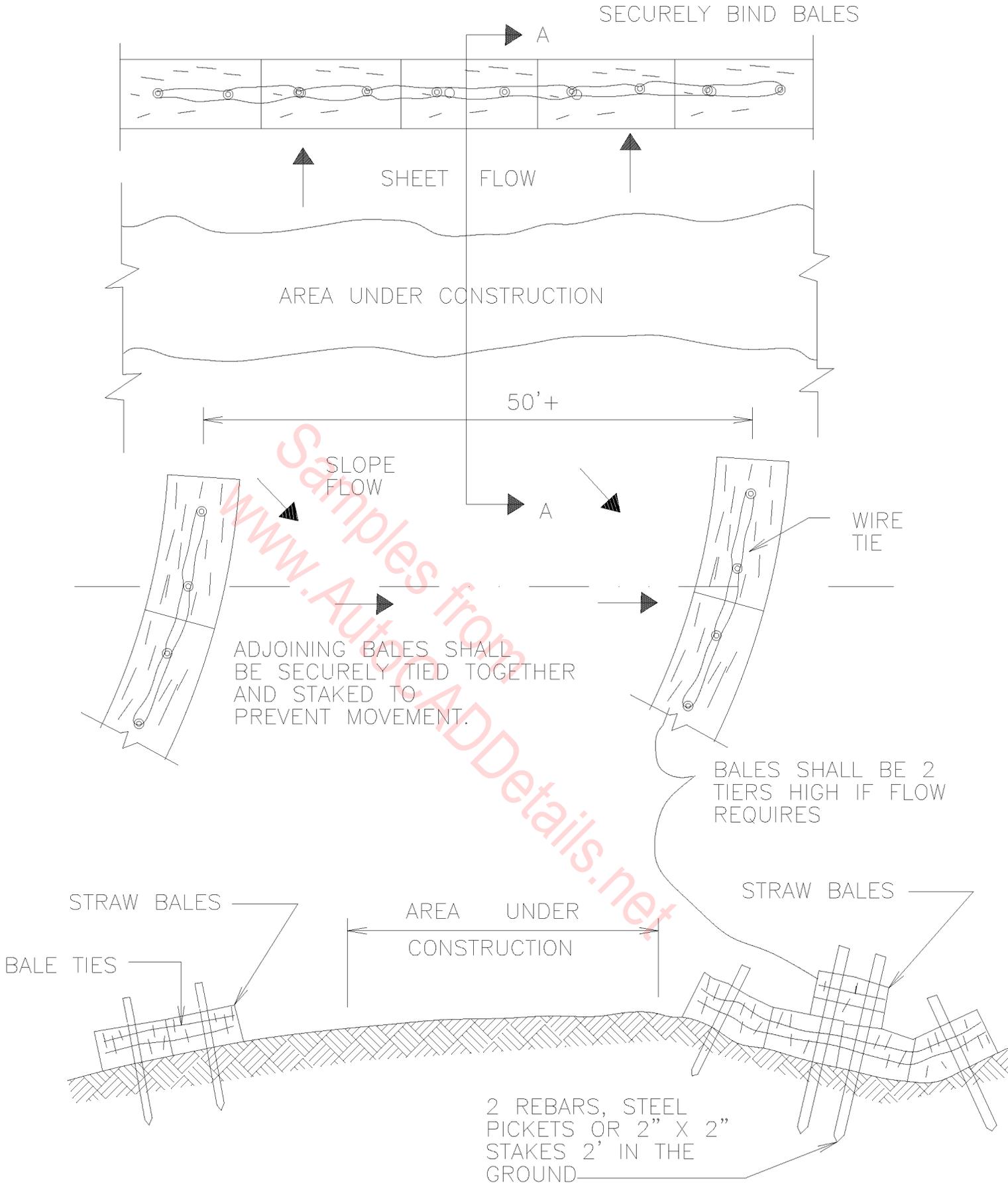
CURTAIN WALL
BEYOND

WEEP HOLE 3" DIA
AT 8' O/C (TYP.)

6 X 6-W2.9 X W2.9
WWF

PAVED DITCH

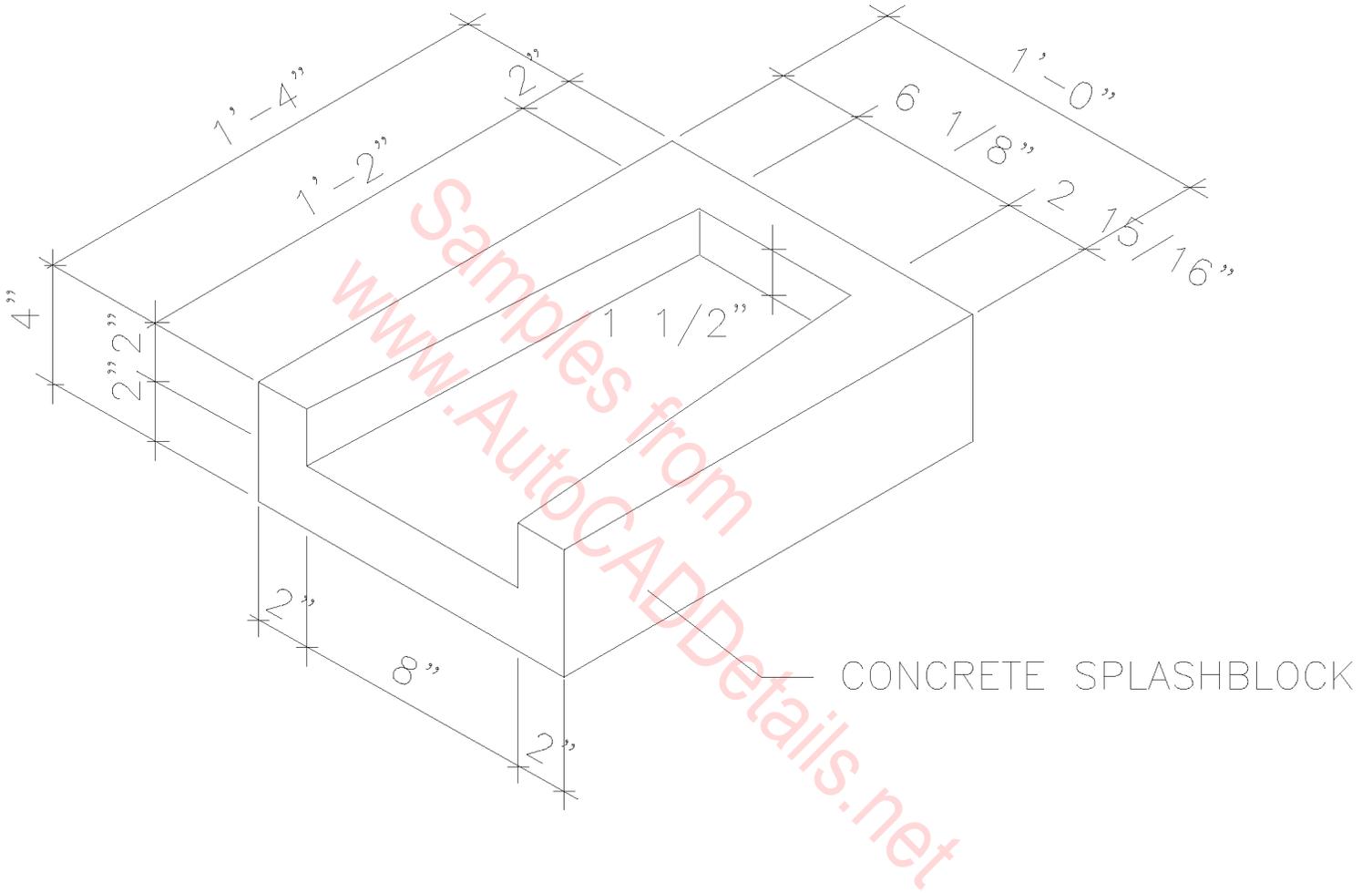
N.T.S.



SECTION A-A

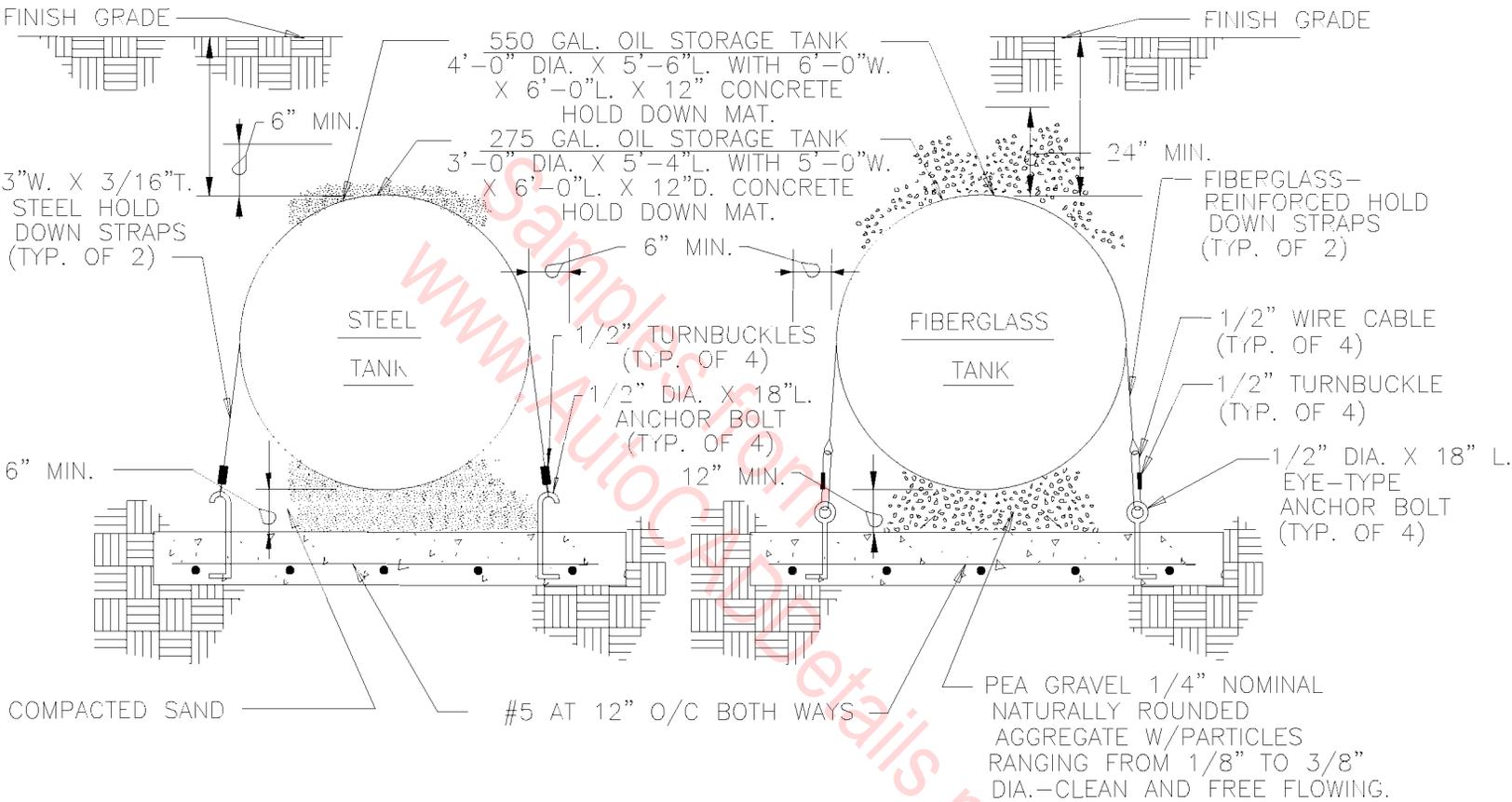
STRAW BALE SEDIMENT BARRIER

N.T.S.



CONCRETE SPLASH BLOCK DETAIL

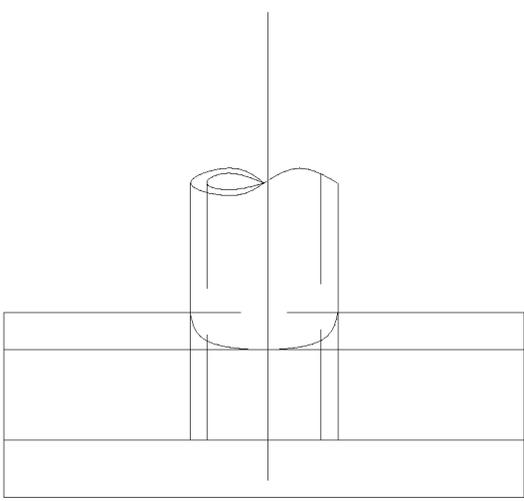
N.T.S.



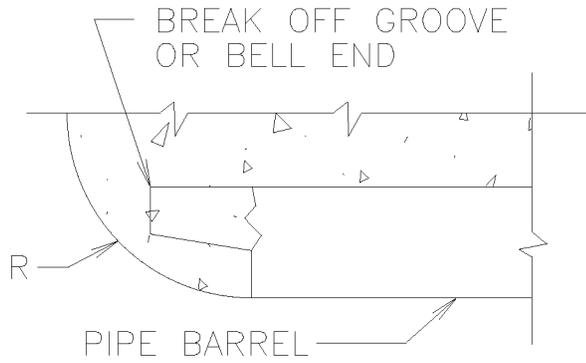
UNDERGROUND FUEL OIL TANK ANTI-FLOTATION PAD & ANCHORAGE DETAIL

N.T.S.

(TYPICAL FOR 275 & 550 GAL. STORAGE TANKS WHERE EXISTING CONCRETE PADS ARE FOUND.)

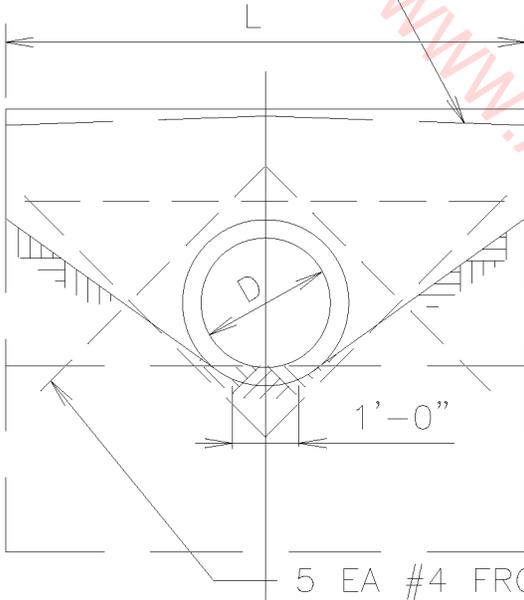


PLAN



ROUNDED ENTRANCE
(UPSTREAM HEADWALLS ONLY)

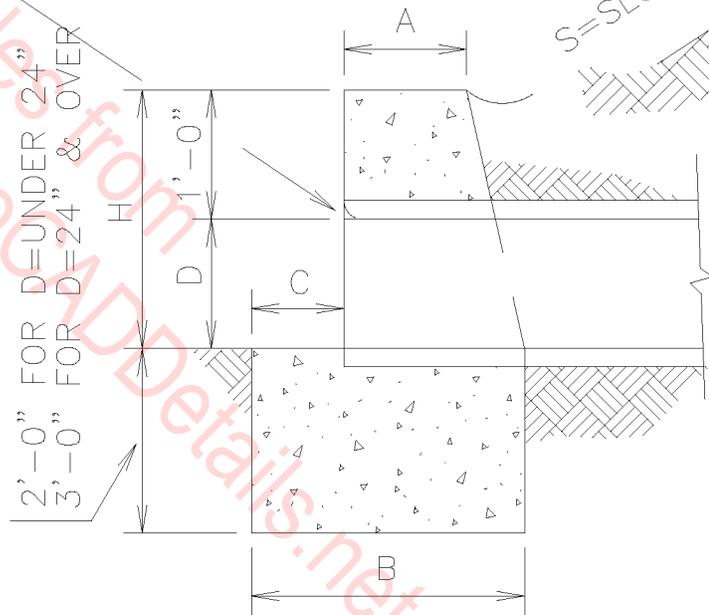
SLOPE SWALE BEHIND
HEADWALL 1/4":1'



ELEVATION

5 EA #4 FRONT
FACE ONLY

DOWNSTREAM HEADWALL AS SHOWN—
PROVIDE ROUNDED ENTRANCE FOR
UPSTREAM HEADWALL (SEE DETAIL)



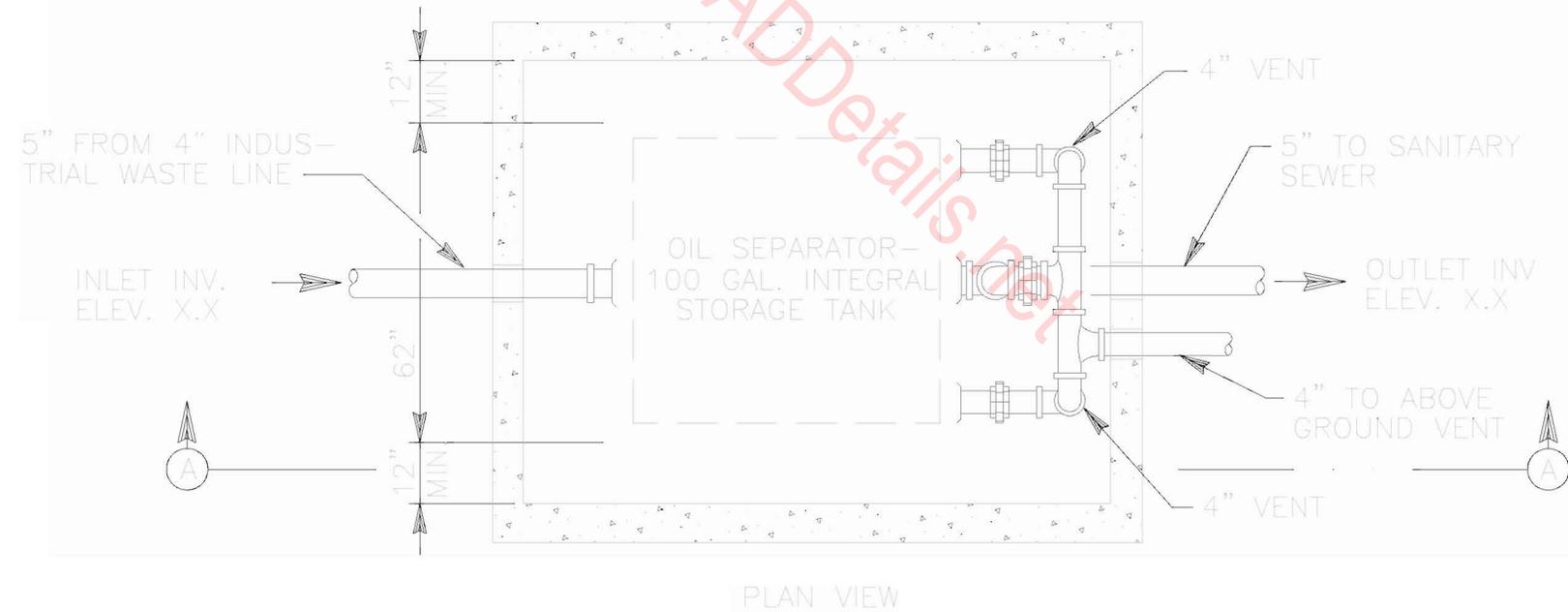
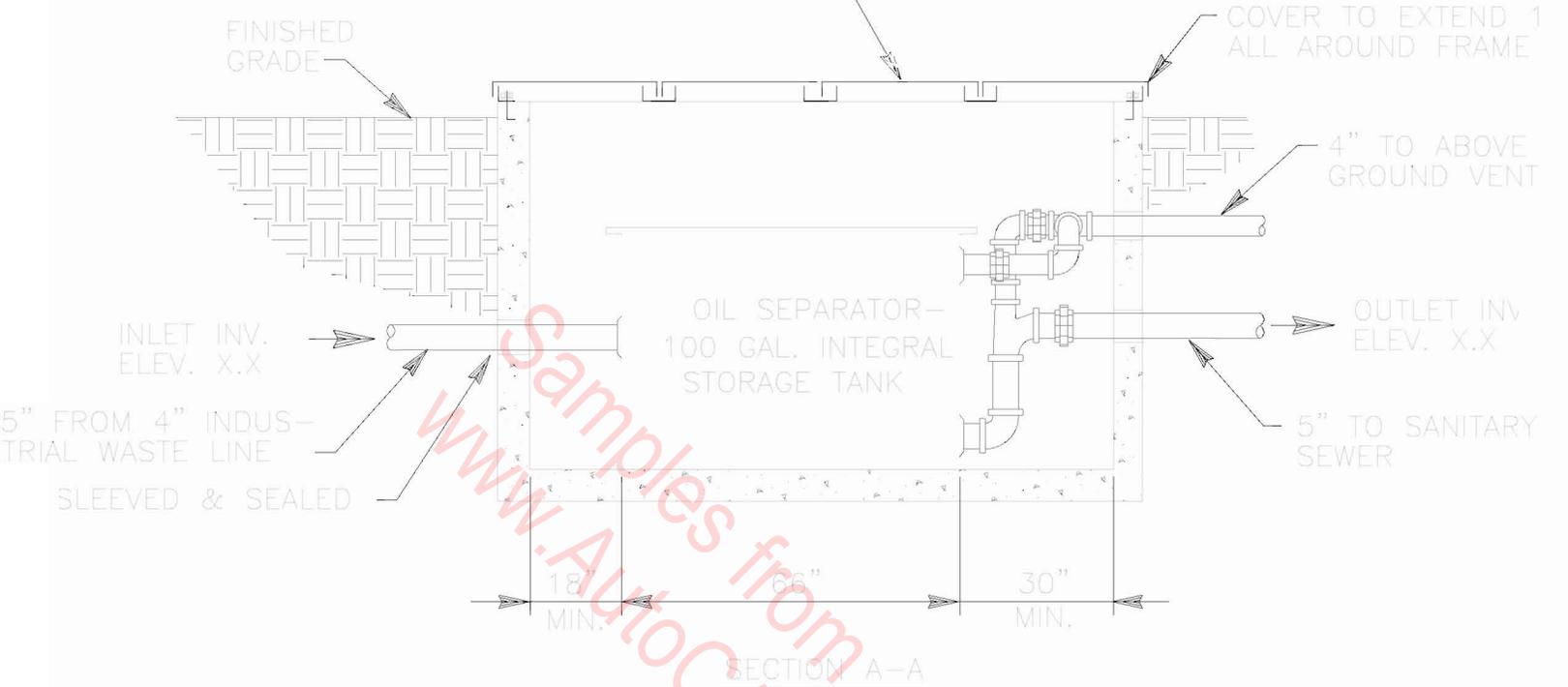
SECTION

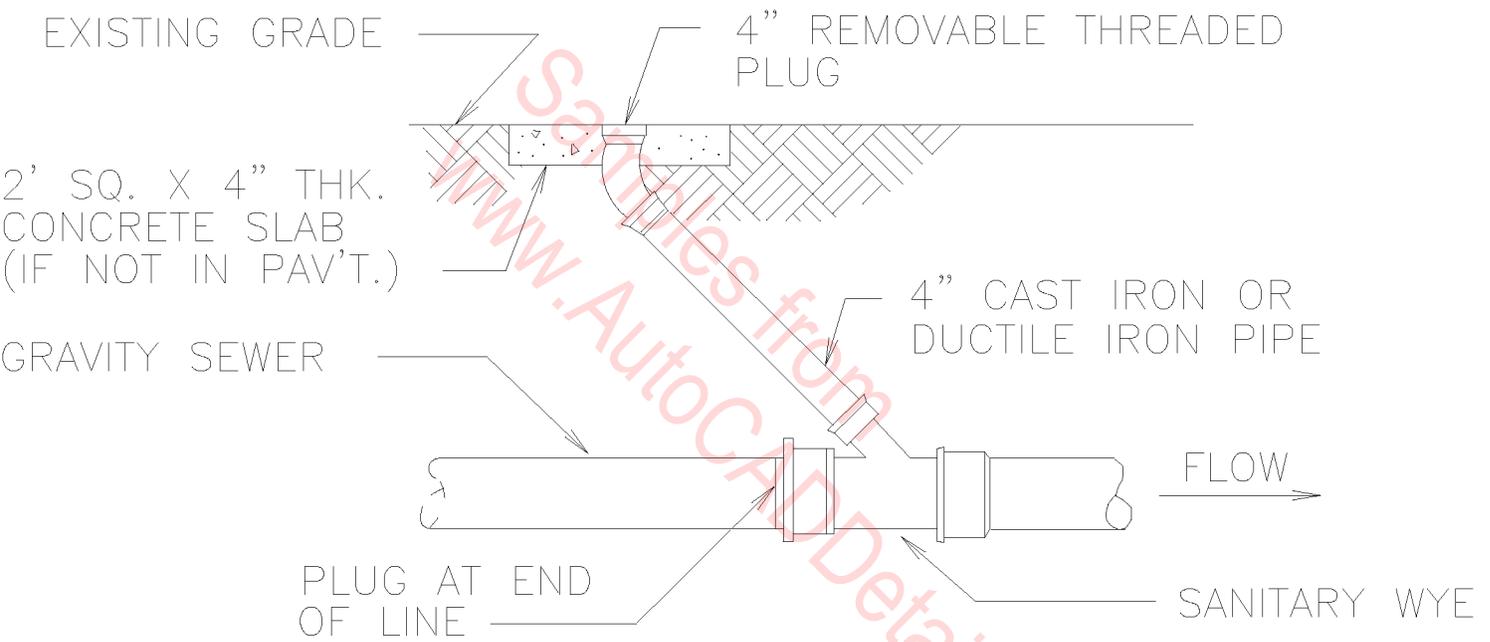
2'-0" FOR D=UNDER 24"
3'-0" FOR D=24" & OVER

ALL SLOPES						S=1 1/2	S=2:1	S=3:1
D	H	A	B	C	R	L	L	L
8"	1'-8"	8"	1'-0"	0	—	3'-6"	4'-2"	5'-6"
10"	1'-10"	8"	1'-0"	0	—	4'-0"	4'-10"	6'-6"
12"	2'-0"	10"	1'-4"	4"	—	4'-6"	5'-6"	7'-6"
15"	2'-3"	10"	1'-4"	4"	2 1/4"	5'-3"	6'-6"	9'-0"
18"	2'-6"	10"	1'-7"	6"	2 3/4"	6'-0"	7'-6"	10'-6"
21"	2'-9"	1'-0"	1'-8"	6"	3 1/8"	6'-9"	8'-6"	12'-0"
24"	3'-0"	1'-0"	1'-9"	6"	3 5/8"	7'-6"	9'-6"	13'-6"
27"	3'-3"	1'-2"	2'-0"	8"	4"	8'-3"	10'-6"	15'-0"
30"	3'-6"	1'-3"	2'-1"	8"	4 1/2"	9'-0"	11'-6"	16'-6"
36"	4'-0"	1'-6"	2'-4"	10"	5 1/2"	10'-6"	13'-6"	19'-6"
42"	4'-6"	1'-6"	2'-7"	12"	6 3/8"	12'-0"	15'-6"	22'-6"

CONCRETE HEADWALL

1/4" CHECKER PLATE—
LIFT OFF COVERS (SEE
STRUCTURES FOR DETAILS)

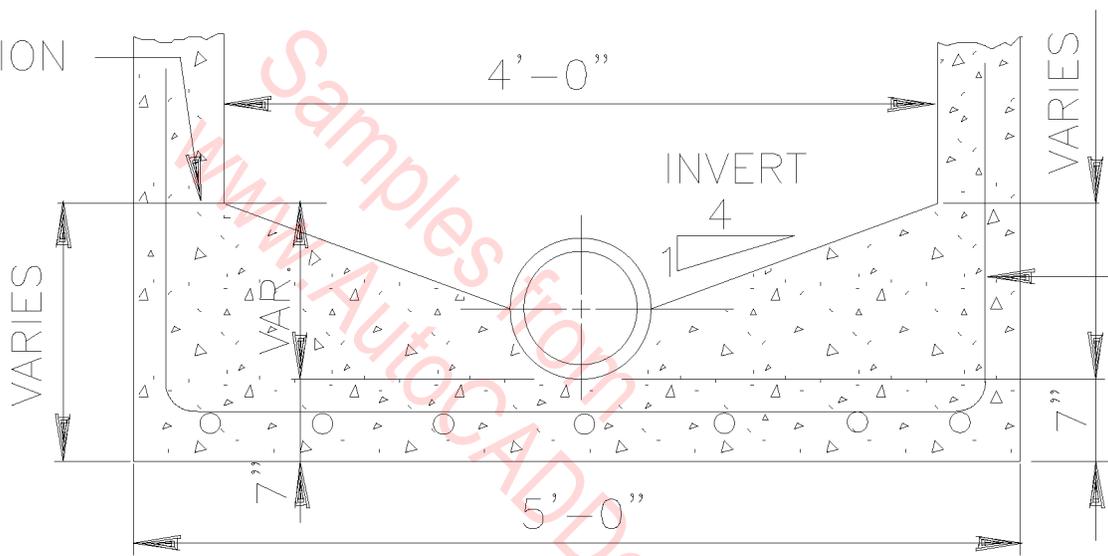




THROUGH FLOW CLEANOUT DETAIL

N.T.S.

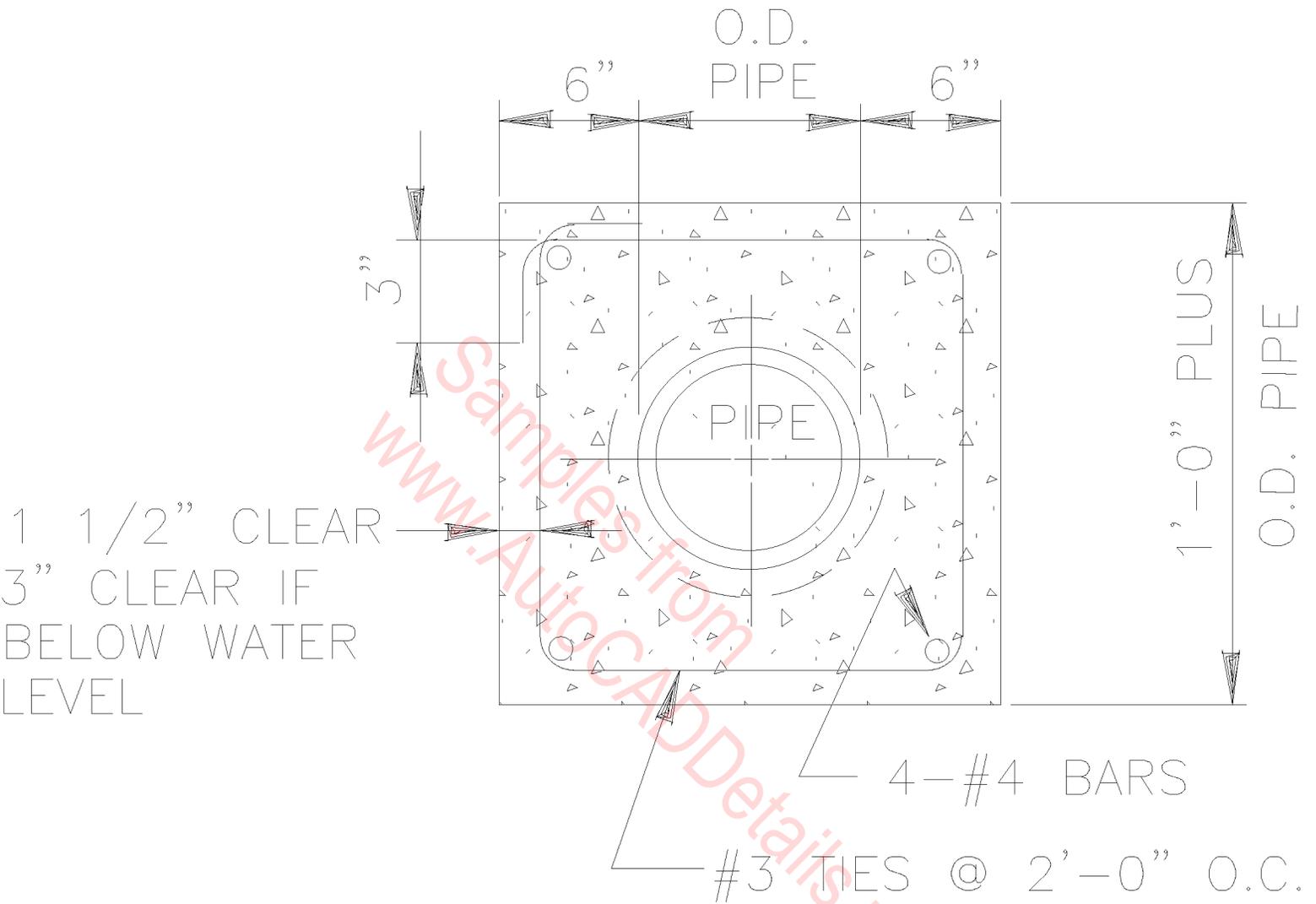
CONSTRUCTION
JOINT



#4 BARS
@ 9" O.C.

SECTION THRU BASE OF
STANDARD MANHOLE

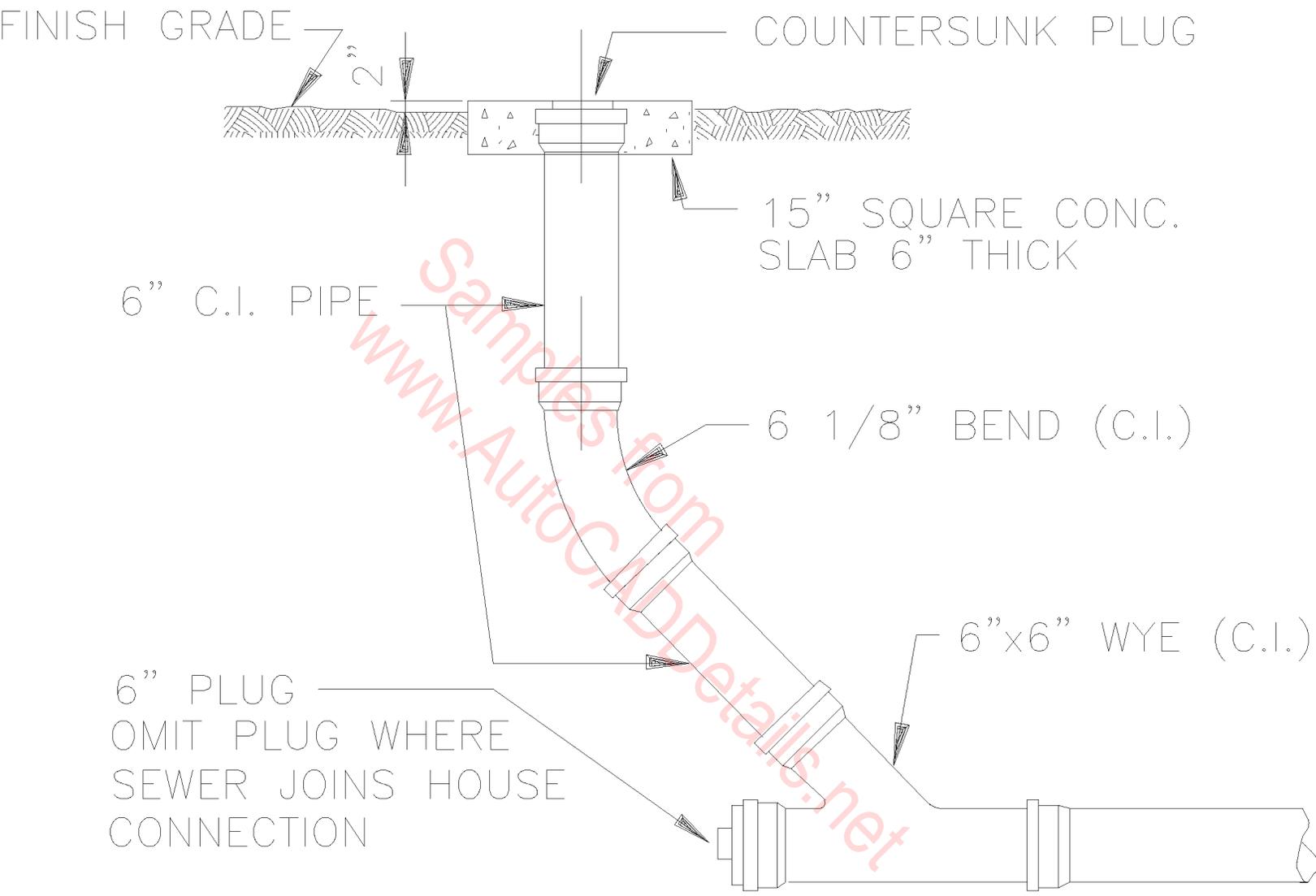
N.T.S.



NOTE: ALL REINFORCING STEEL TO BE DEFORMED BARS AND LAPPED 14 INCHES AT SPLICES

CONCRETE ENCASEMENT

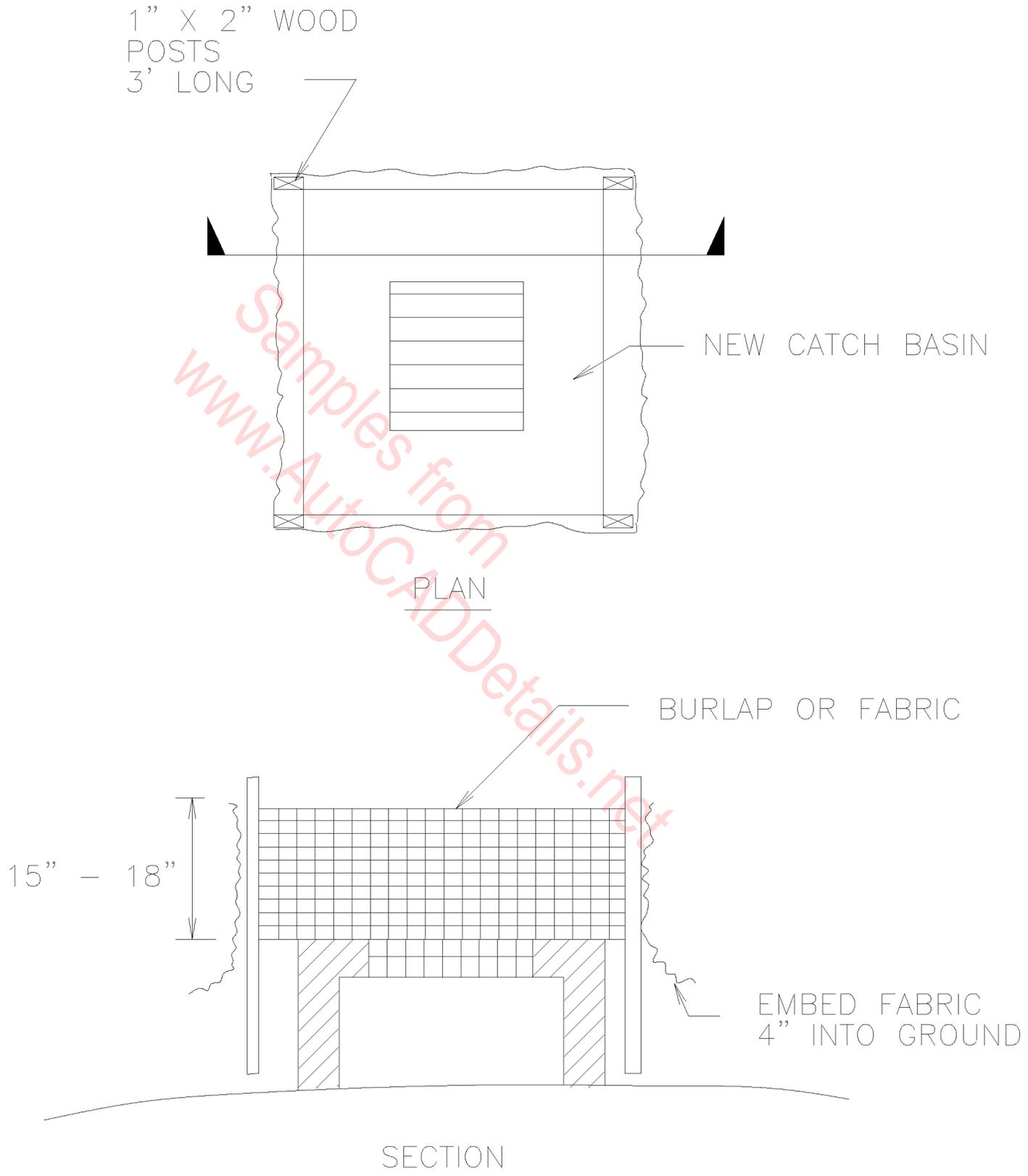
N.T.S.



CLEANOUT TO GRADE

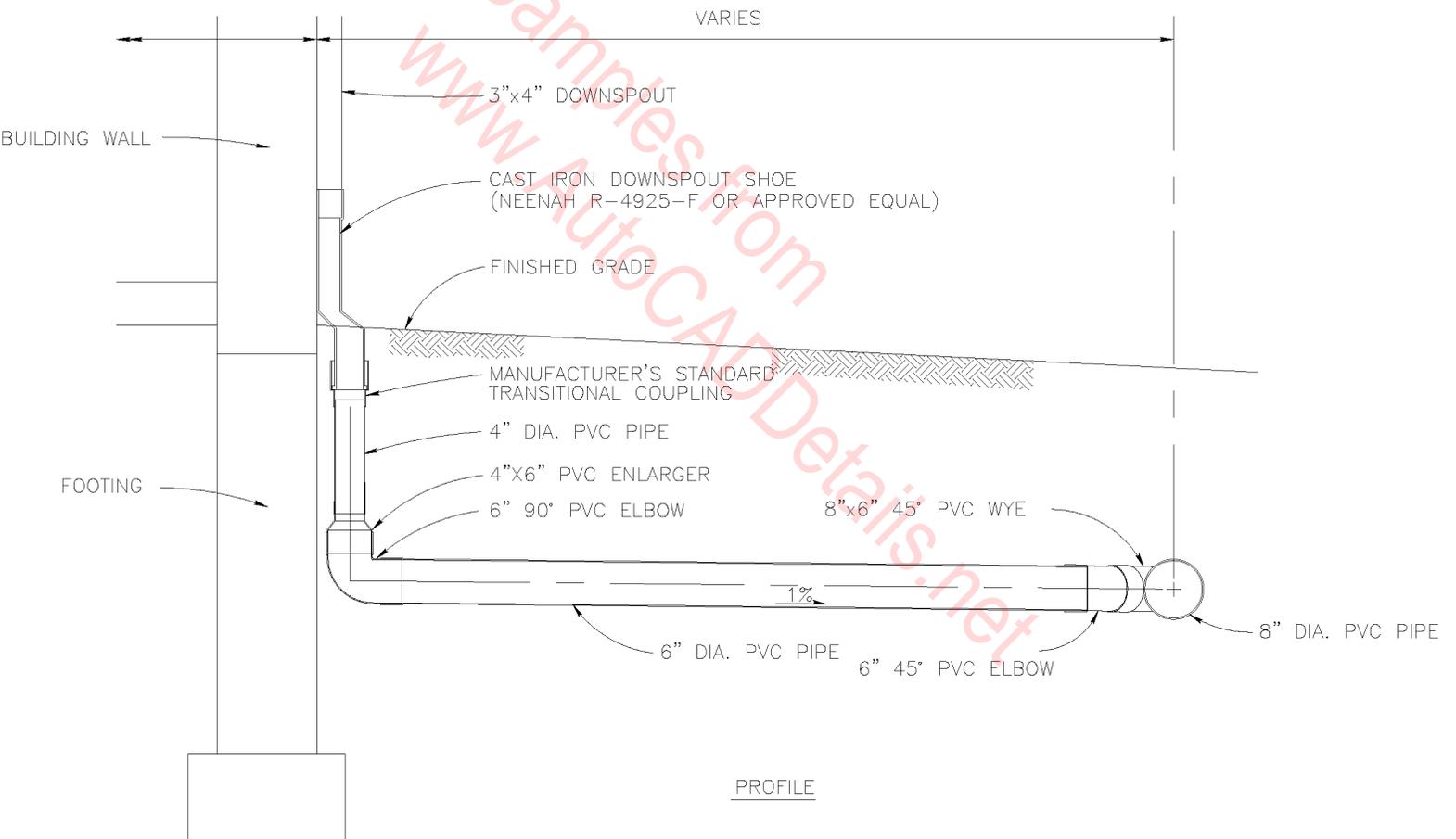
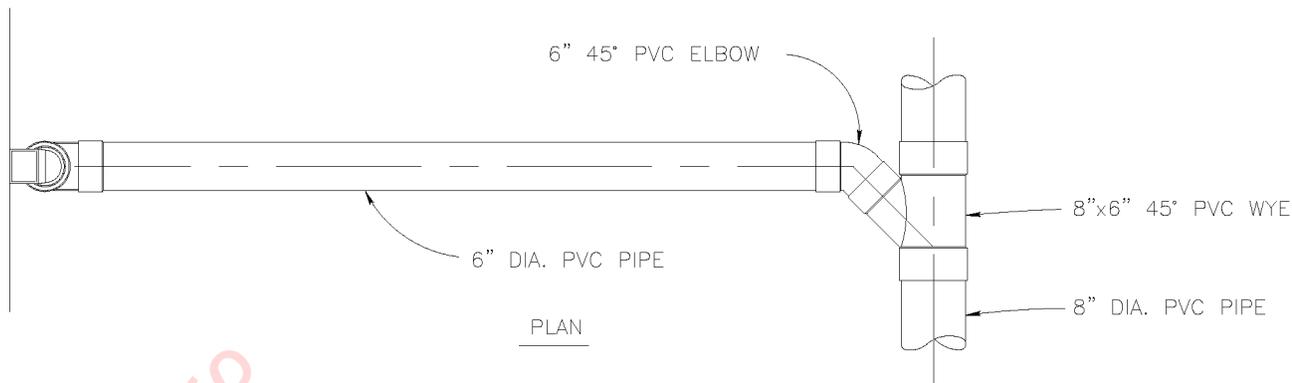
N.T.S.

NOTE: STRAW BALES MAY BE USED IN LIEU OF FABRIC AROUND CATCH BASINS. BALES SHALL BE EMBEDDED 4" INTO GROUND AND SECURELY STAKED IN PLACE.



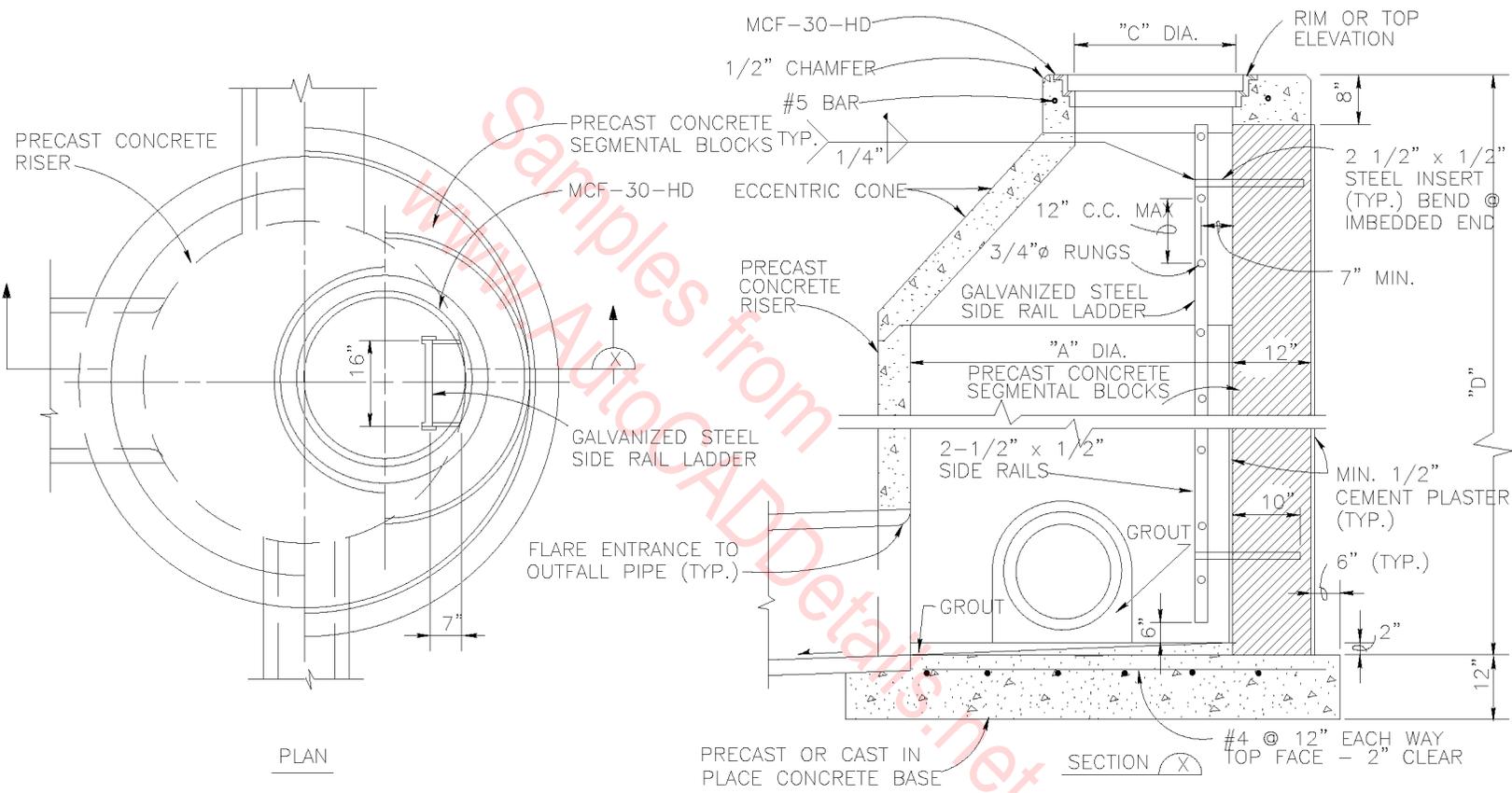
CATCH BASIN PROTECTION

N.T.S.



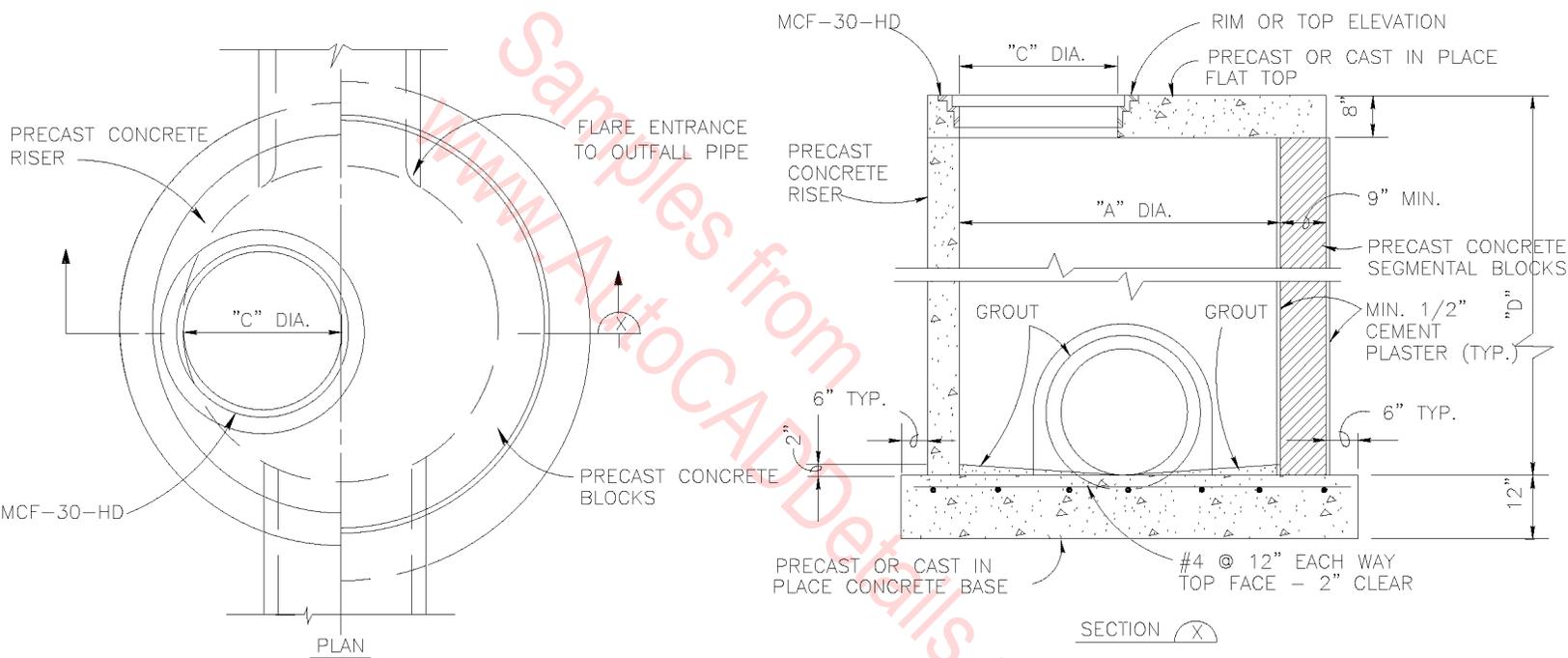
TYPICAL ROOF DRAIN DETAIL

N.T.S.

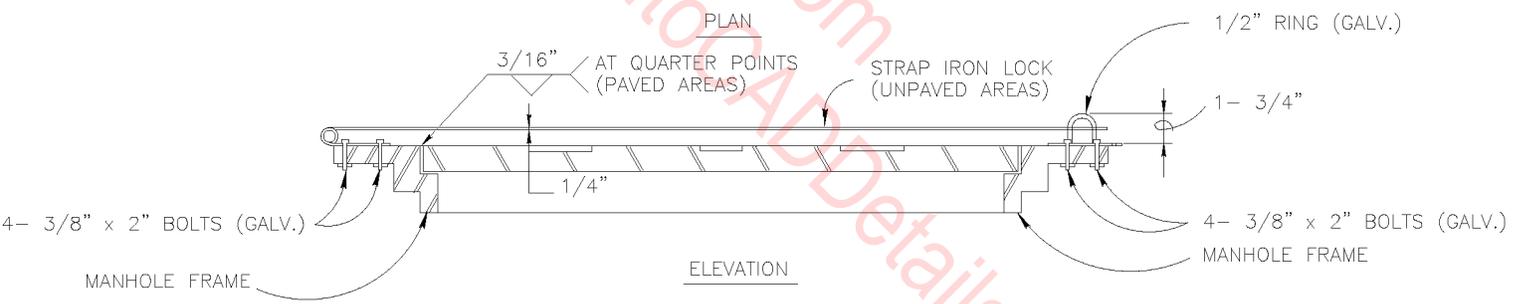
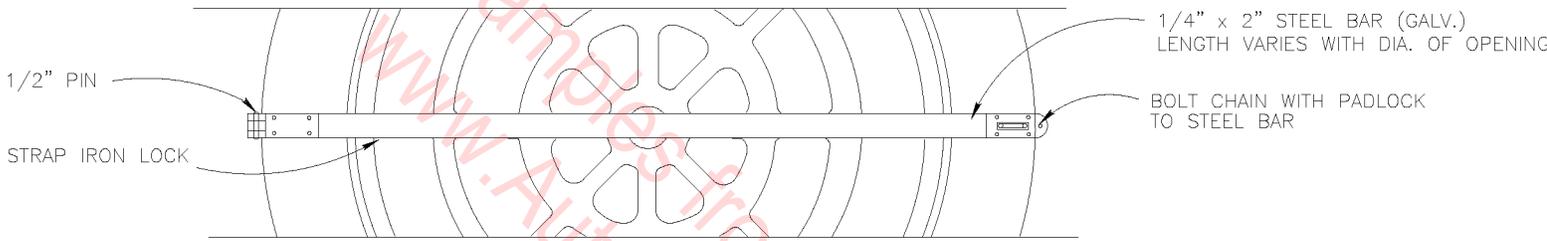


TYPICAL ECCENTRIC MANHOLE DETAIL

N.T.S.

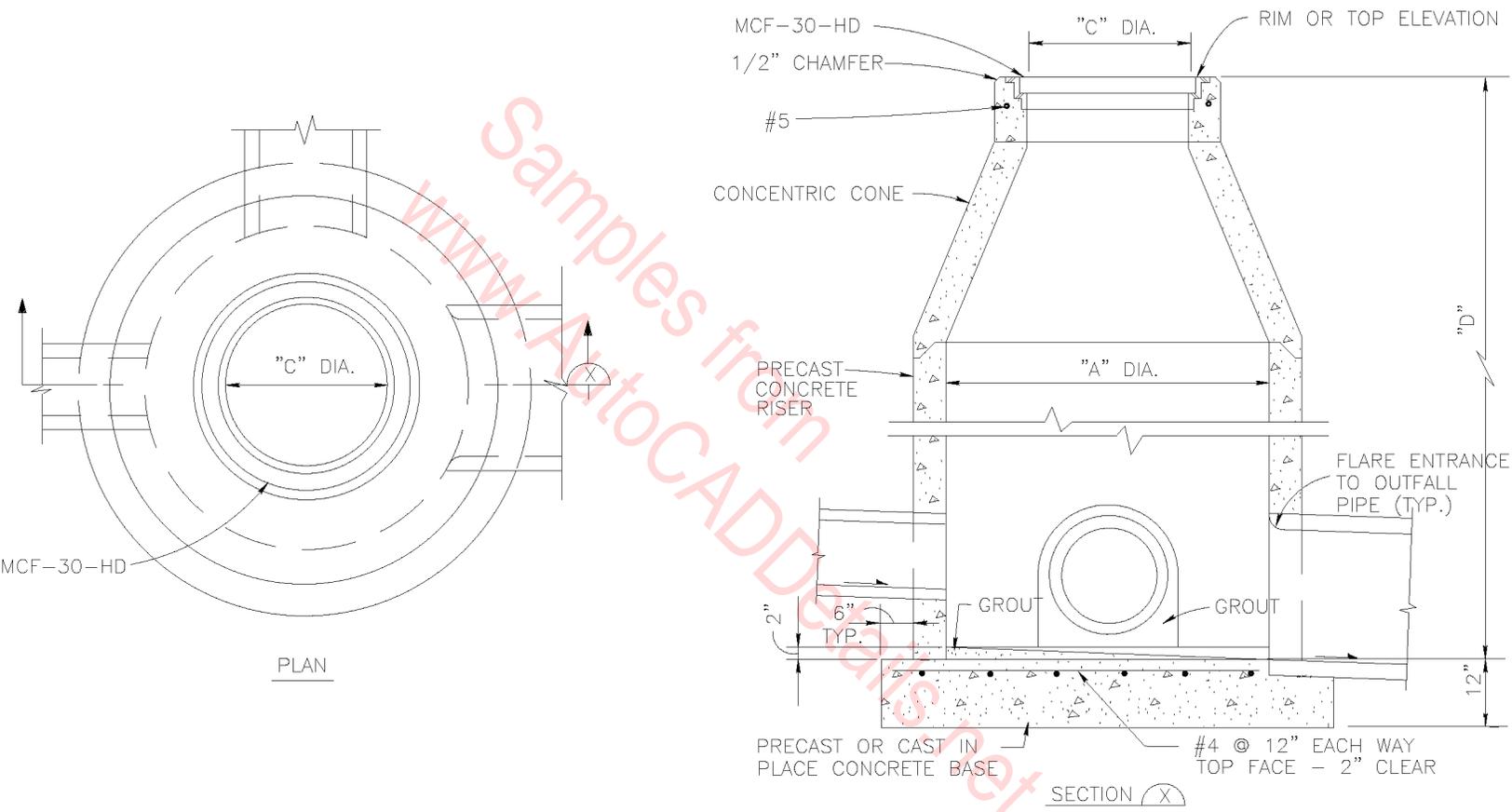


TYPICAL PRECAST SHALLOW MANHOLE DETAIL
 N.T.S.



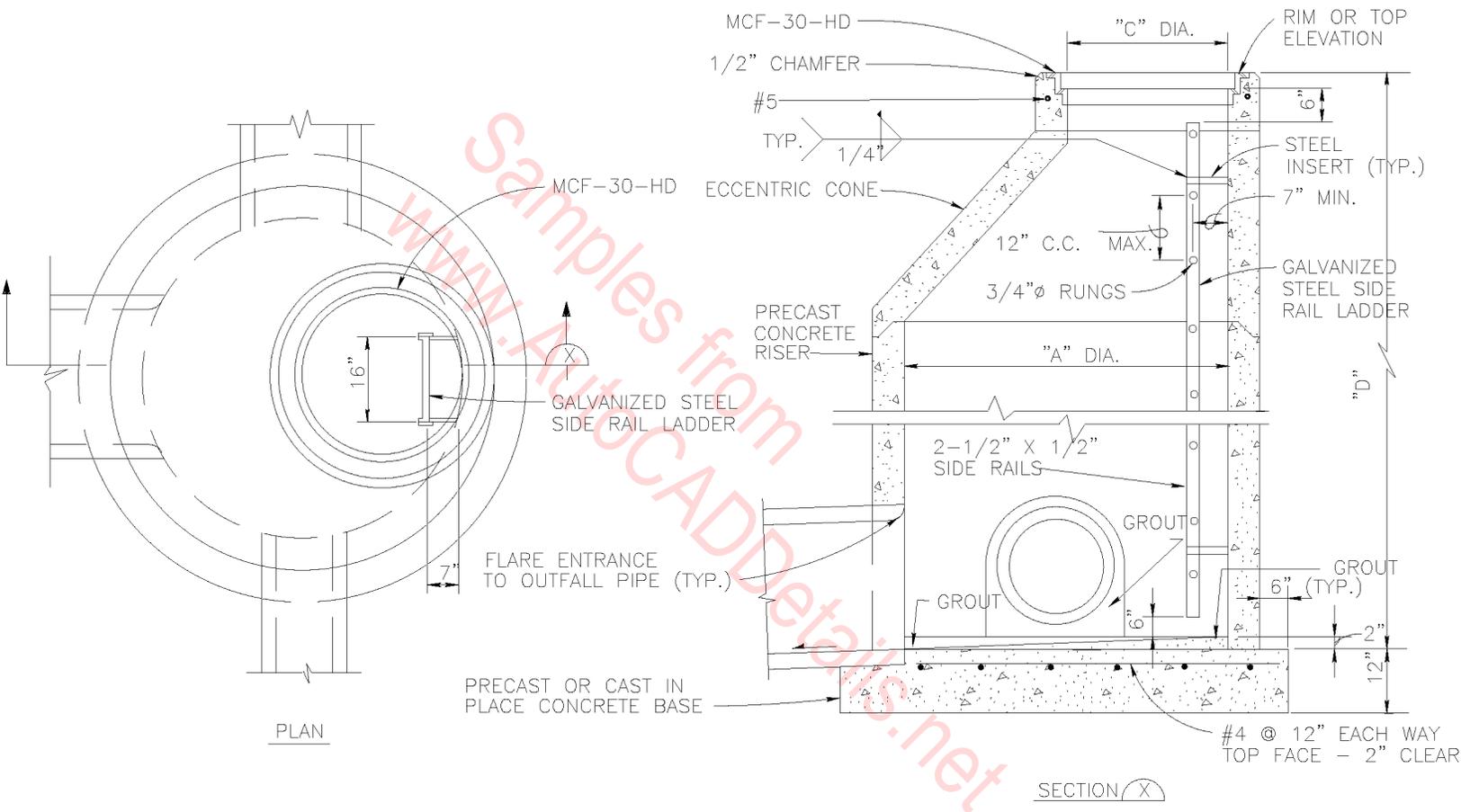
MANPROOFING DETAIL

N.T.S.



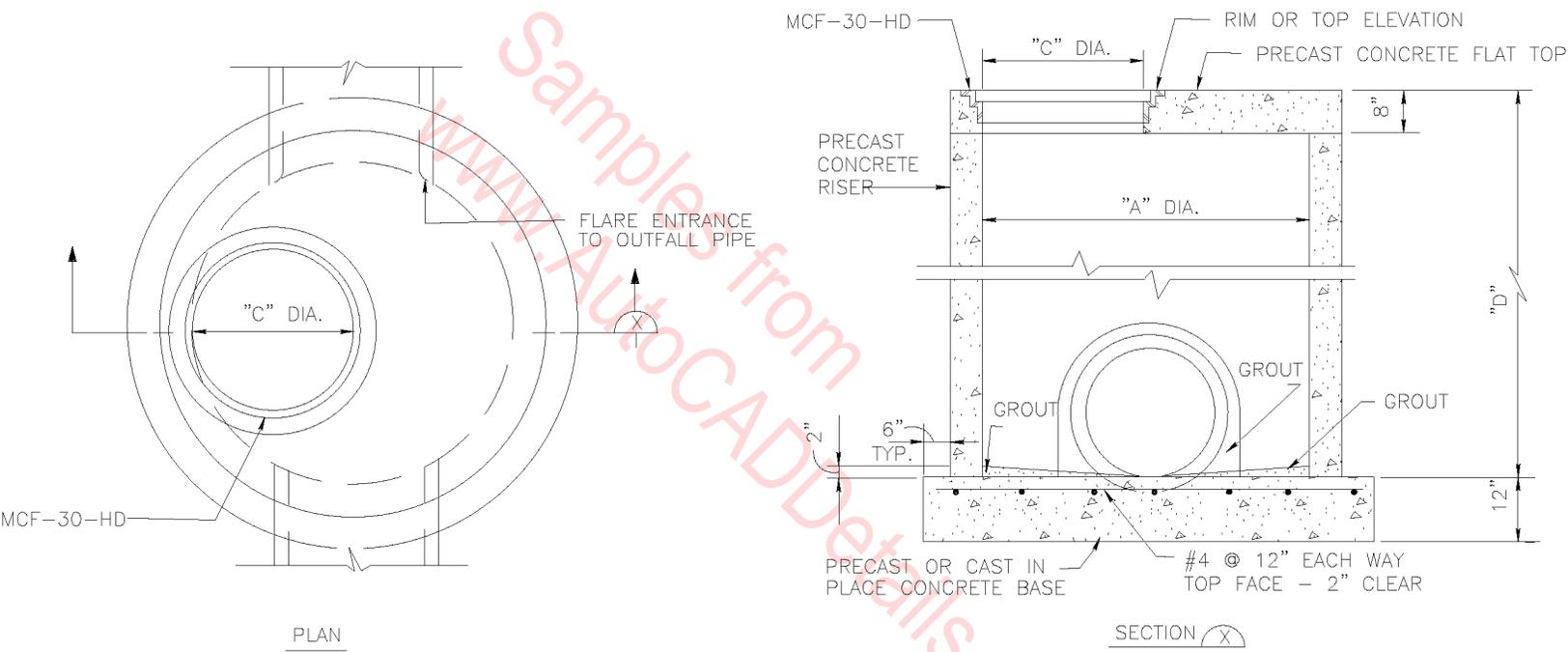
TYPICAL PRECAST CONCENTRIC MANHOLE DETAIL

N.T.S.



TYPICAL PRECAST ECCENTRIC MANHOLE DETAIL

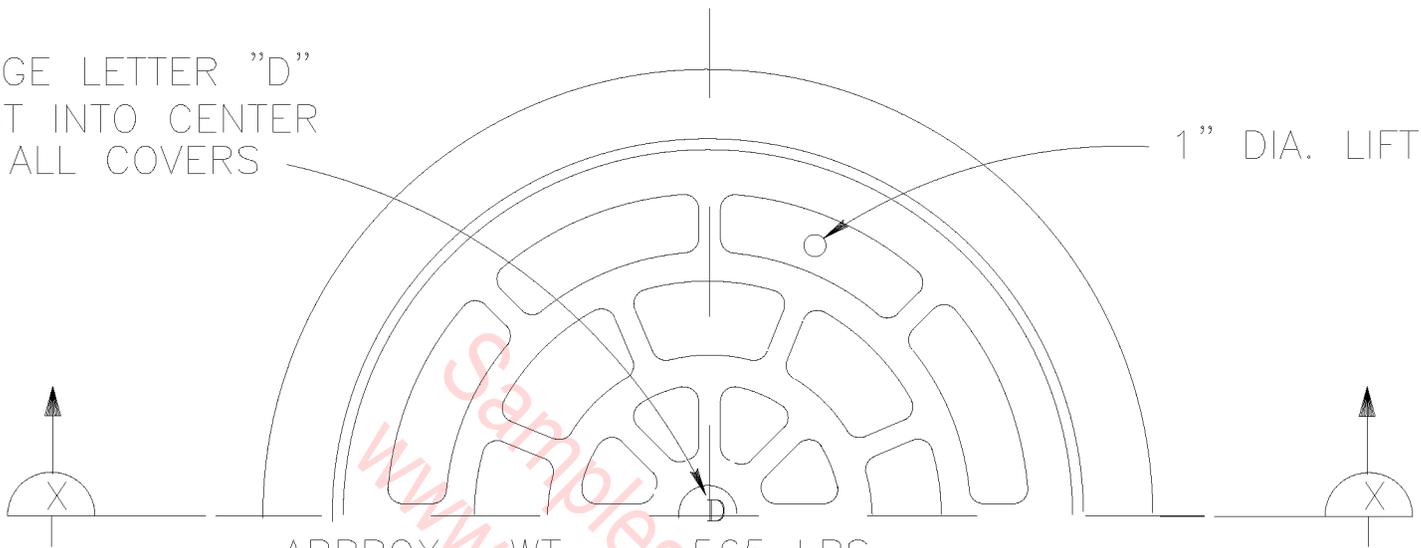
N.T.S.



TYPICAL PRECAST SHALLOW MANHOLE DETAIL
N.T.S.

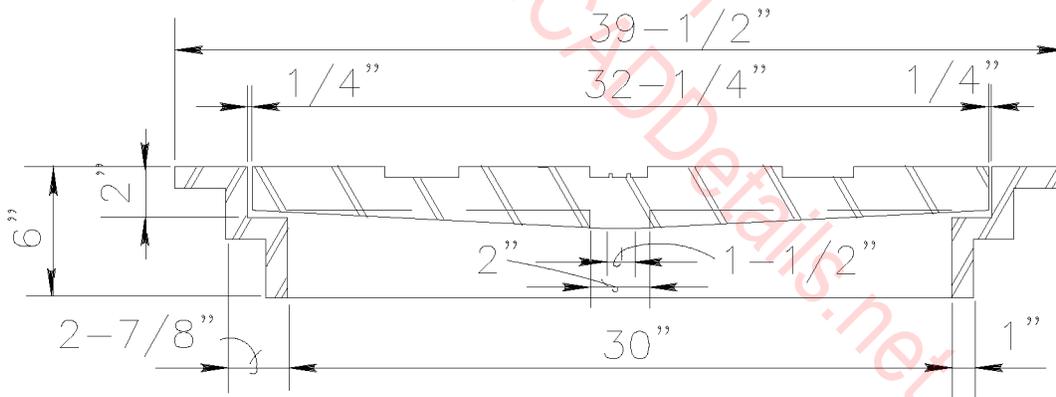
LARGE LETTER "D"
CAST INTO CENTER
OF ALL COVERS

1" DIA. LIFT HOLE



APPROX. WT. — 565 LBS.

HALF PLAN

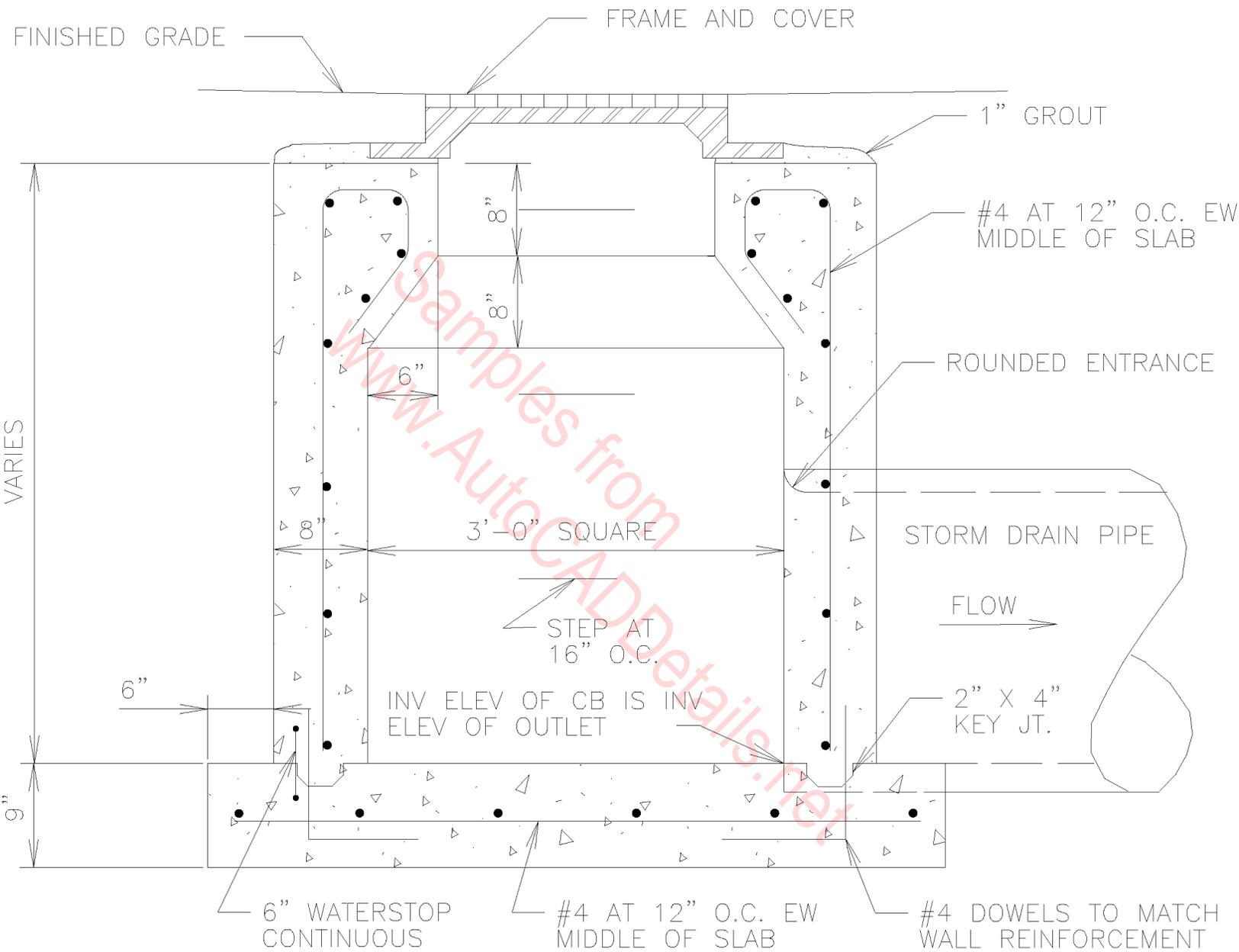


SECTION X-X

MANHOLE COVER & FRAME

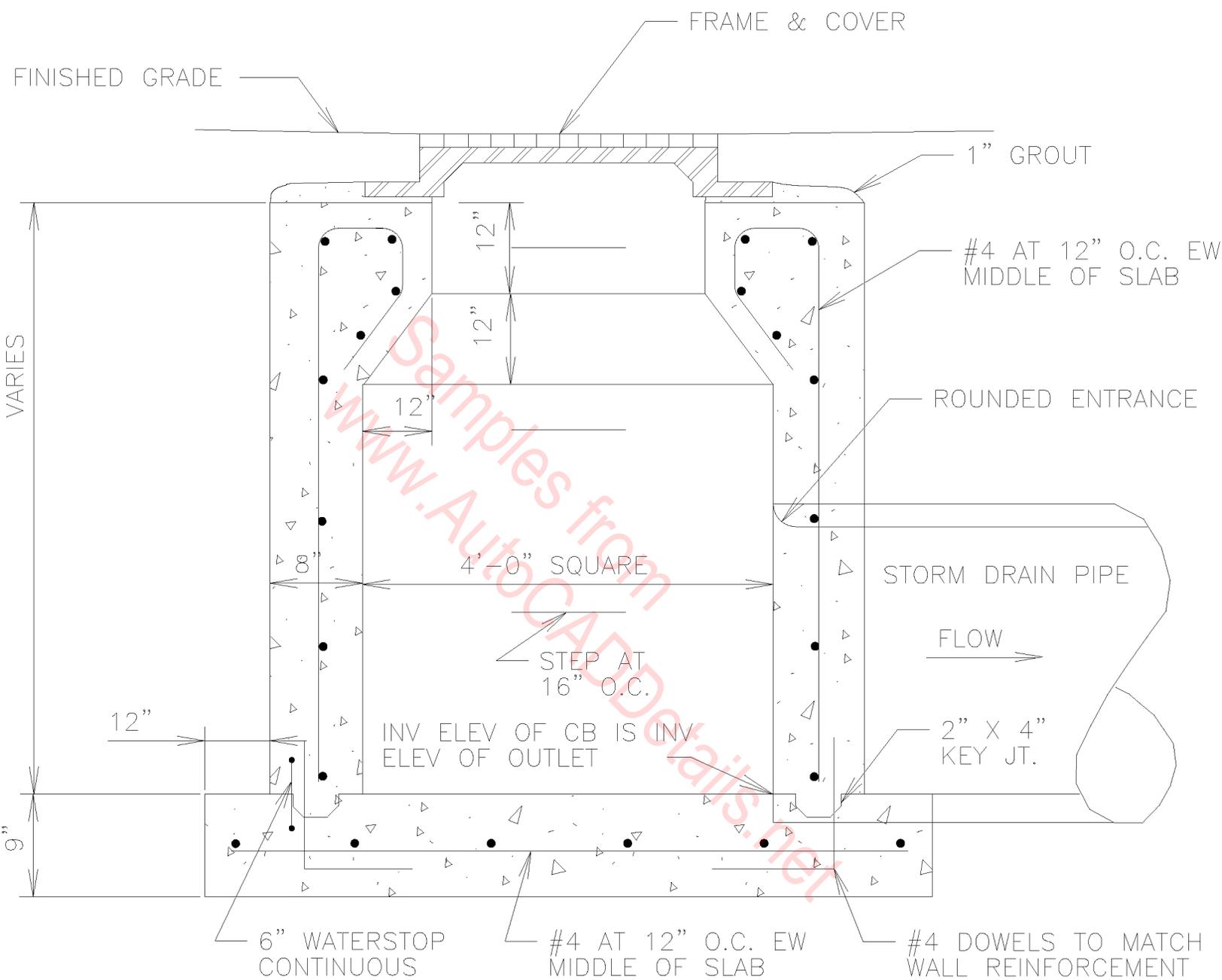
MCF-30-HD

N.T.S.



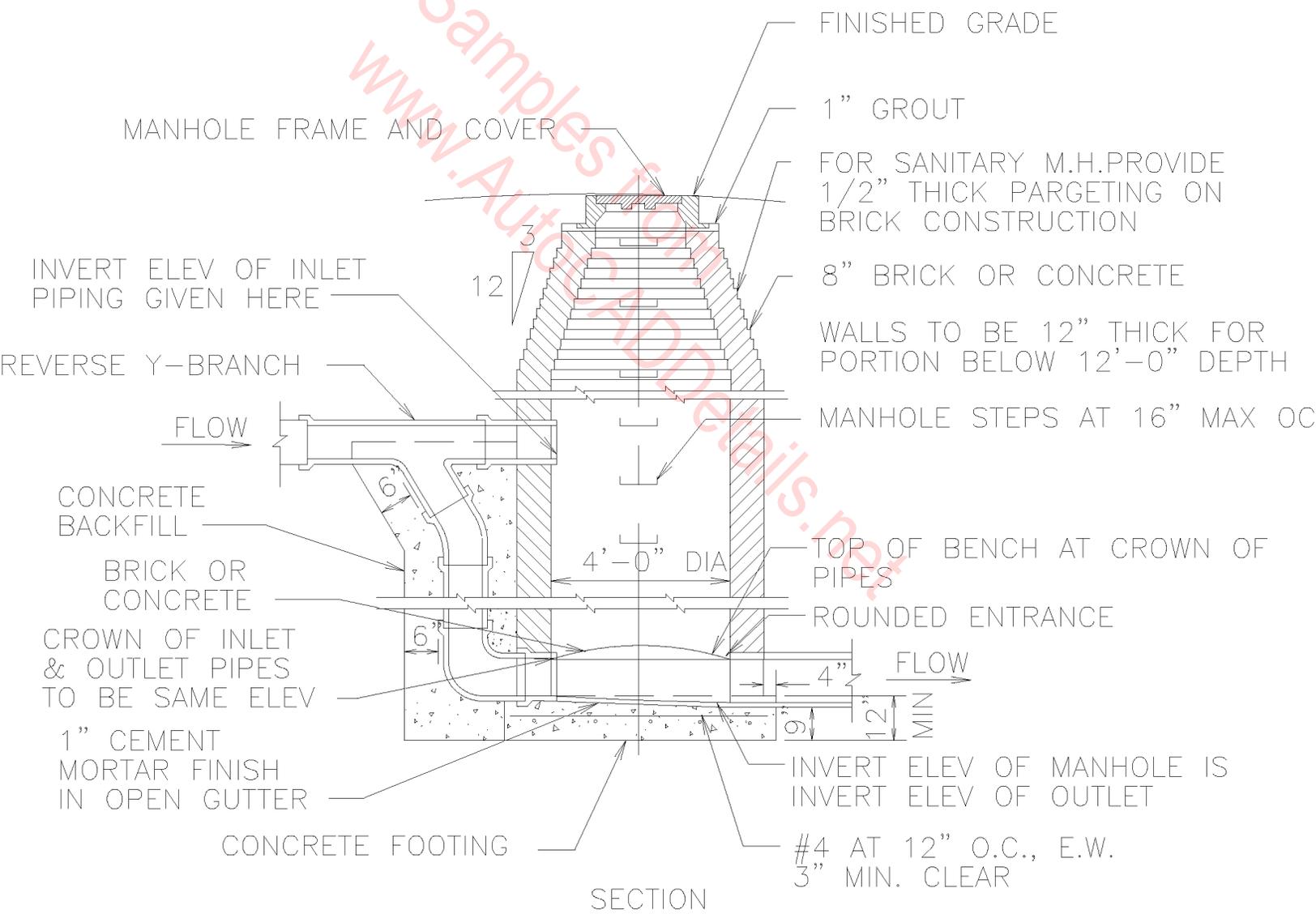
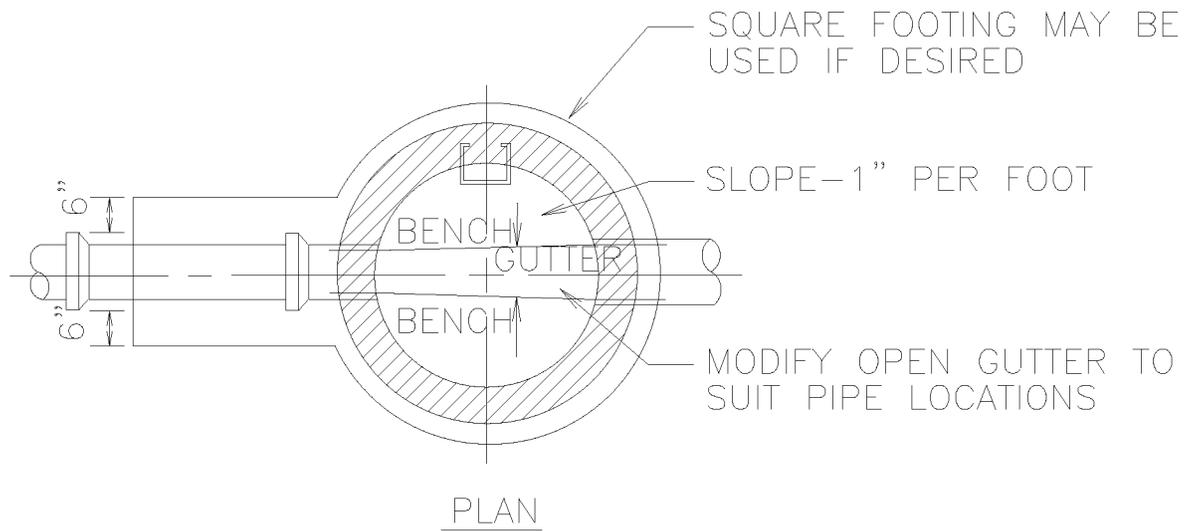
CATCH BASIN

N.T.S.



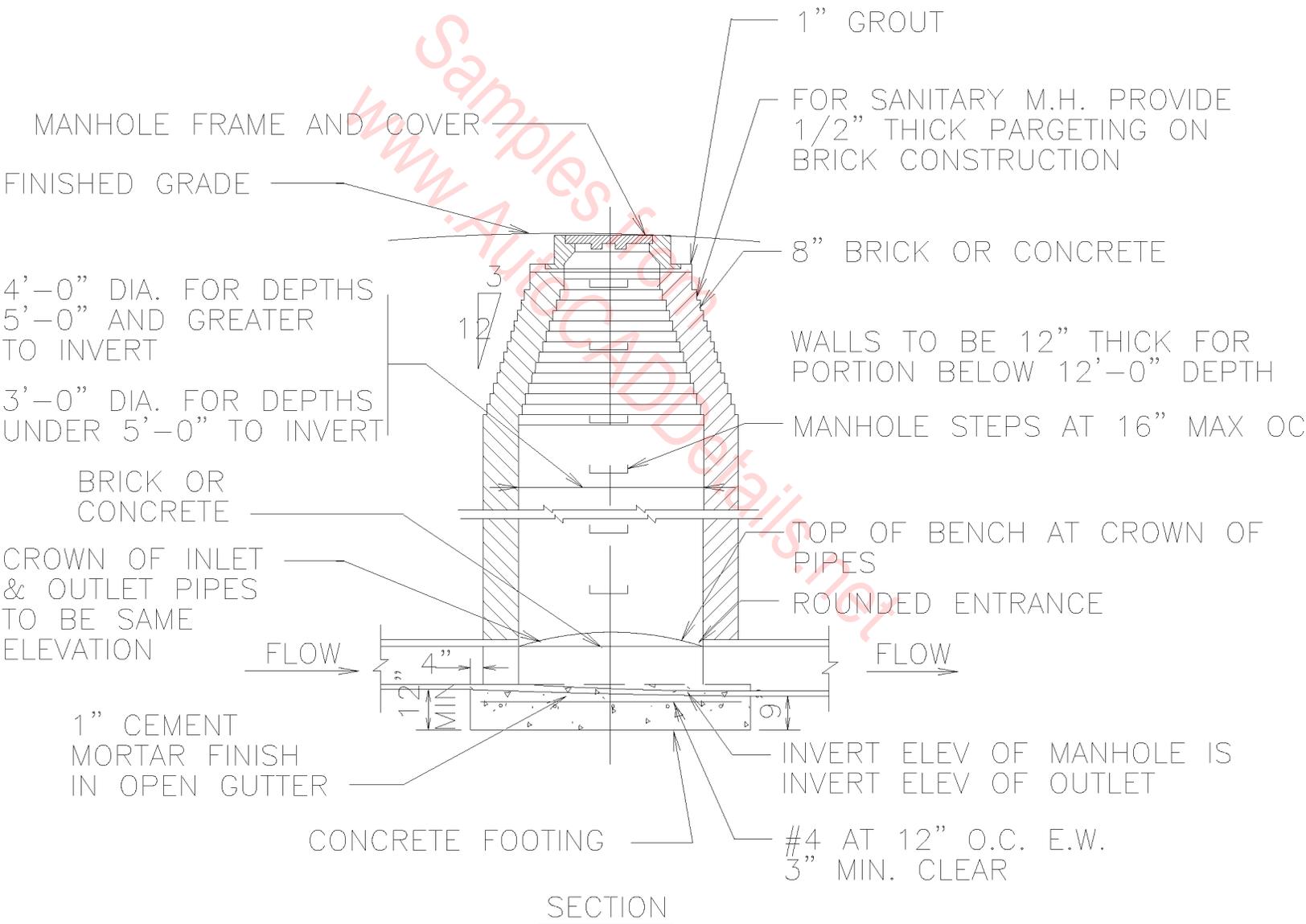
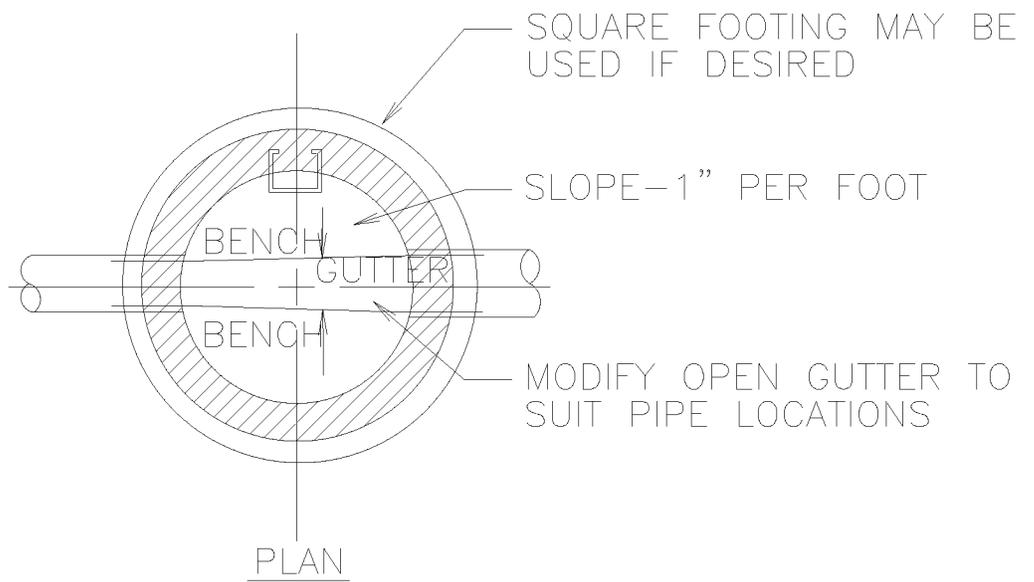
CATCH BASIN (30" AND 36" PIPE)

N.T.S.



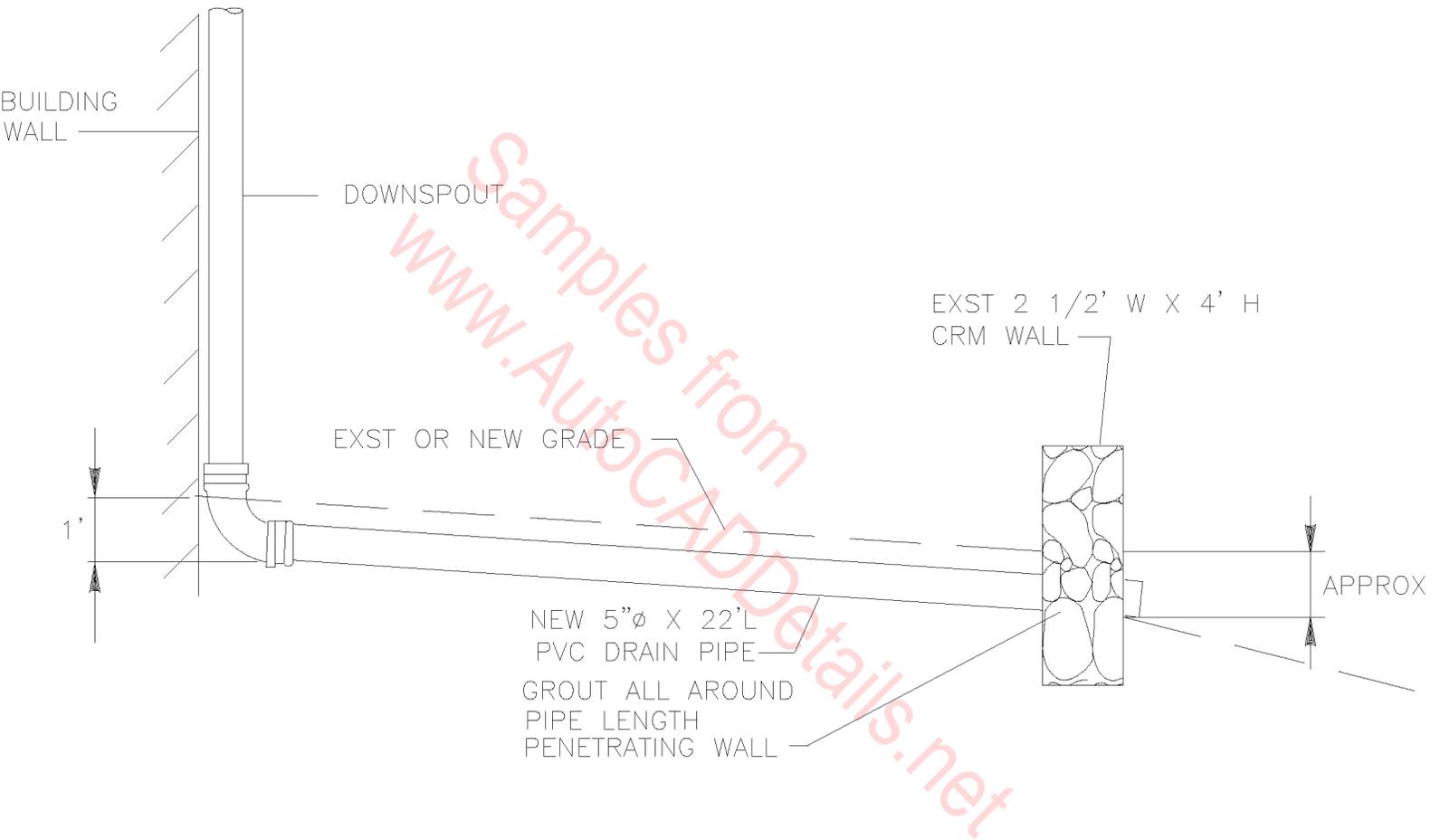
DROP MANHOLE

N.T.S.



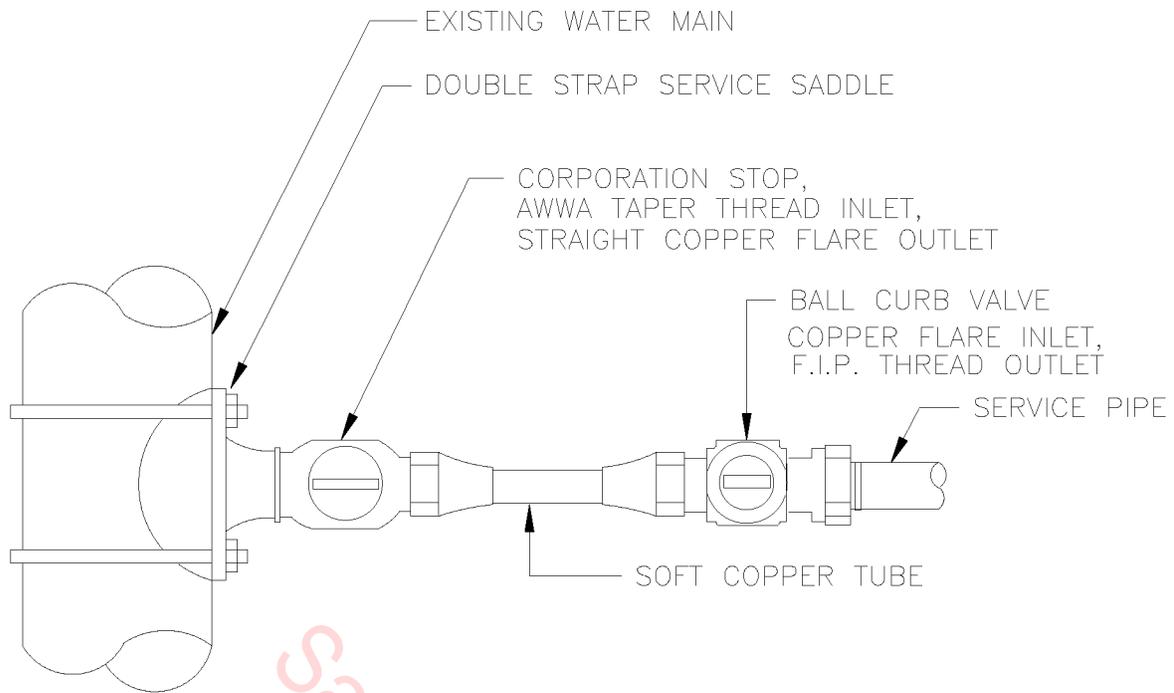
MANHOLE

N.T.S.



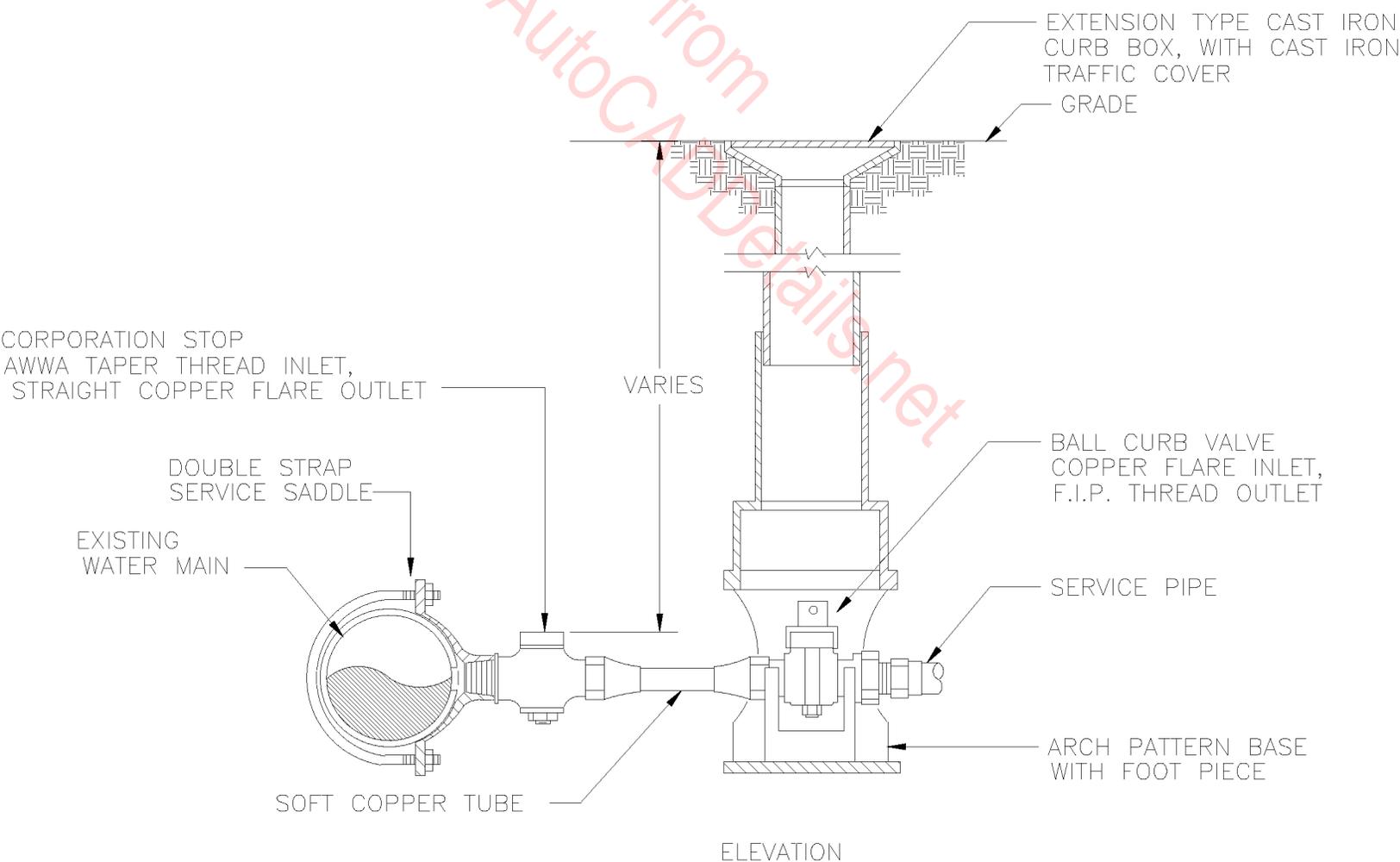
DRAIN PIPE DETAIL

N.T.S.



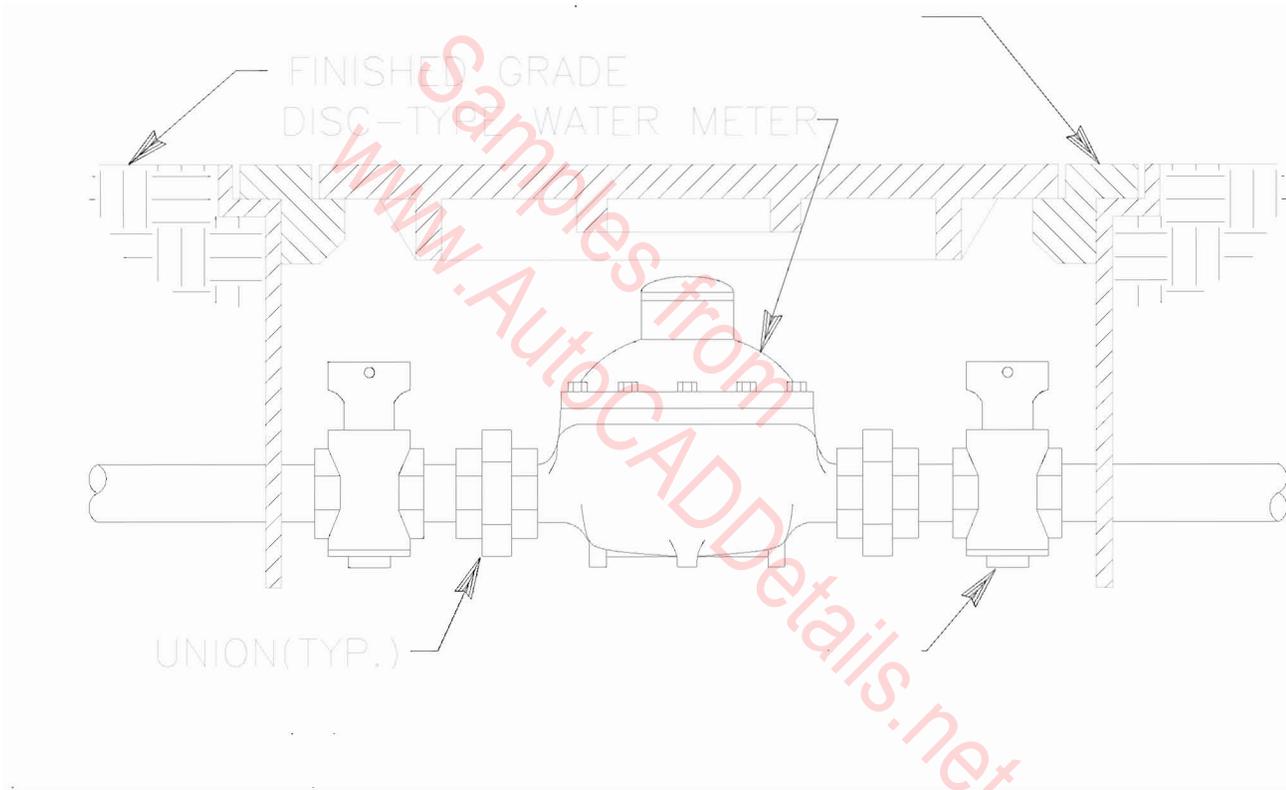
NOTE: CURB BOX NOT SHOWN FOR PURPOSE OF CLARITY ONLY

PLAN

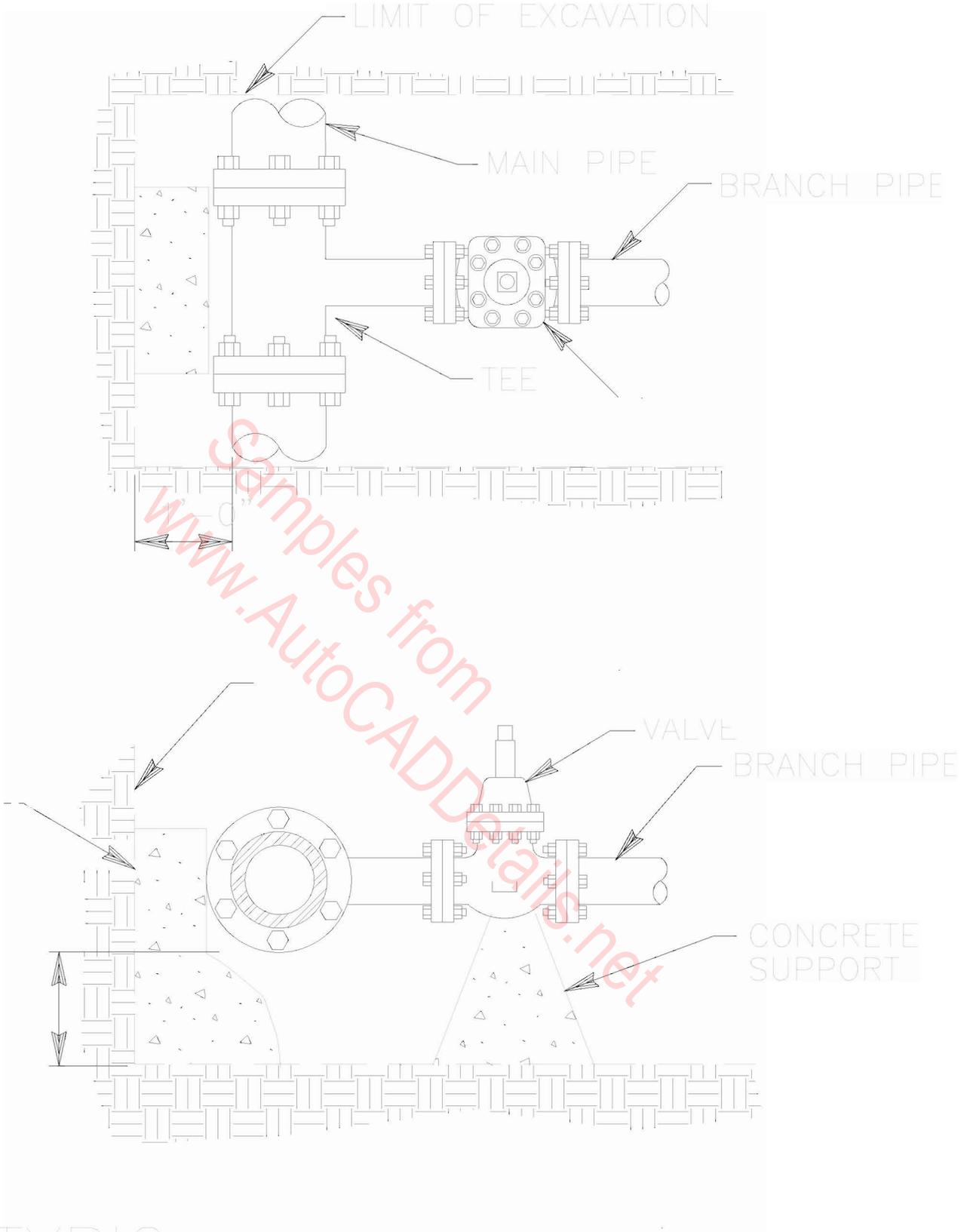


WATER MAIN CONNECTION DETAIL

N.T.S.



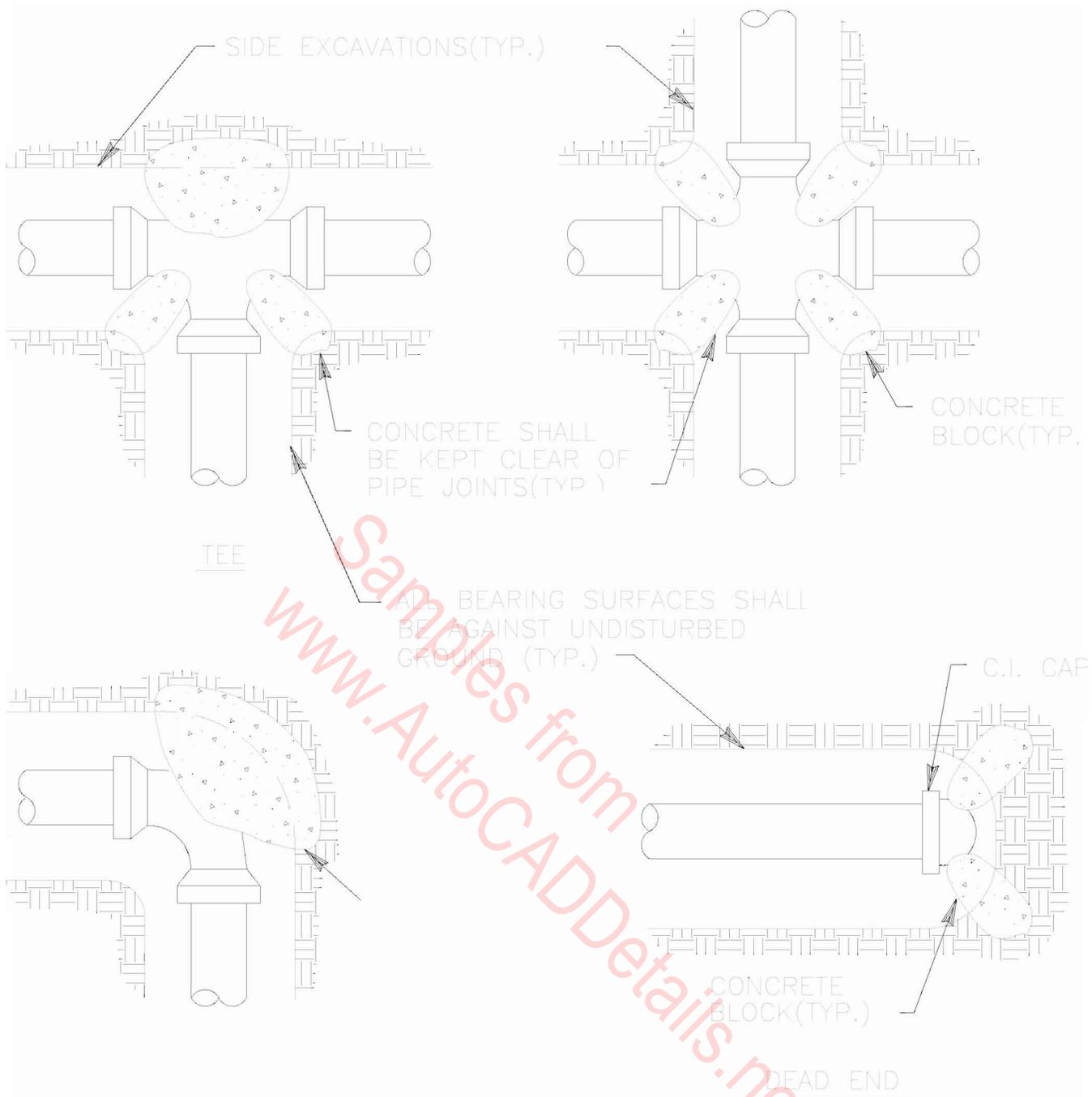
N.T.S.



TYPIC

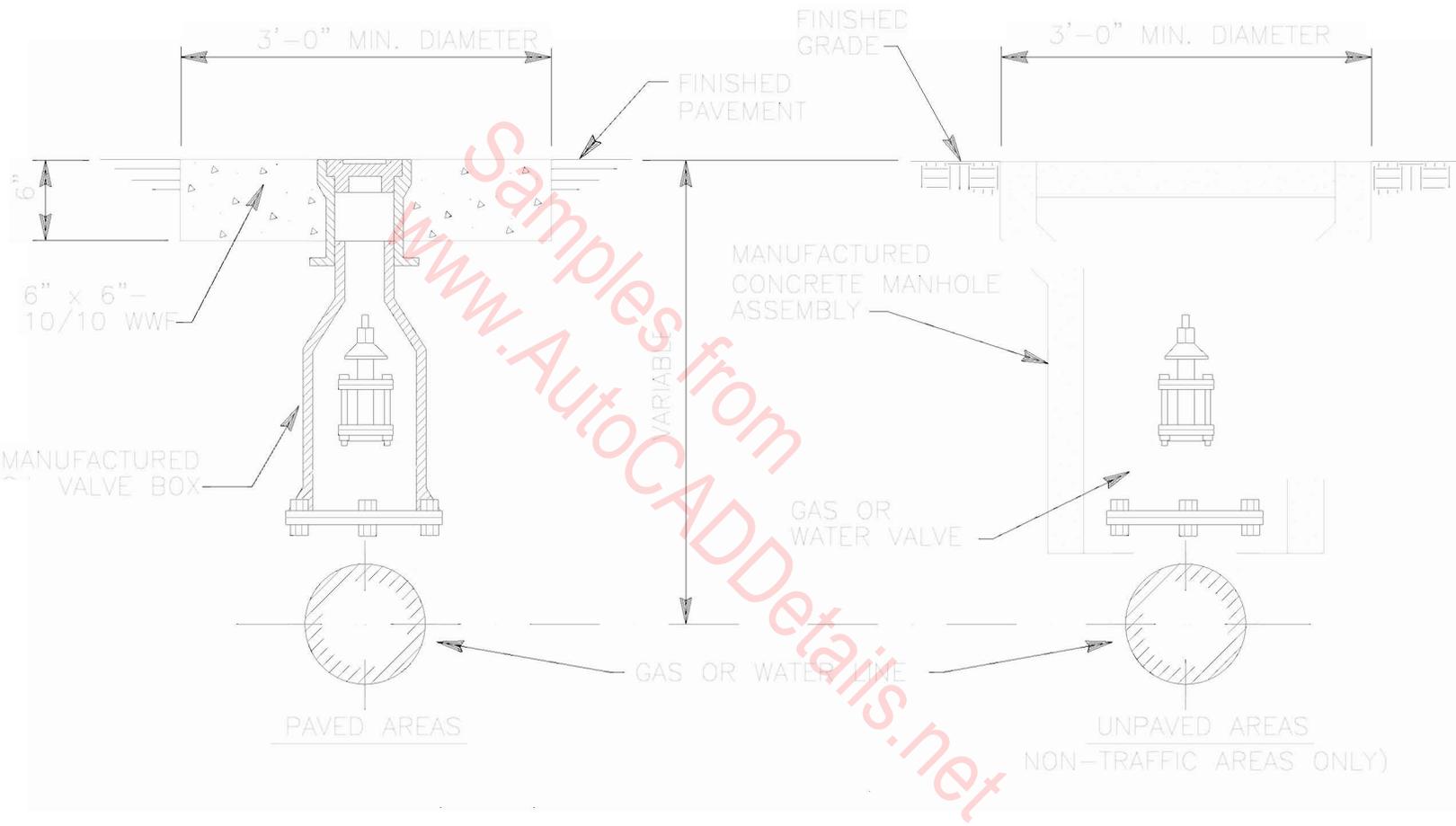
INSTALLATION DETAIL

N.T.S.

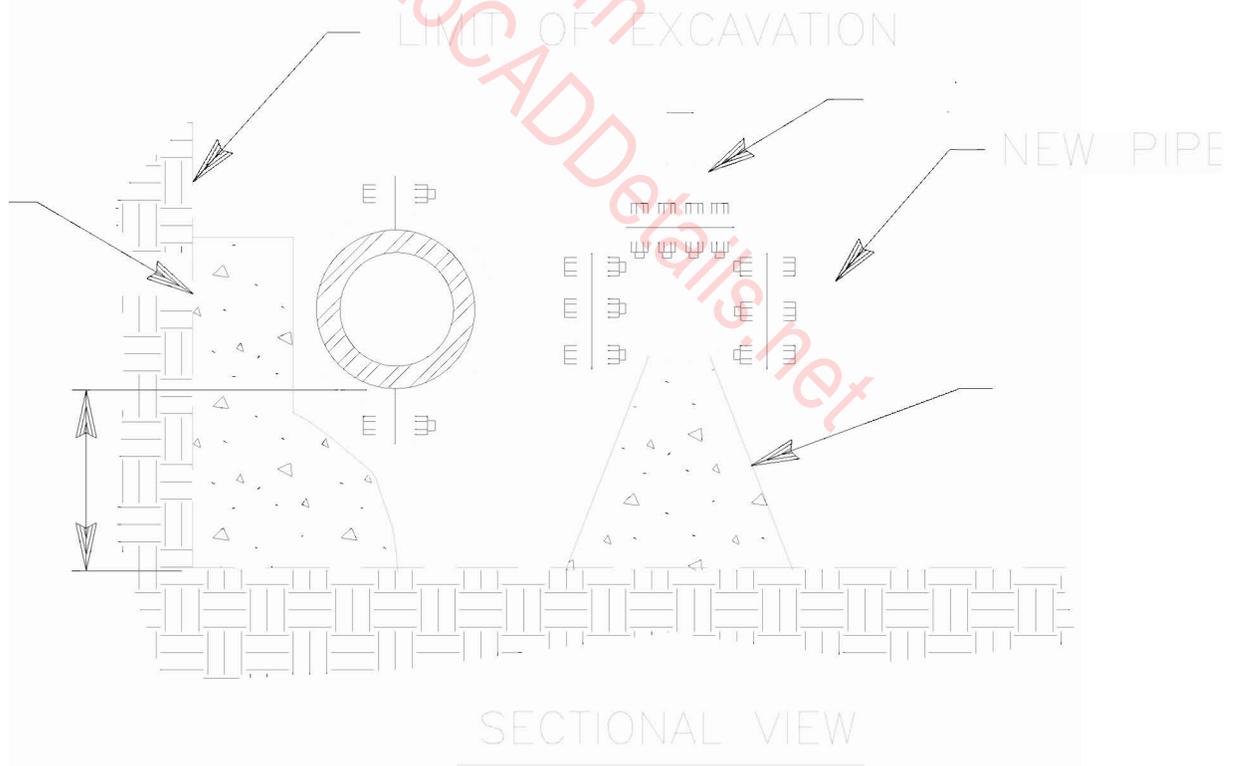
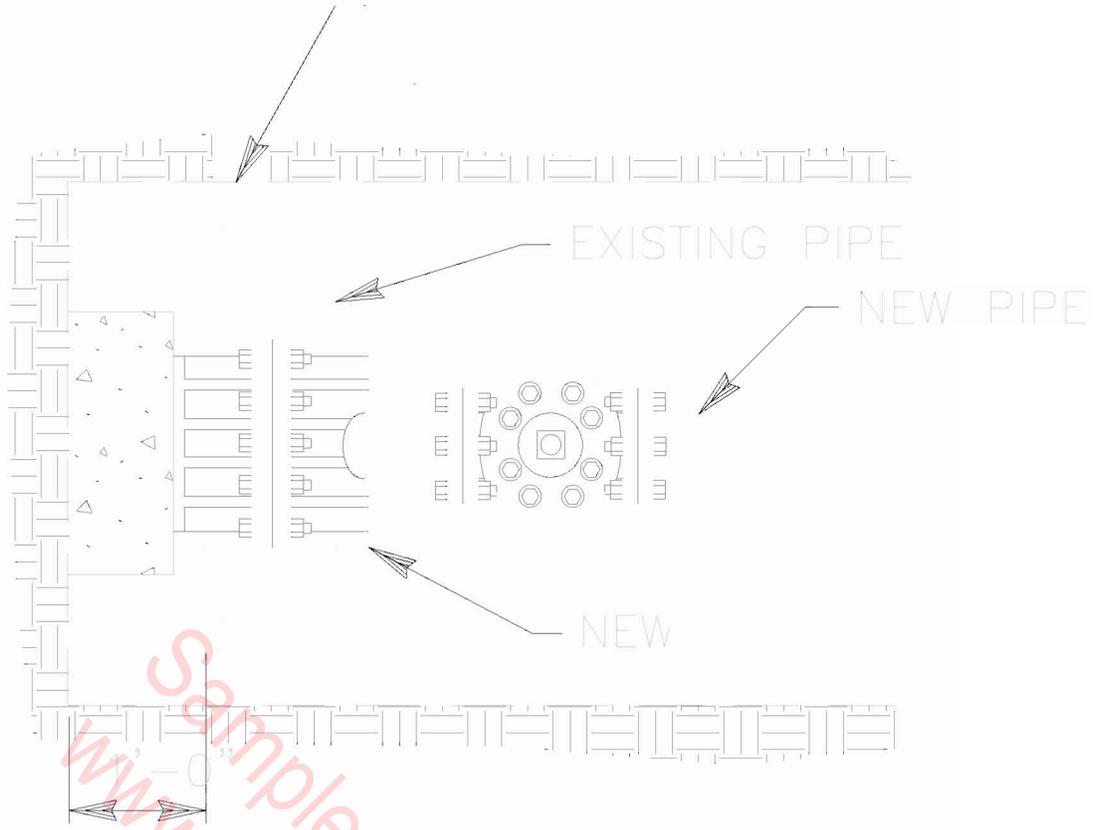


BEARING AREAS EACH DIRECTION
OF THRUST IN SQUARE FEET

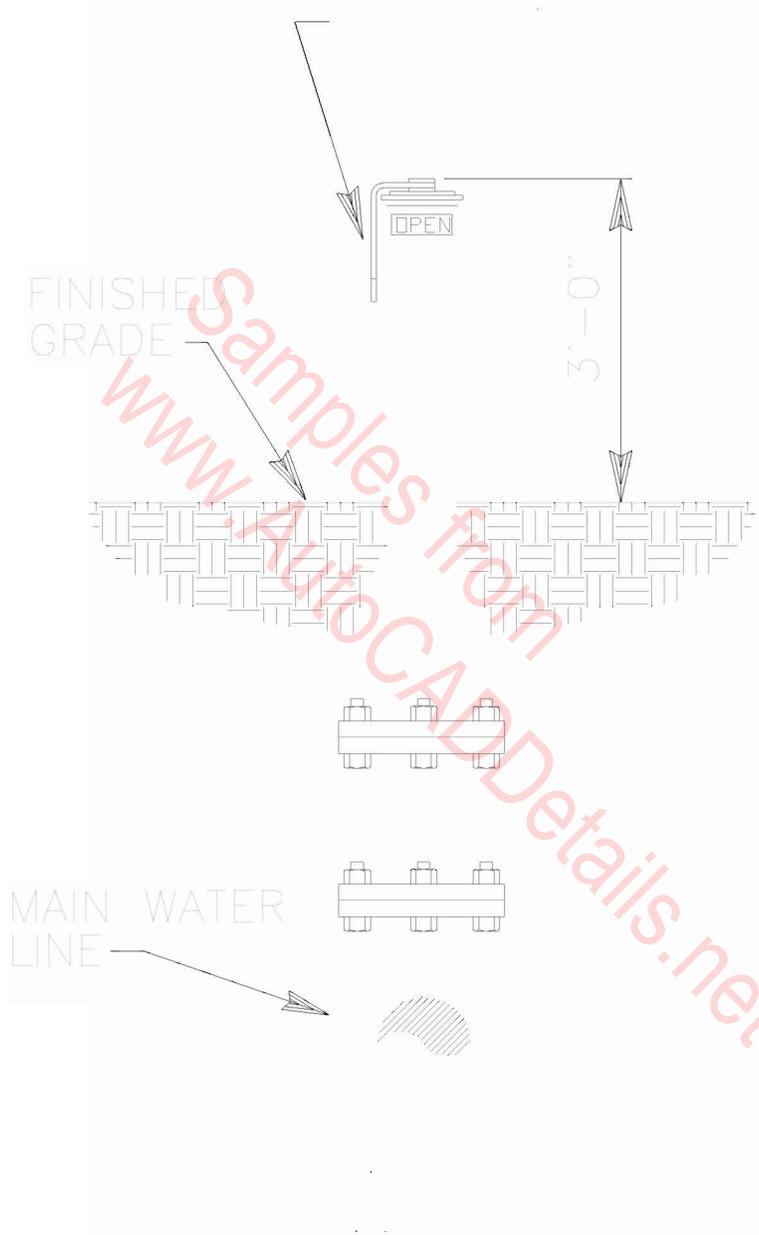
PIPE SIZE	TEES & DEADENDS	90° ELBOWS	45° ELBOW CROSSES IN DIRECTION OF FLOW	22-1/2° ELBOWS
6"	4.0	5.5	3.0	2.0
8"	7.0	9.5	5.0	3.0
10"	9.5	13.5	7.0	4.0
12"	13.5	19.0	10.0	5.0
14"	18.0	23.5	14.0	7.0
16"	23.0	33.0	18.0	9.0

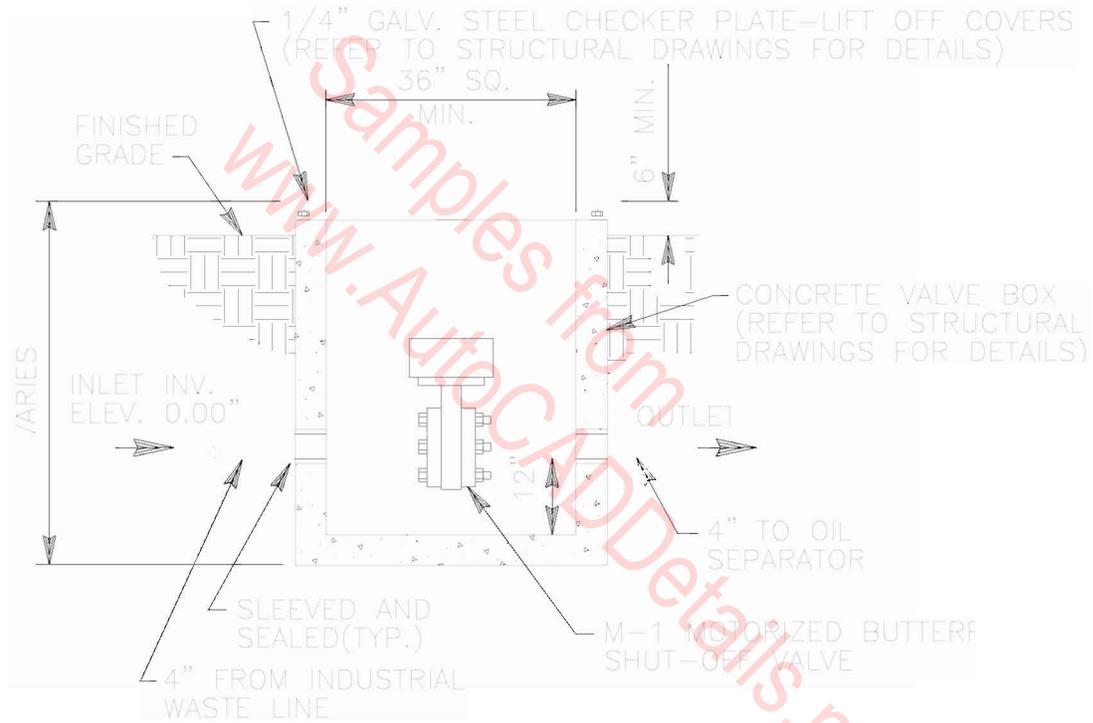


N.T.S.

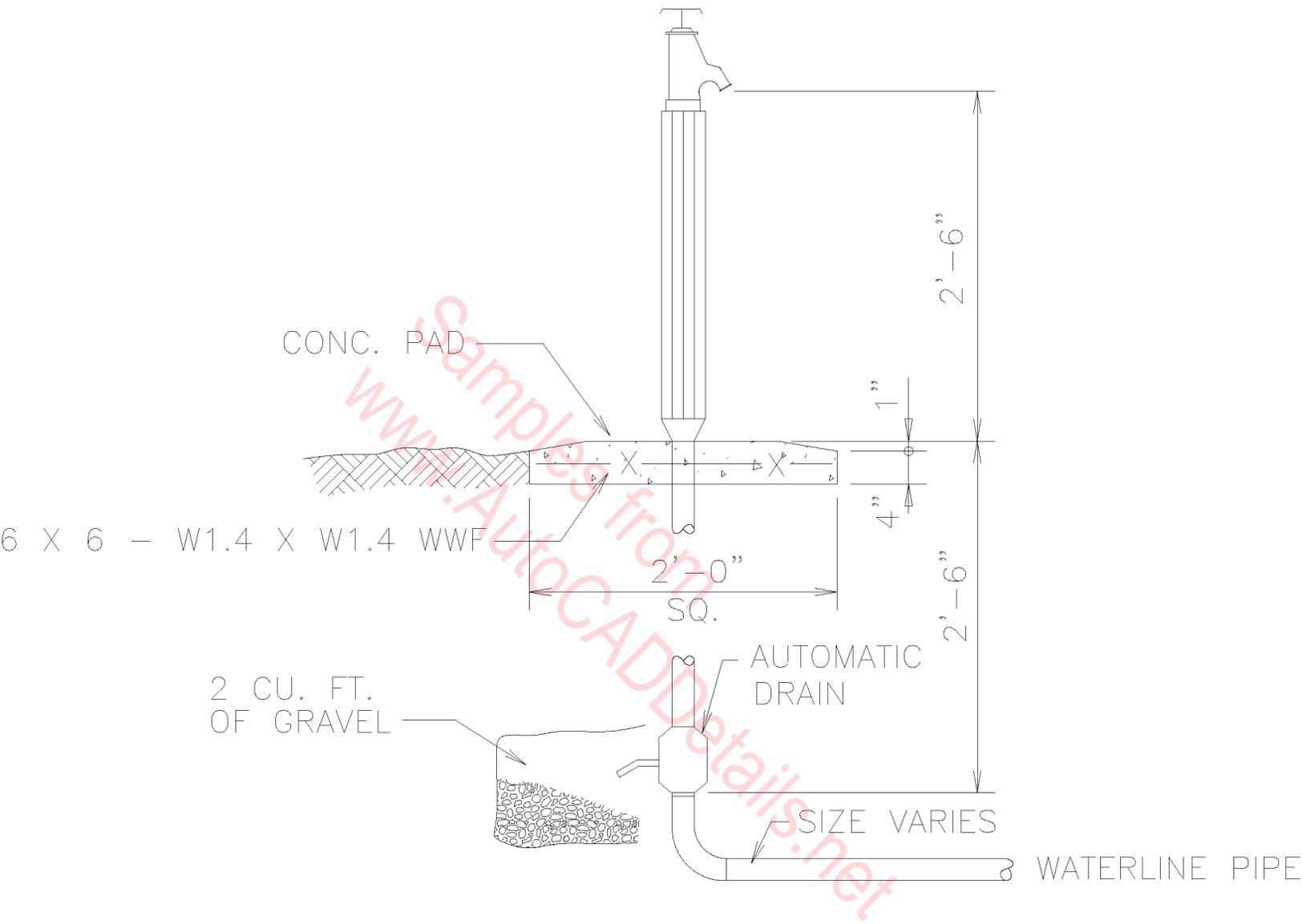


VALVE



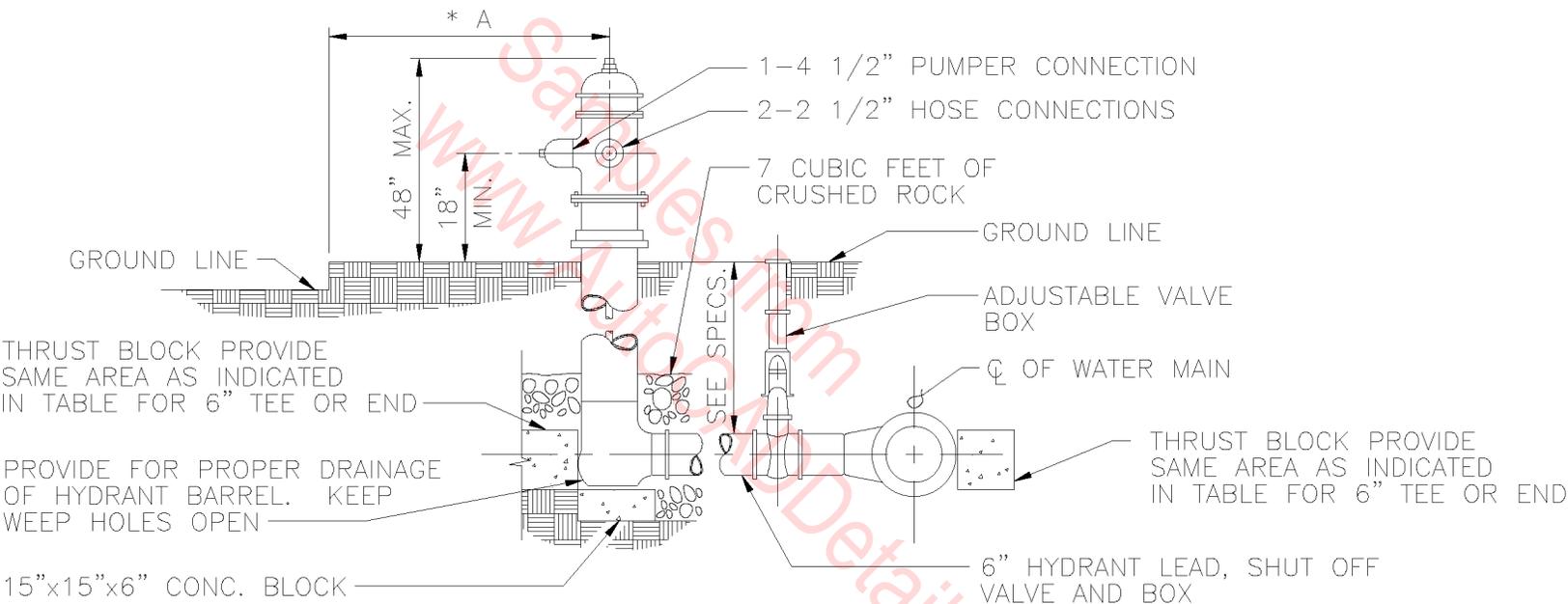


N.T.S



YARD HYDRANT DETAIL

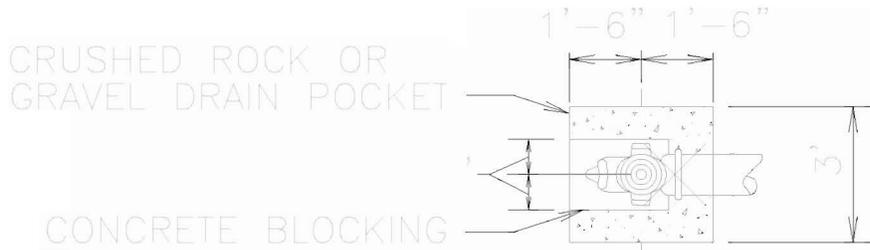
N.T.S.



TYPICAL FIRE HYDRANT SETTING

N.T.S.

* A = 7'-0" FROM BACK OF PAVEMENT WHERE NO CURB EXISTS OR 4'-0" FROM BACK OF CURB.

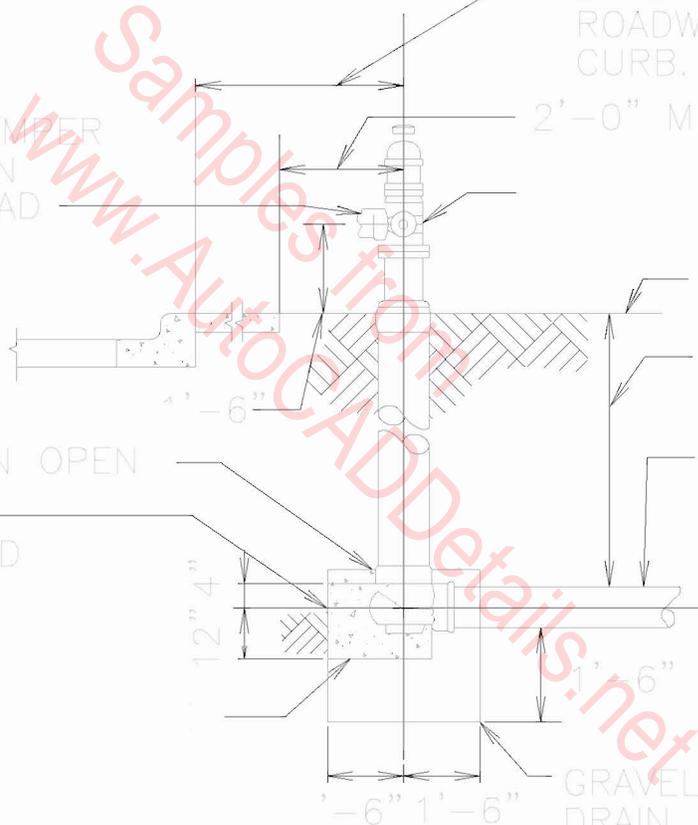


PLAN

4 1/2" PUMPER CONNECTION FACING ROAD

3'-0" MIN. FROM EDGE OF ROADWAY SHOULDER OR CURB, 7'-0" MAX.

2'-0" MIN. FROM SIDEWALK



FINISHED GRADE

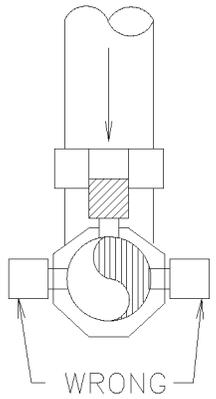
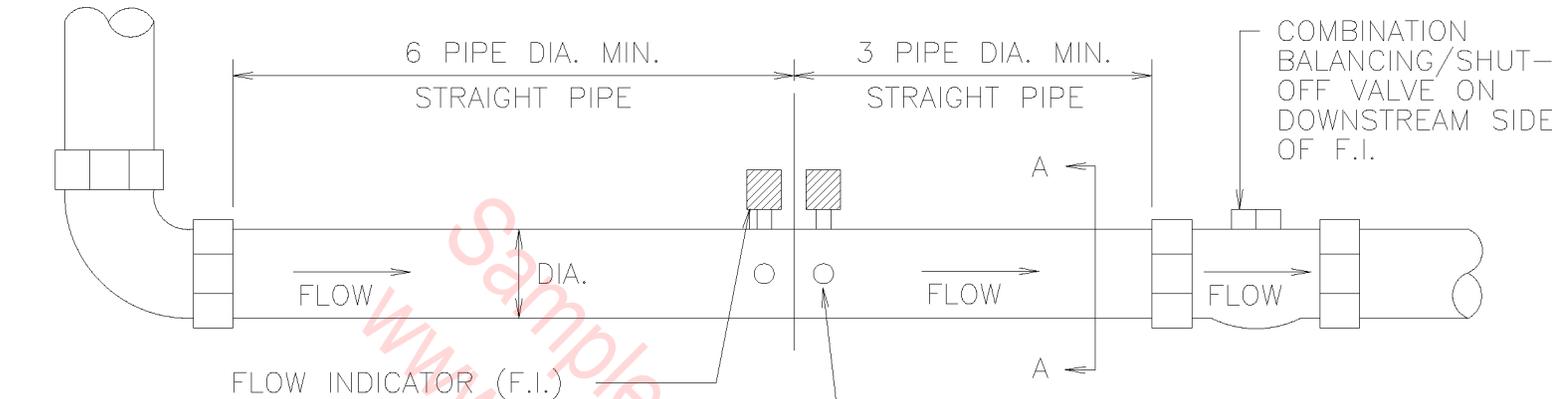
MIN. DEPTH OF BURY 2'-6"

PROVIDE 6" GATE VALVE WITH CI ROADWAY VALVE BOX FOR EACH HYDRANT CONNECTION

EAVE HYDRANT DRAIN OPEN
COMPACTED OR UNDISTURBED GROUND

GRAVEL OR CRUSHED ROCK DRAIN POCKET - THOROUGHLY COMPACTED

N.T.S.



SECTION A-A
 SHOWING RELATIONSHIP
 OF FLOW INDICATOR TO
 UPSTREAM ELBOW

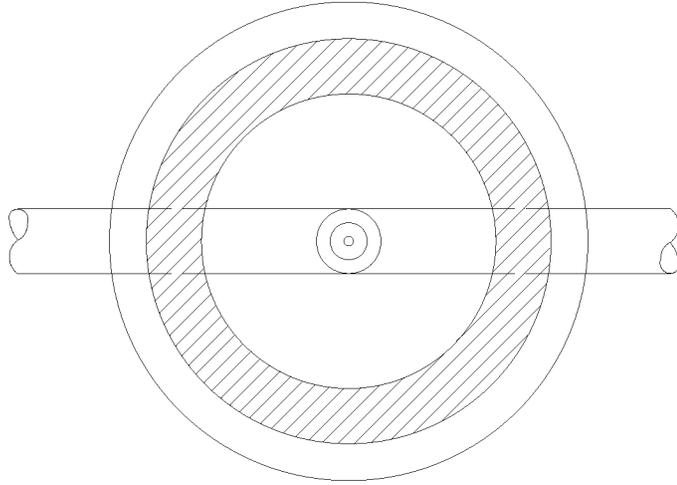
DO NOT LOCATE F.I. IN THIS POSITION RELATIVE TO UPSTREAM ELBOW. LOCATE F.I. PARALLEL TO PIPE UPSTREAM OF ELBOW, NOT PERPENDICULAR. SEE SECTION A-A.

NOTES:

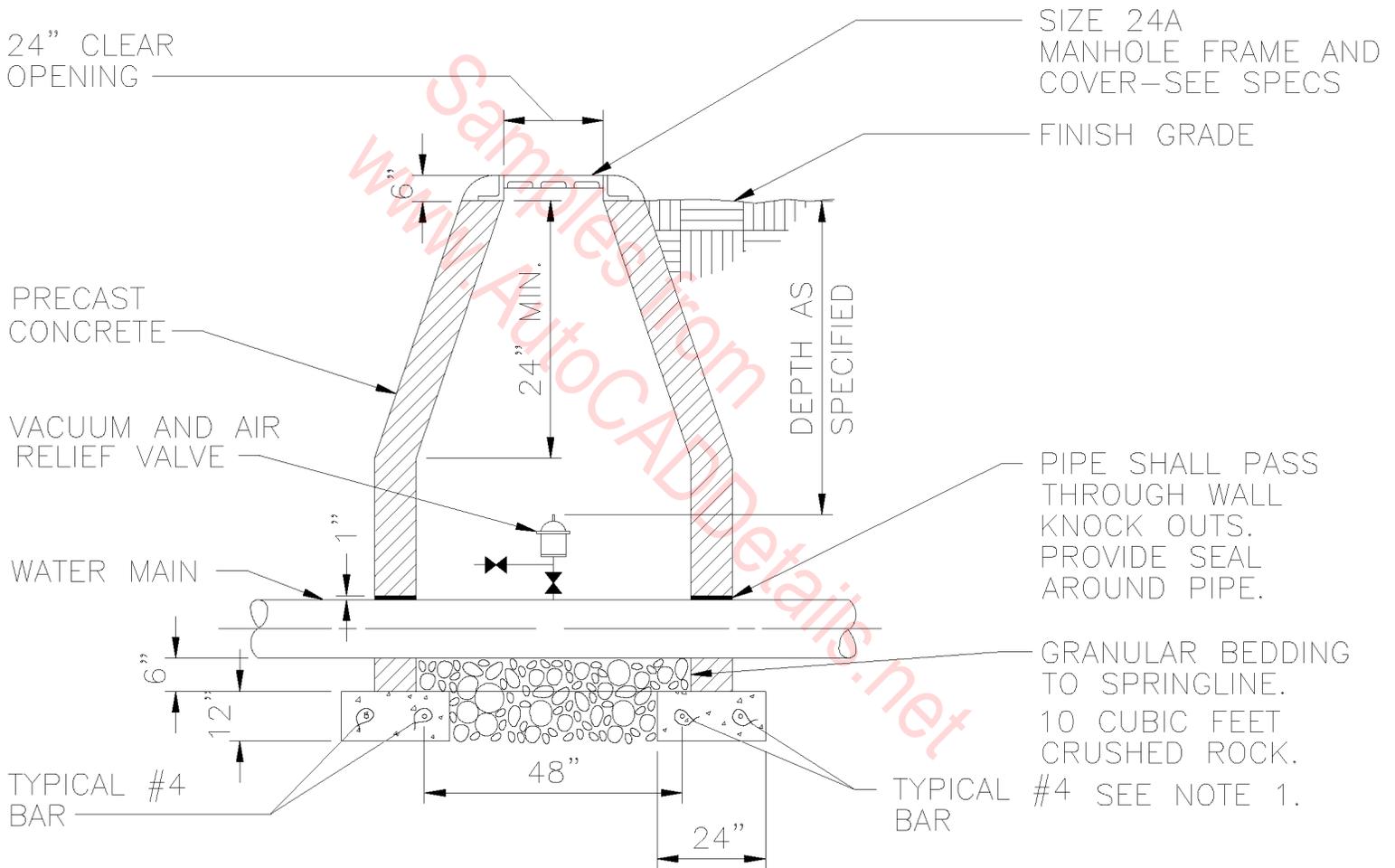
1. ONLY STRAIGHT PIPE IS TO BE WITHIN MINIMUM UPSTREAM & DOWNSTREAM DIMENSIONS, NO FITTINGS OR VALVES ARE ALLOWED.
2. F.I. & VALVES SHALL BE ORIENTED FOR EASY ACCESS. IF TOP OF PIPE IS CLOSE TO STRUCTURE OR OBSTRUCTIONS, ARRANGE PIPING TO LOCATE VALVE OPERATOR & F.I. CONNECTIONS ON SIDE OF PIPE. NO VALVE SHALL BE INSTALLED WITH THE OPERATOR BELOW THE HORIZONTAL.

FLOW INDICATOR DETAIL

N.T.S.



PLAN

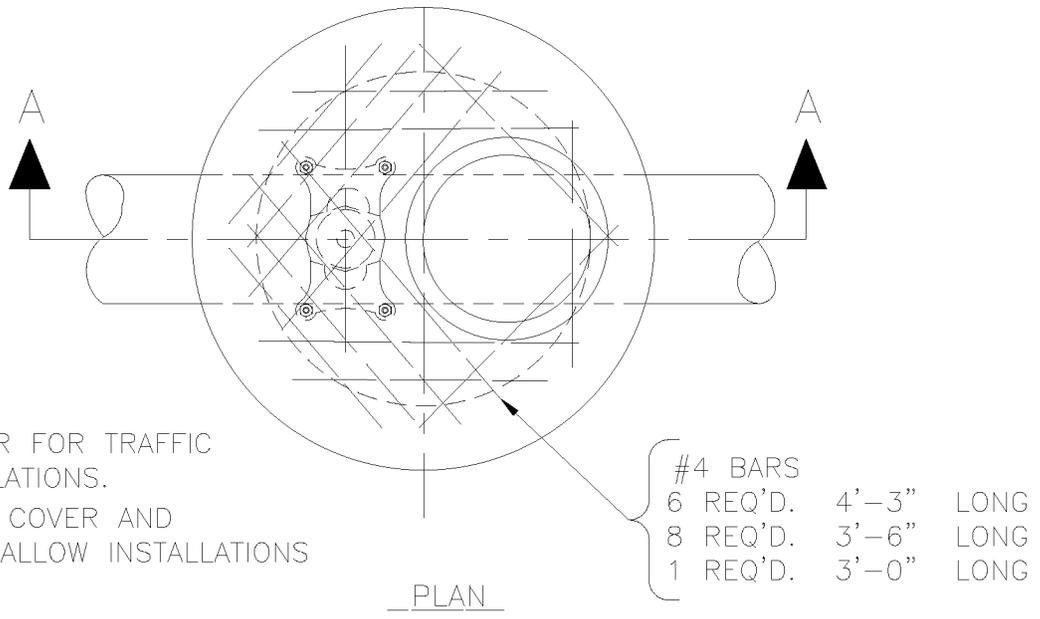


TYPICAL VACUUM AND AIR RELIEF VALVE MANHOLE, DRY CONDITIONS

N.T.S.

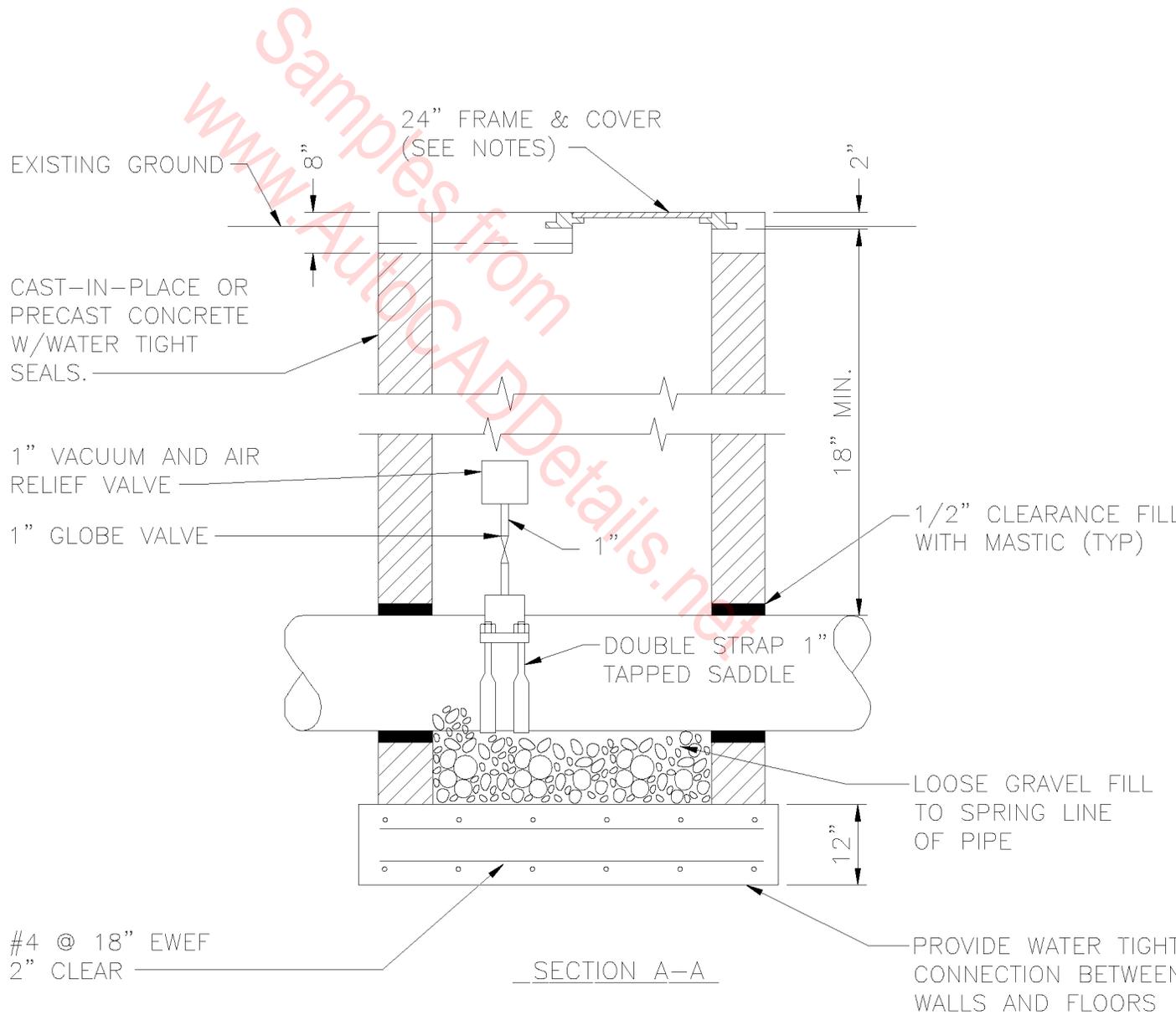
NOTES:

1. PROVIDE SUITABLE SUPPORT TO RELIEVE STRESS ON PIPE AND FITTINGS WITH GRANULAR BEDDING TO SPRING LINE OF PIPE.
2. PROVIDE NON-RIGID JOINT A DISTANCE FROM 1 TO 2 FEET ON EACH SIDE OF THE MANHOLE.
3. A FLAT TOP MANHOLE MAY BE USED.



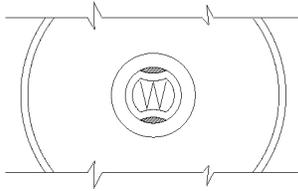
NOTES:

1. USE 24" FRAME AND COVER FOR TRAFFIC LOADINGS OR DEEP INSTALLATIONS.
2. USE LIGHT-DUTY FRAME & COVER AND LARGER DIAMETERS FOR SHALLOW INSTALLATIONS AND NON-TRAFFIC AREAS.



VACUUM AND AIR RELIEF VALVE MANHOLE
HIGH GROUNDWATER CONDITIONS

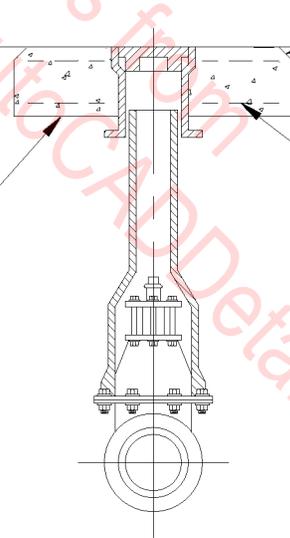
N.T.S.



VALVE BOX TOP

CAST AROUND THE TOP OF EACH VALVE BOX A CONCRETE DISK 3'-0" IN DIAMETER x 8" THICK WHEN VALVES ARE LOCATED IN ROADS, SIDEWALKS, OR OTHER PAVED AREAS

CONCRETE DISK MAY BE USED IN NON PAVED AREAS AS A VALVE MARKER.

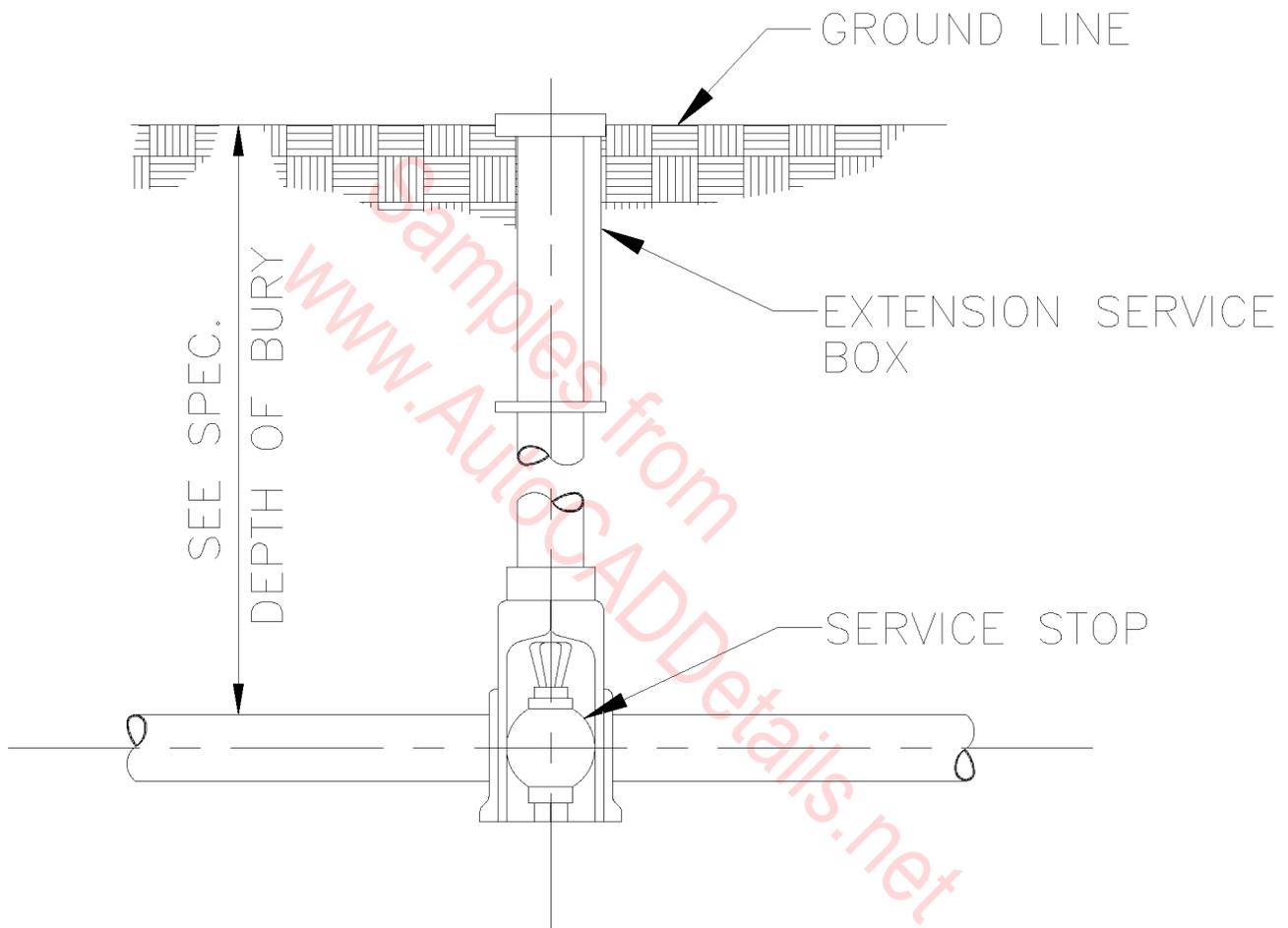


1" CHAMFER WHEN LOCATED IN AREAS OTHER THAN CONCRETE

#3 ϕ BARS @ 8 O.C. EACH WAY OR EQUIVALENT

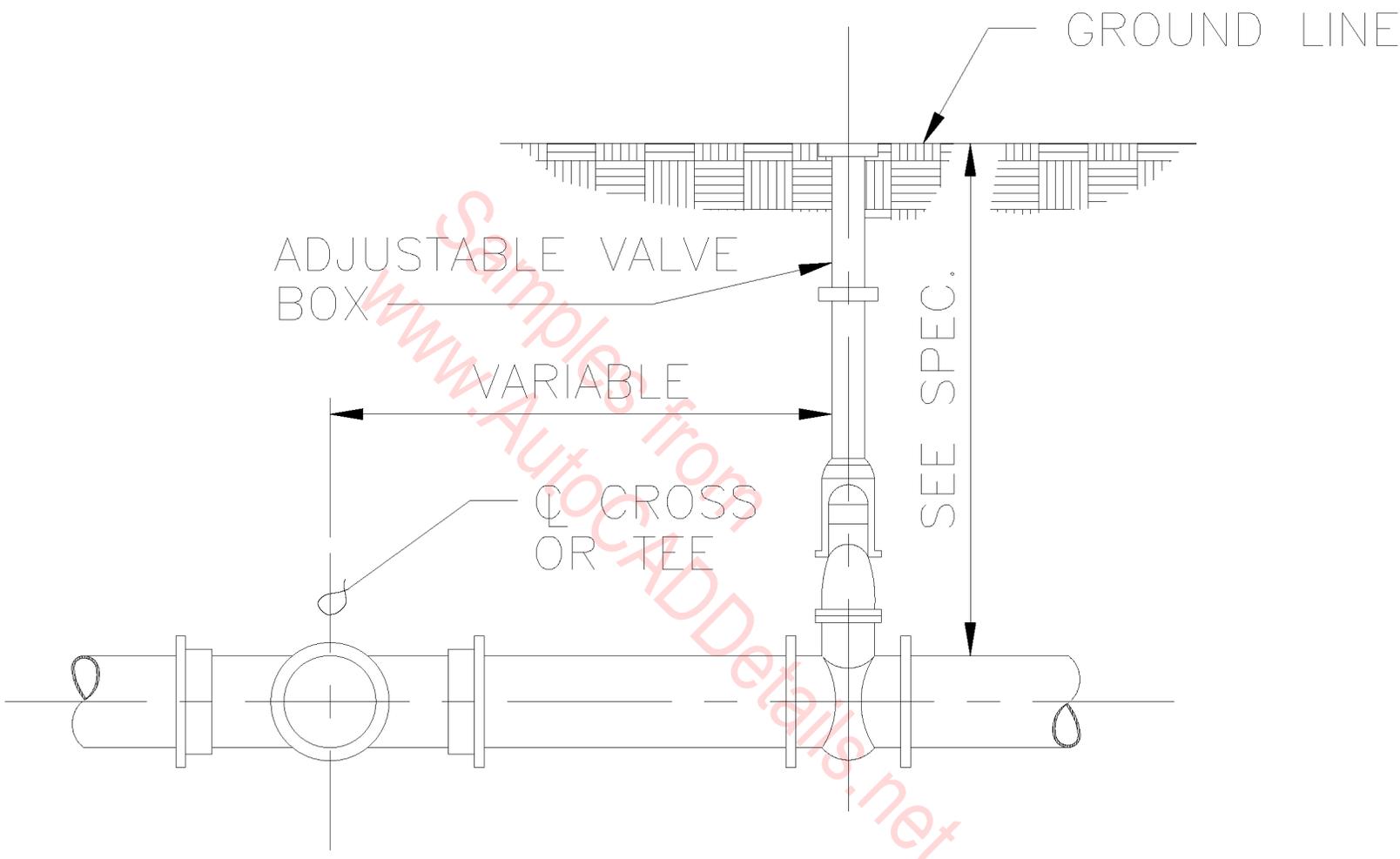
DETAIL VALVE BOX

N.T.S.



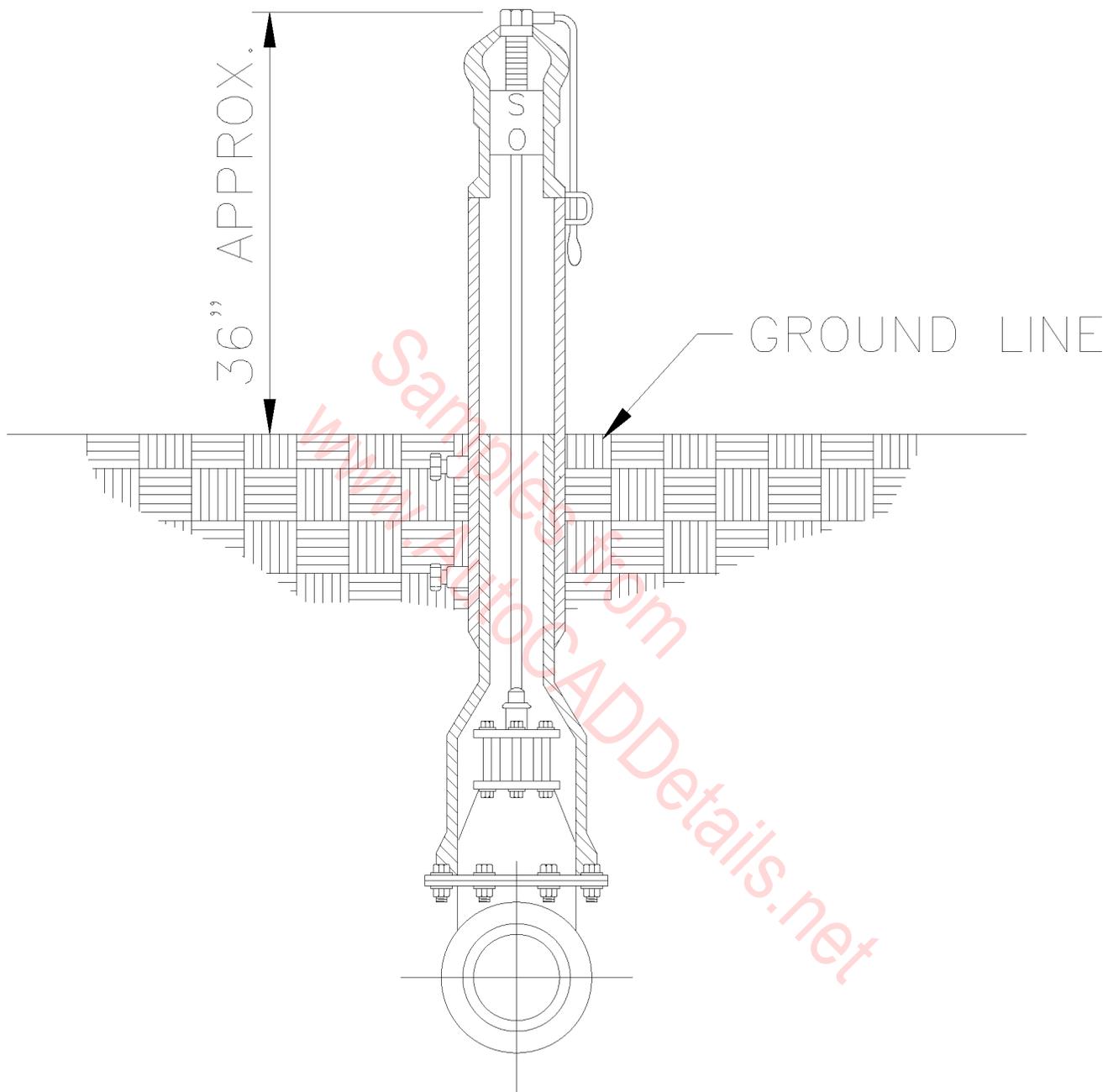
TYPICAL SERVICE BOX SETTING

N.T.S.



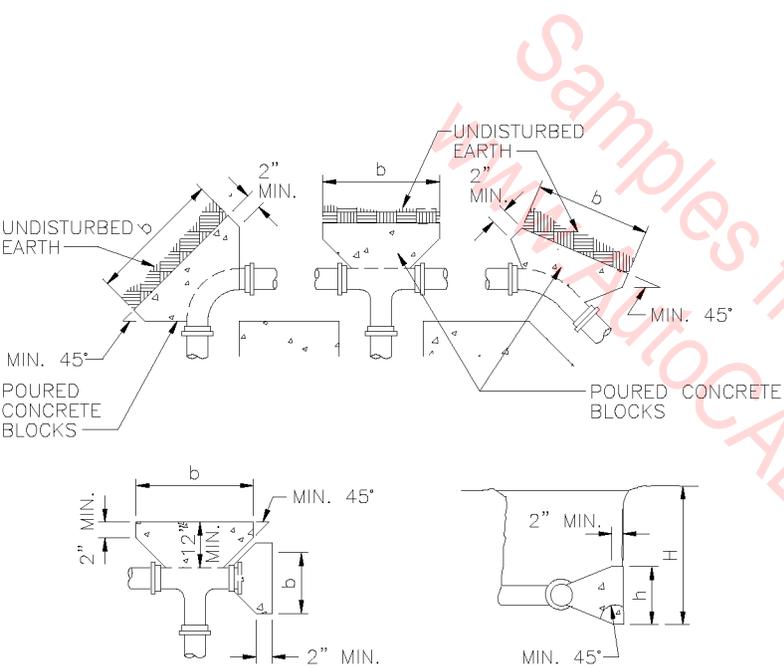
TYPICAL VALVE SETTING

N.T.S.



POST INDICATOR VALVE

N.T.S.



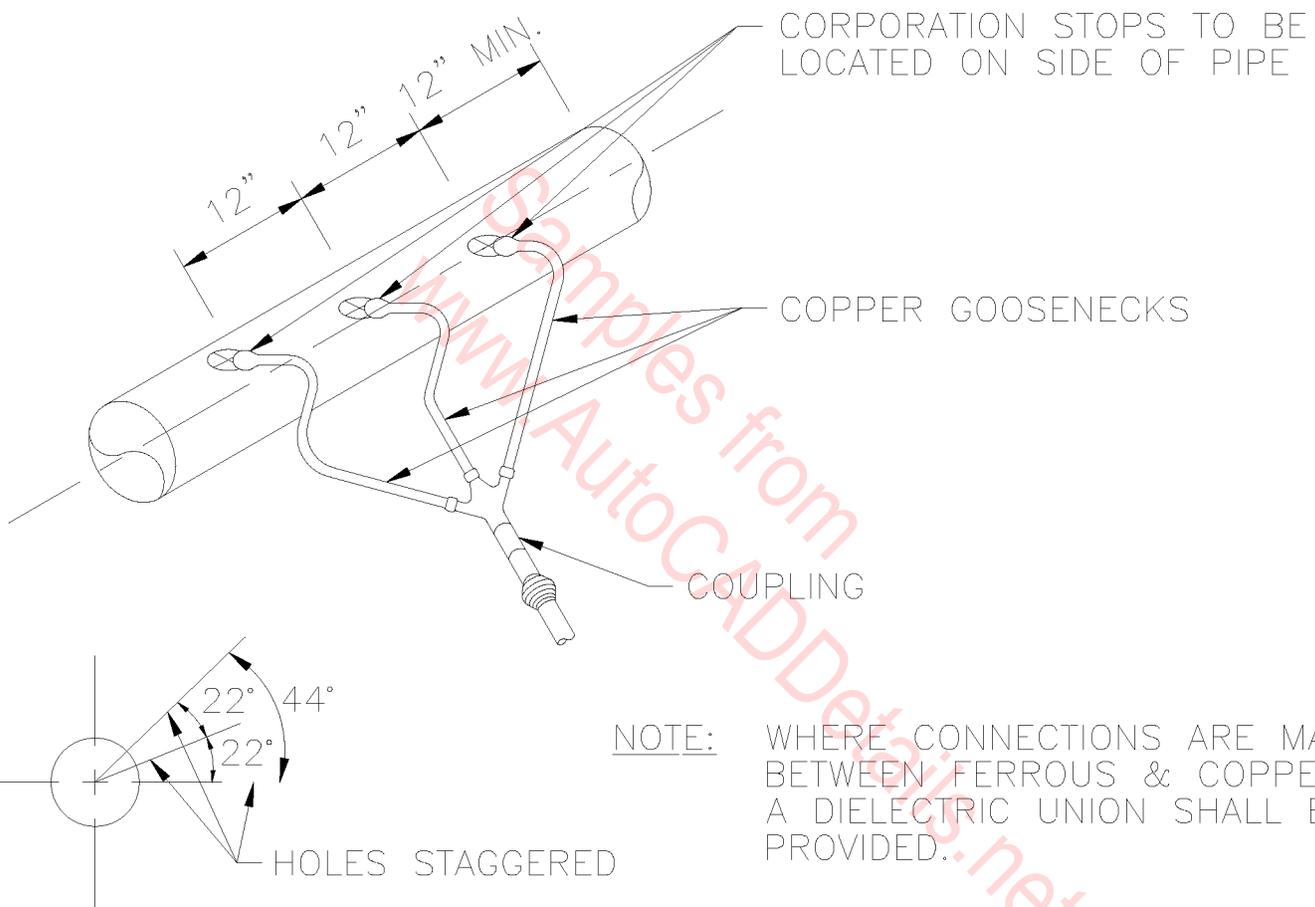
NOTES:

1. PLACE 4 ml. POLYETHYLENE BETWEEN CONCRETE AND FITTING (CONCRETE SHALL NOT INTERFERE WITH JOINT.)
2. MINIMUM CONCRETE THICKNESS SHALL BE 12 INCHES.
3. THE HORIZONTAL DIMENSION (b) OF THE BEARING AREA SHALL BE BETWEEN 1.0 AND 2.0 TIMES THE VERTICAL DIMENSION (h).
($h \leq b \leq 2h$)
4. THE VERTICAL DIMENSION (h) OF THE BEARING AREA SHALL BE EQUAL TO ONE-HALF THE TOTAL DEPTH (H) TO THE BOTTOM OF THE THRUST BLOCK BUT NOT LESS THAN THE OUTSIDE DIAMETER (D_o) OF THE FITTING ($D_o < h \leq H/2$).
5. THRUST BLOCK ORIENTATION SHALL BE SUCH THAT THE CENTER OF THE FITTING CORRESPONDS WITH THE CENTER OF THE THRUST BLOCK.
6. THE MINIMUM ALLOWABLE ANGLE (EITHER VERTICAL OR HORIZONTAL) SHALL BE 45 DEGREES.

BEARING AREA OF BLOCK IN SQ. FT. (b x h)					
FITTING SIZES	TEE & END	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND

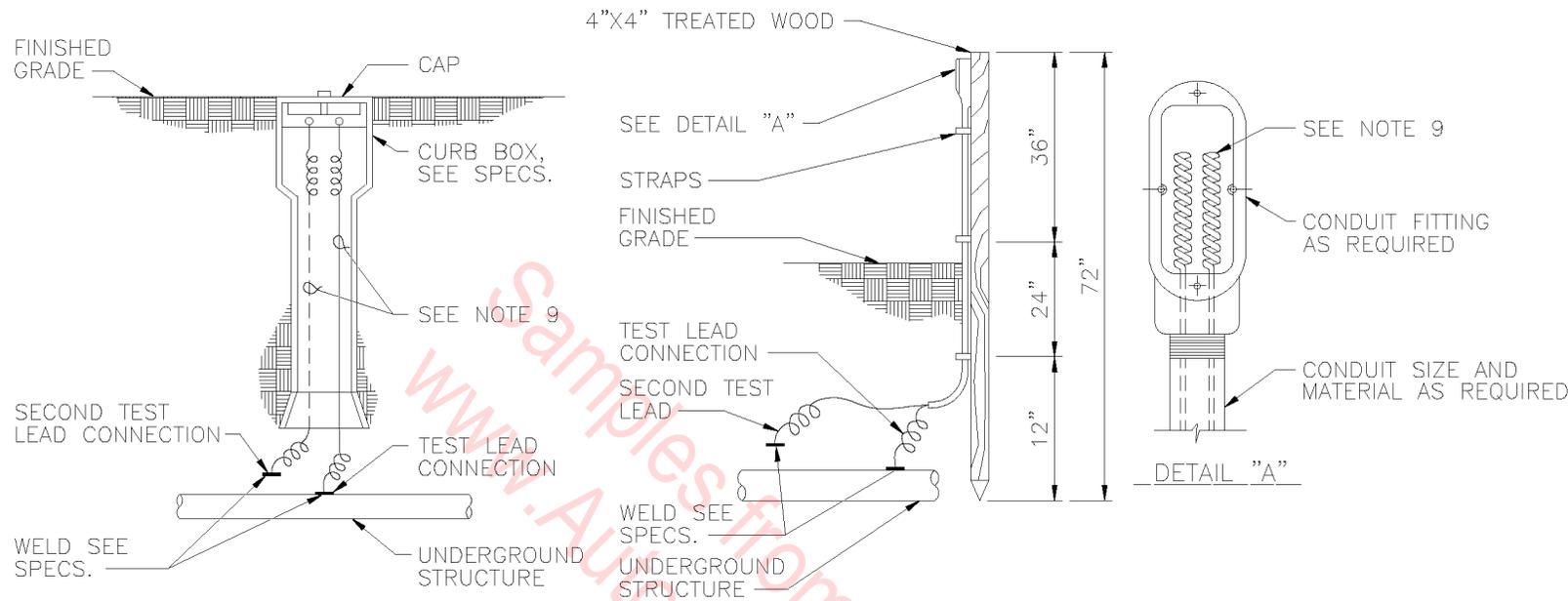
TYPICAL THRUST BLOCKING DETAIL

N.T.S.



TYPICAL GOOSENECK CONNECTION

N.T.S.



CURB BOX TEST STATION

SEE NOTES 1,2,3,4,8, & 9

POST MOUNTED TEST STATION

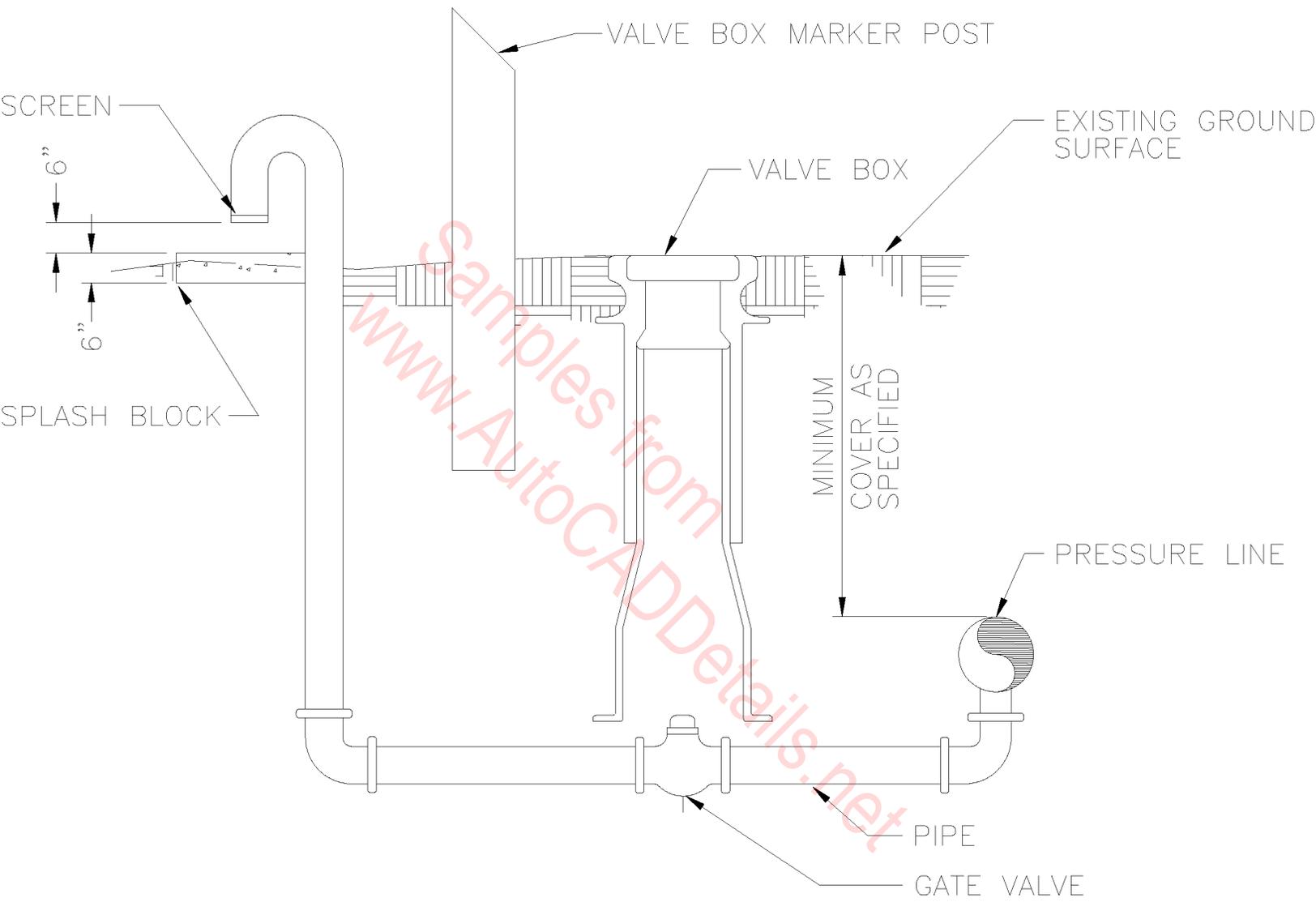
SEE NOTES 1,5,6,7,8, & 9

TEST LEAD STATION

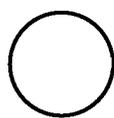
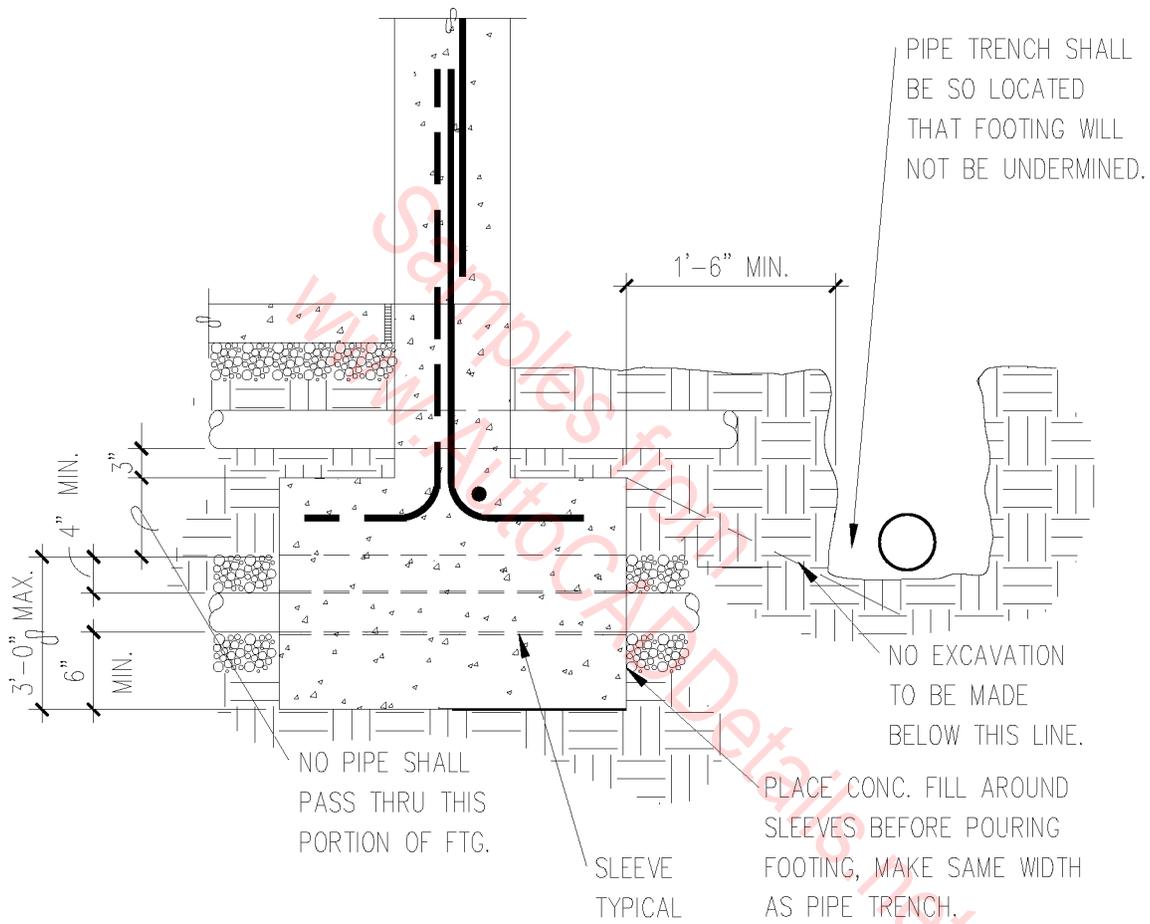
N.T.S.

NOTES:

1. TYPE OF TEST STATION & LOCATION TO BE DETERMINED BY CONTRACTING OFFICER.
2. TEST LEADS TO BE INSTALLED IN CURB BOXES (OF C.I. OR PLASTIC).
3. CURB BOXES TO BE INSTALLED FLUSH WITH GROUND AND LOCATED OVER OR NEAR PIPE LINE TO WHICH TEST LEAD IS ATTACHED.
4. TEST LEADS TO CONSIST OF No. 12 TW WIRE WITH ADEQUATE SLACK LEFT IN EXCAVATION AND CURB BOX.
5. TEST LEAD BOX TO CONSIST OF CROUSE-HINDS E57 CONDULET WITH COVER AND GASKET OR APPROVED EQUAL.
6. 12" OF SLACK TEST LEAD WIRE TO BE LEFT IN TEST LEAD BOX AND WIRE CONNECTOR OR ELECTRICAL TAPE TO BE PLACED OVER THE END OF THE TEST LEAD, ALL TEST LEADS TO BE OF No. 12 TW SOLID COPPER WIRE.
7. EARTH AROUND TEST STATION SUPPORTING POST WILL BE THOROUGHLY COMPACTED AT THE TIME OF INSTALLATION.
8. PROVIDE THIS TEST STATION WHEN SPECIFIED ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, OR AS DIRECTED.
9. PROVIDE ONE TEST LEAD UNLESS OTHERWISE NOTED. LEADS SHALL BE COLOR CODED.



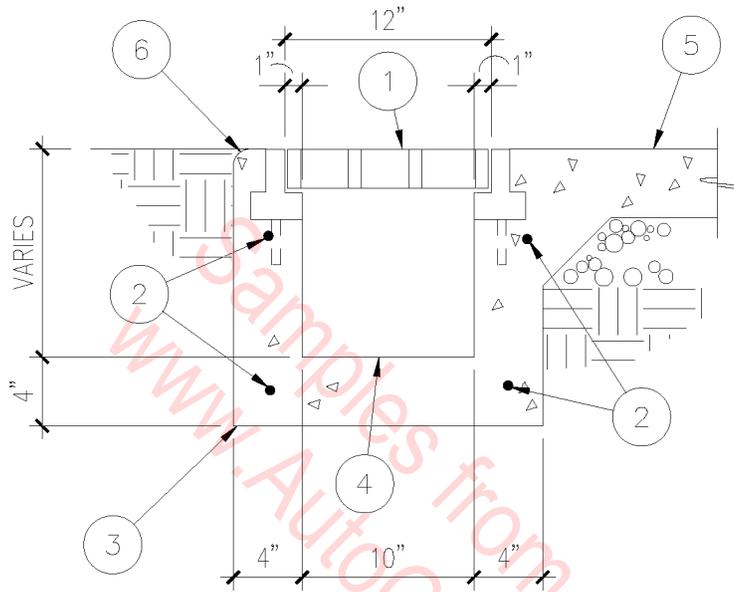
BLOW-OFF ASSEMBLY
 N.T.S.



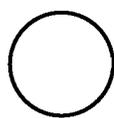
DRAINAGE PIPE SLEEVE

SCALE: 3/4" = 1'-0"

02D-1001



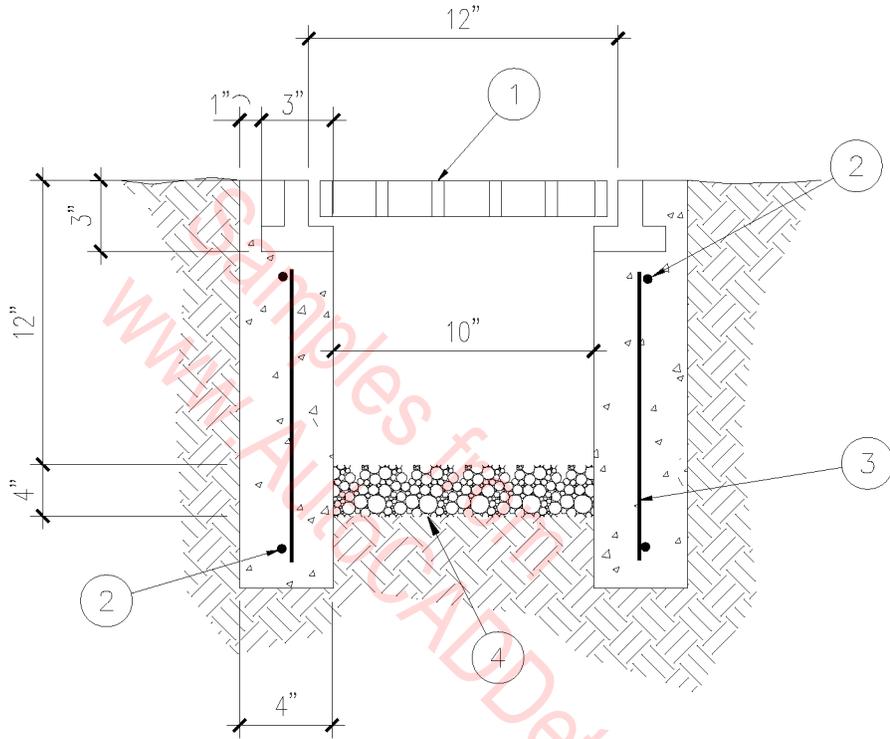
1. HEAVY DUTY GRATE & FRAME.
2. #4 REBARS CONTINUOUS TOP & BOTTOM.
3. C.I.P CONCRETE TRENCH DRAIN.
4. CONSTRUCT END OF TRENCH DRAINS SIMILAR TO SIDE CONSTRUCTION.
5. CONCRETE SLAB ON SUBGRADE.
6. 1" RADIUS.



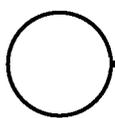
SIDEWALK TRENCH DRAIN

1" = 1'-0"

02D-1002



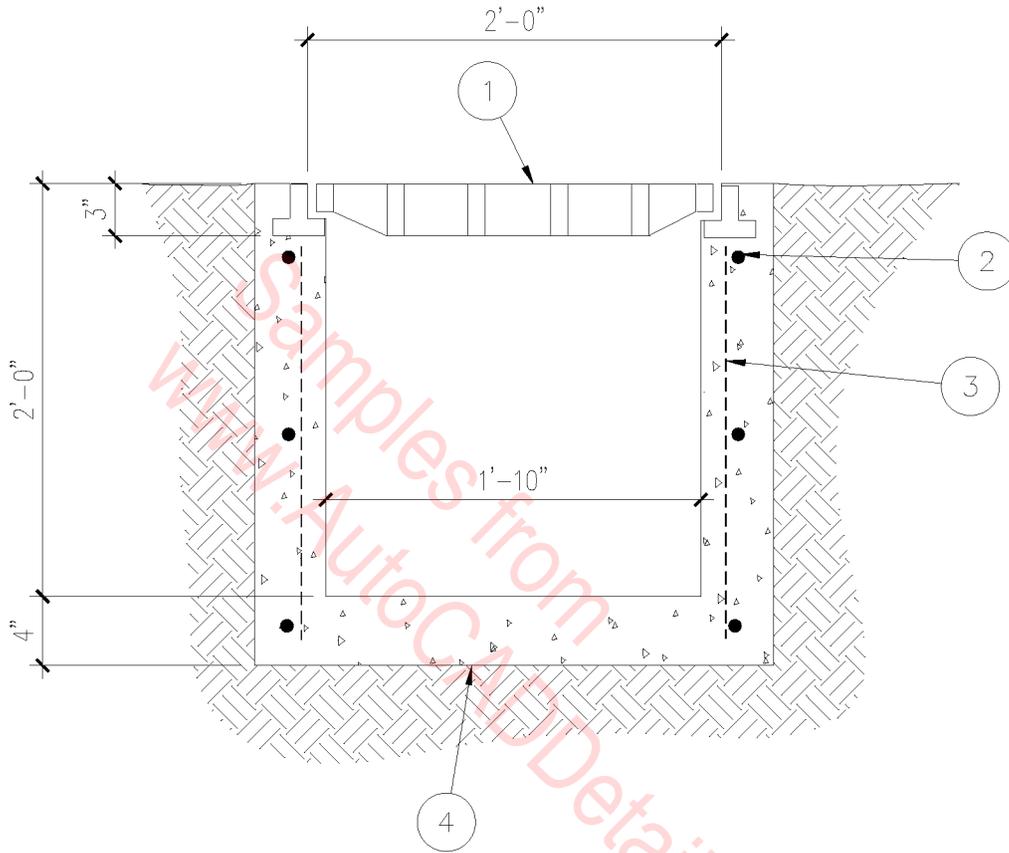
1. GRATING AND FRAME.
2. #4 REBAR ALL AROUND.
3. #4 REBAR AT EACH CORNER.
4. DRAINAGE FILL.



OPEN TRENCH DRAIN

1 1/2" = 1'-0"

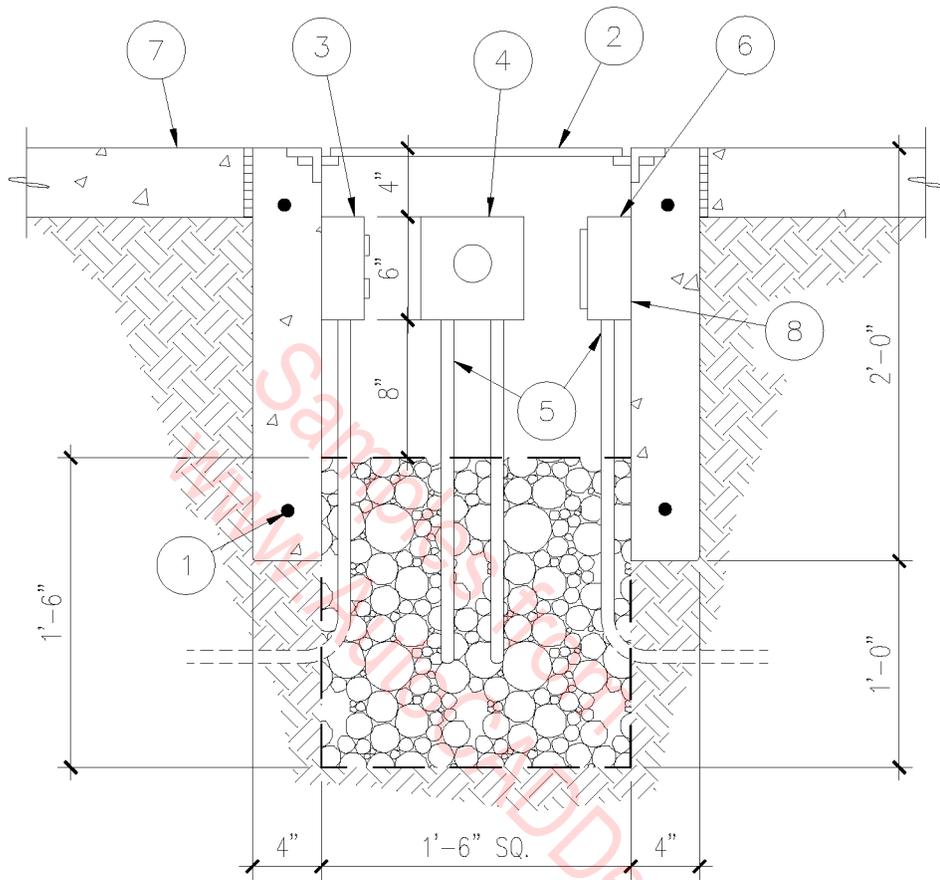
02D-1003



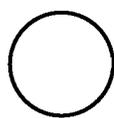
1. GRATING AND FRAME.
2. #4 REBAR AT 12" EACH WAY.
3. #4 REBAR AT EACH CORNER.
4. CONCRETE.

○ CATCH BASIN
 1" = 1'-0"

02D-1005



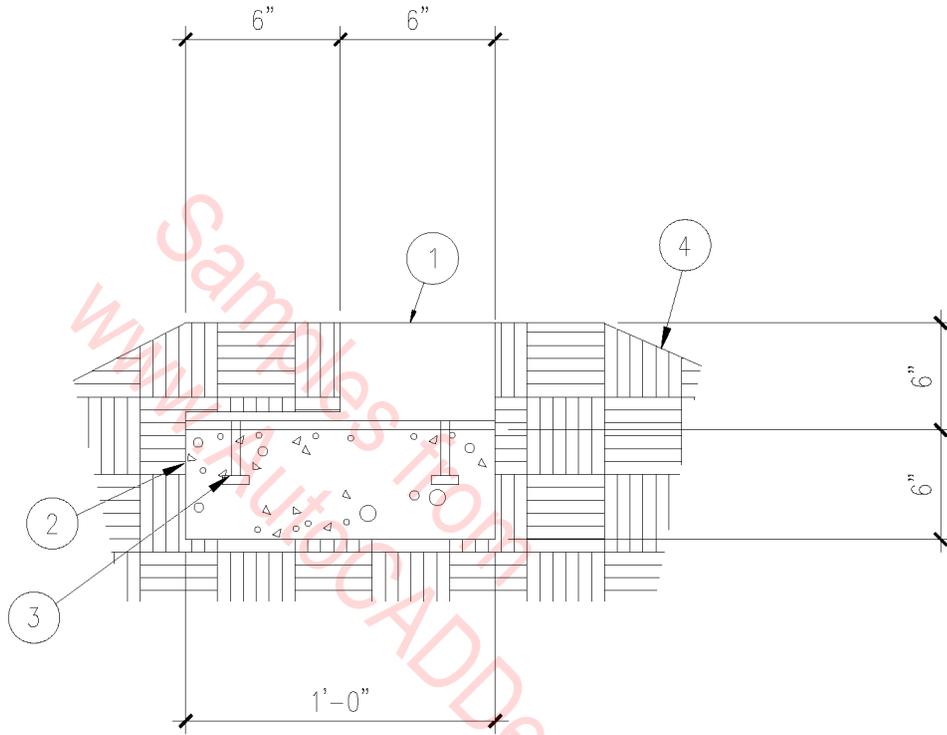
- | | |
|--|--|
| <ol style="list-style-type: none"> 1. #4 REBAR CONTINUOUS ALL AROUND. 2. 18" X 18" FLUSH HINGED MANHOLE COVER WITH PADLOCK. 3. DUPLEX OUTLET IN WATERPROOF BOX - SEE ELECTRICAL. 4. MIC OUTLET IN WATERPROOF BOX- SEE ELECTRICAL. 5. CONDUITS-SEE ELECTRICAL. | <ol style="list-style-type: none"> 6. WATERPROOF BOX WITH COVER FOR FIELD INTERCOM SYSTEM- SEE ELECTRICAL. 7. CONCRETE SLAB OVER SUB-GRADE. 8. SCOREBOARD CONTROL WIRES IN WATERPROOF J-BOX ON SIDE OF MANHOLE- SEE ELECTRICAL. |
|--|--|



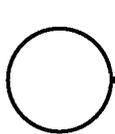
ELECTRICAL PIT BOX

1" = 1'-0"

02D-1006



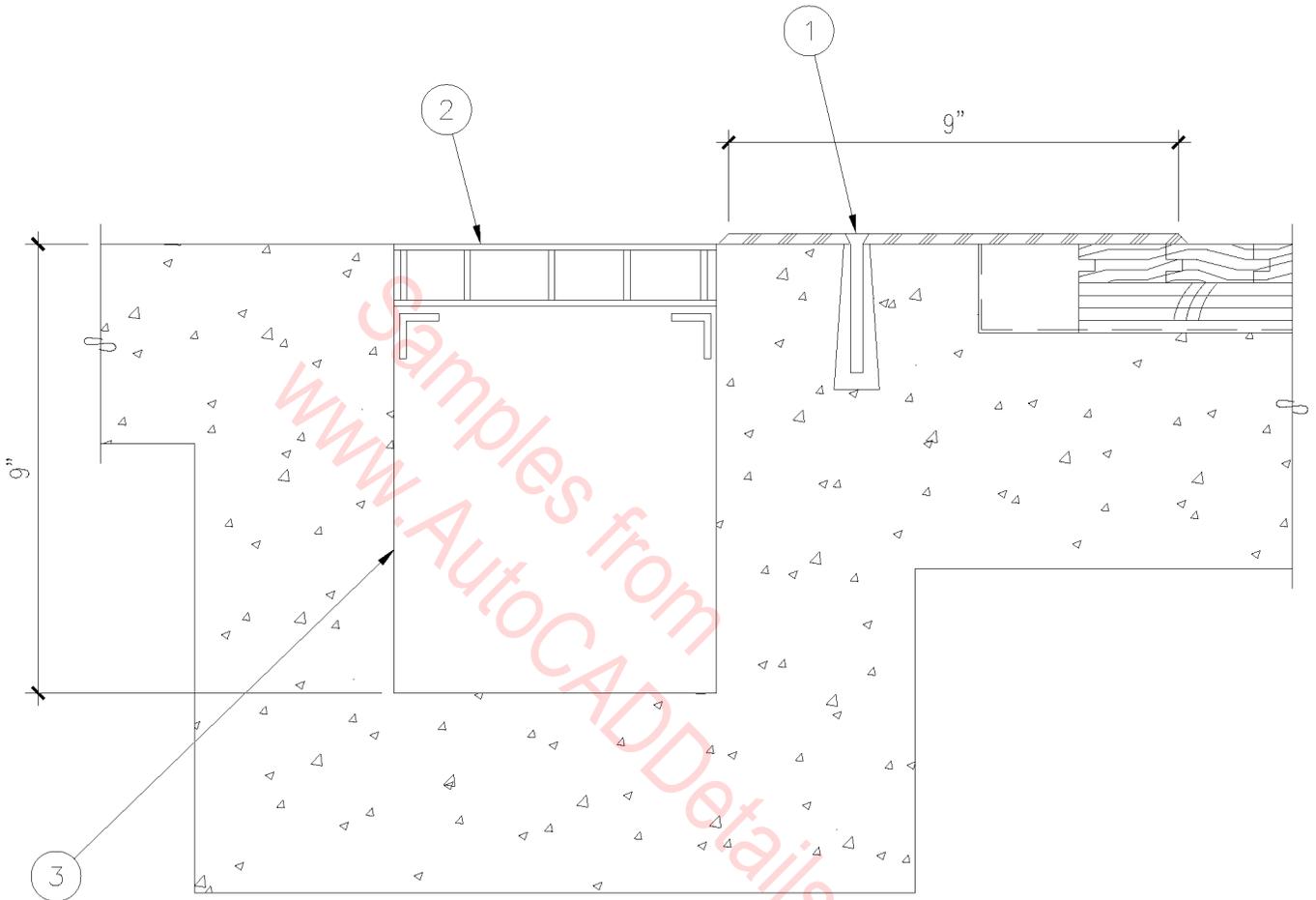
1. PITCHER'S PLATE ANCHORED IN CONCRETE.
2. CONCRETE FOOTING.
3. ANCHORING SPIKES.
4. FINISH GRADE.



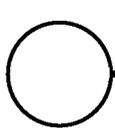
PITCHER'S PLATE

SCALE: 1 1/2" = 1'-0"

02D-1007



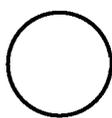
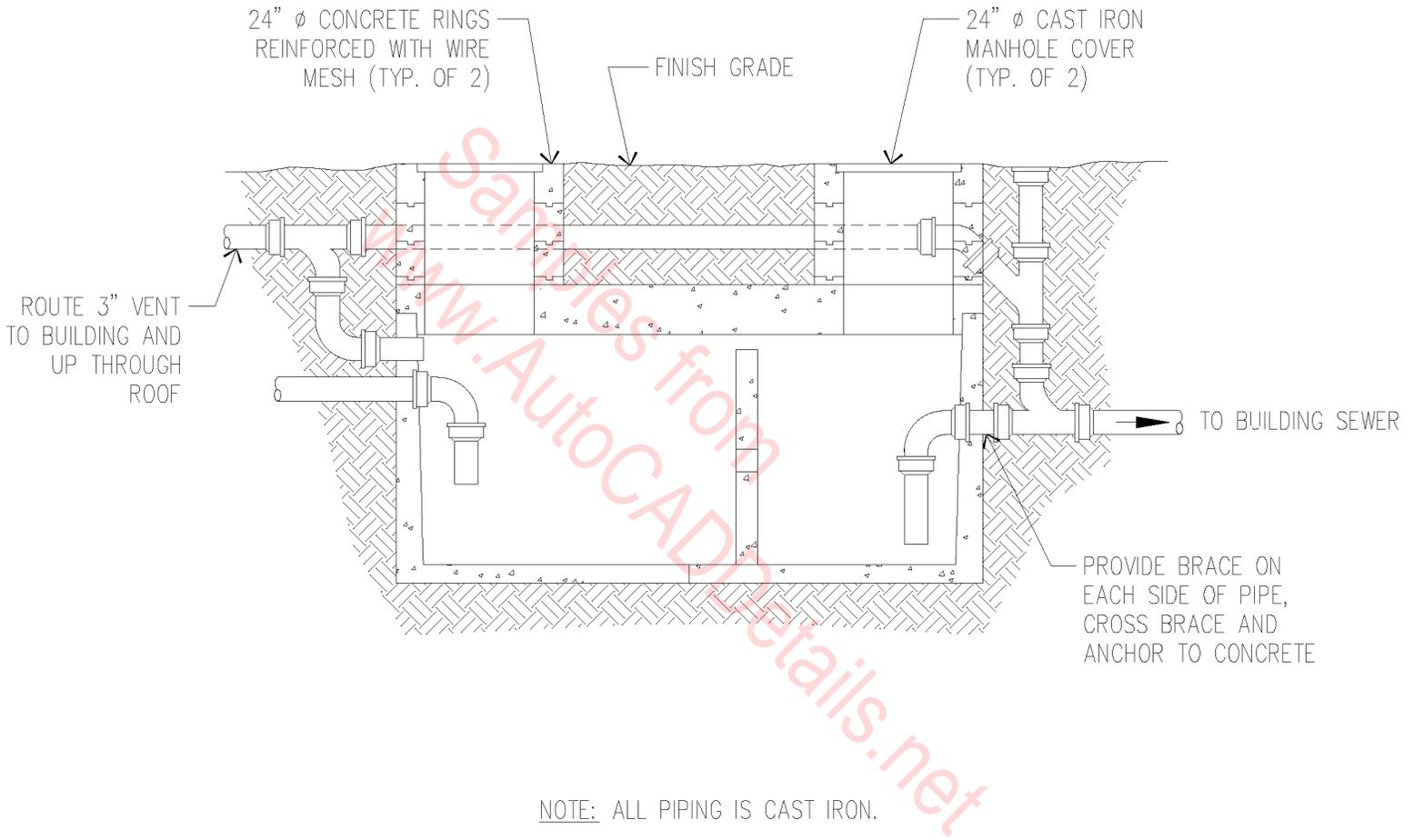
1. THRESHOLD AND WOOD FLOOR.
2. METAL GRATE.
3. TRENCH DRAIN.



GYM FLOOR @ DRAIN

3" = 1'-0"

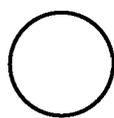
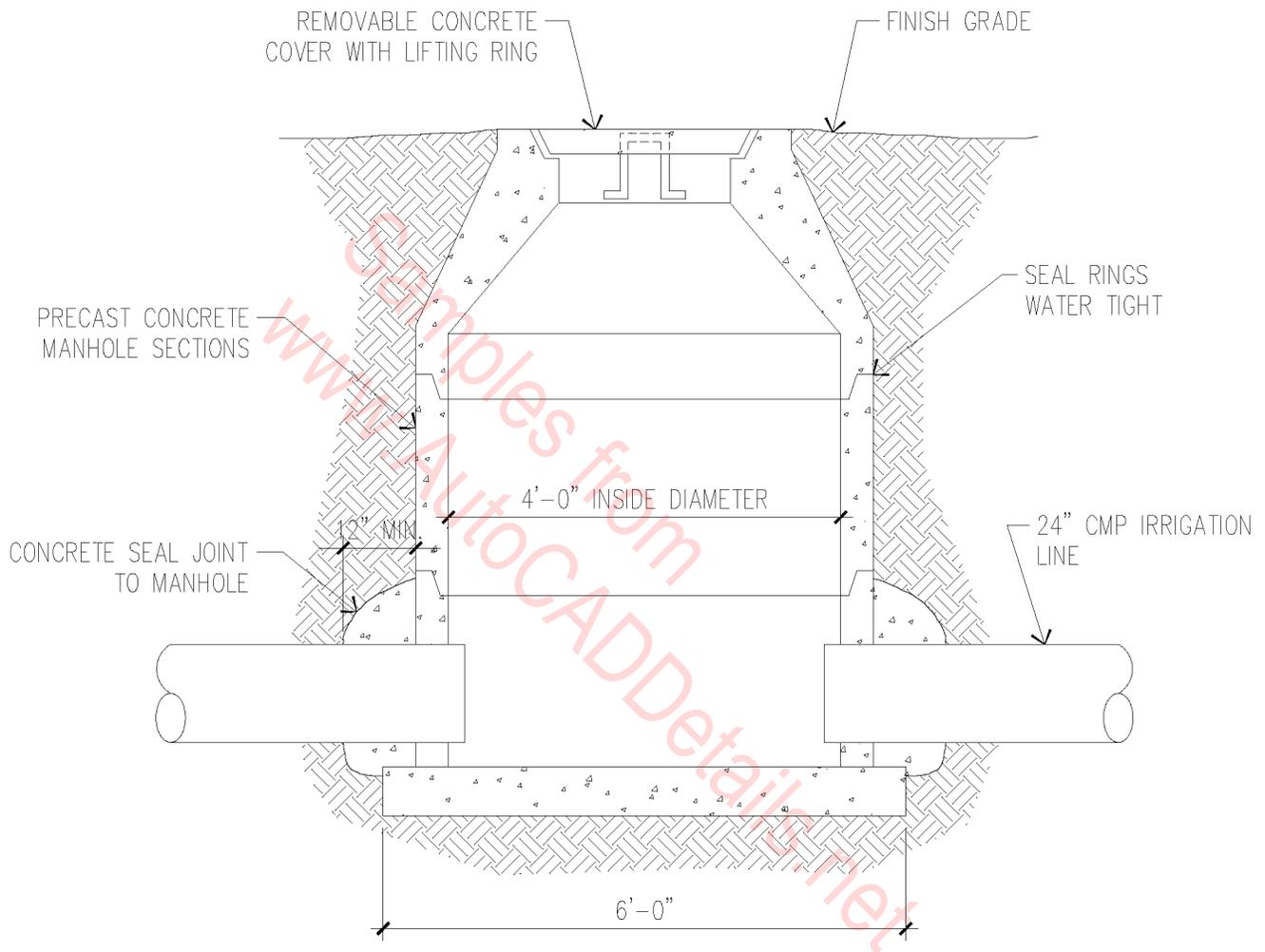
02D-1008



EXTERIOR GREASE TRAP

N.T.S.

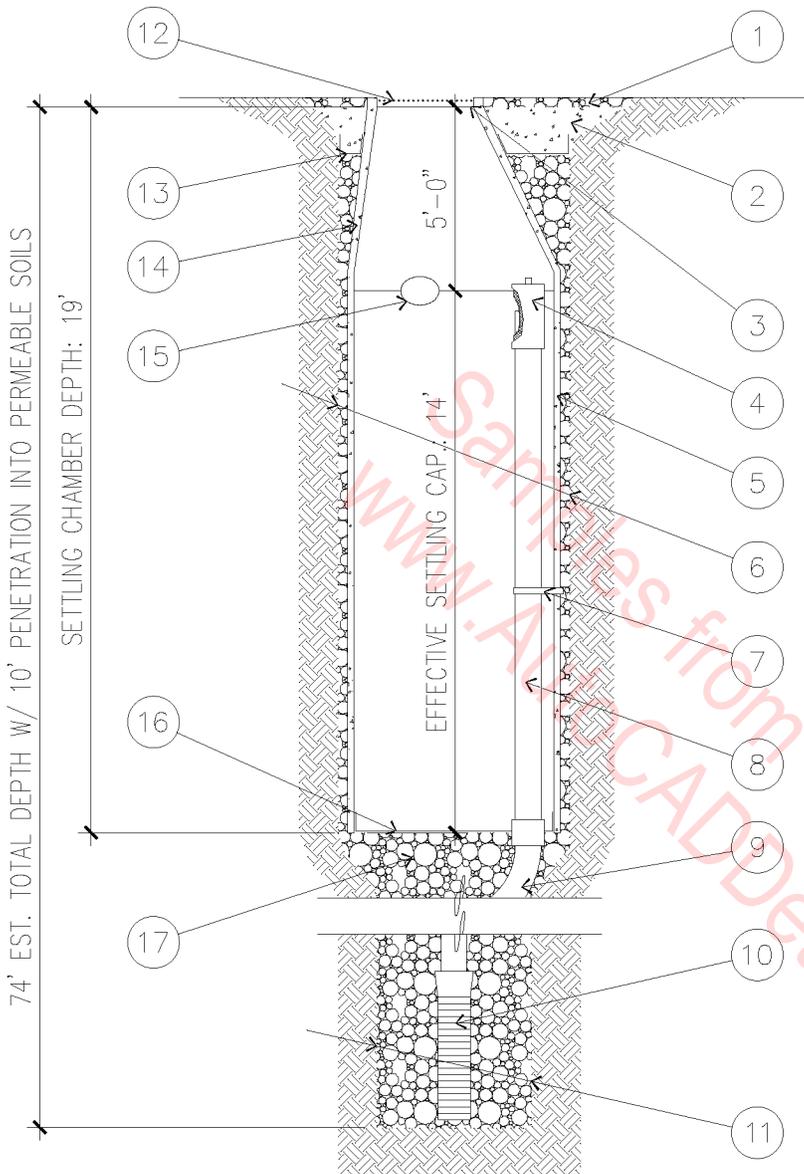
02D-1009



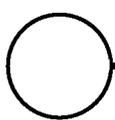
MANHOLE DETAIL

N.T.S.

02D-1010



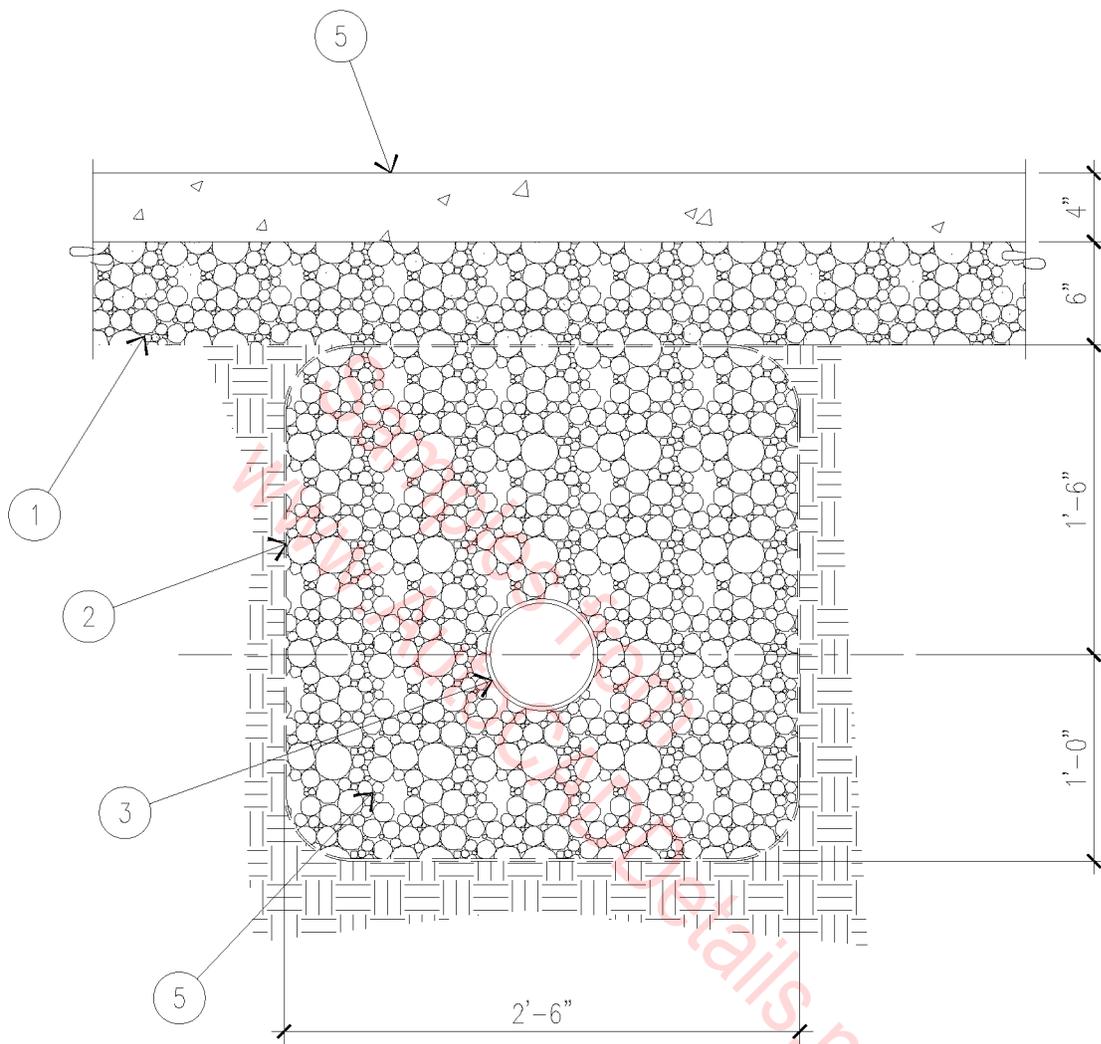
1. 1" TO 3" ROCK.
2. COMPACTED BASE MATERIAL.
3. FABRIC SEAL.
4. DEBRIS SHIELD.
5. PRECAST LINER.
6. MIN. 6' Ø DRILLED SHAFT.
7. SUPPORT BRACKET.
8. OVERFLOW PIPE.
9. 8" DIAMETER DRAIN PIPE.
10. DRAINAGE SCREEN.
11. MIN 4' Ø DRILLED SHAFT.
12. C.I. RING AND 30" GRATE
£ 2130-BOLT DOWN.
13. MOISTURE MEMBRANE MIN.
18" BELOW RIM.
14. MODIFIED MANHOLE CONE.
15. ABSORBENT.
16. DRAINAGE FABRIC.
17. 3/8" TO 1-1/2" WASHED ROCK.



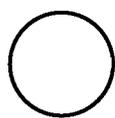
DRYWELL

3/16" = 1'-0"

02D-1011



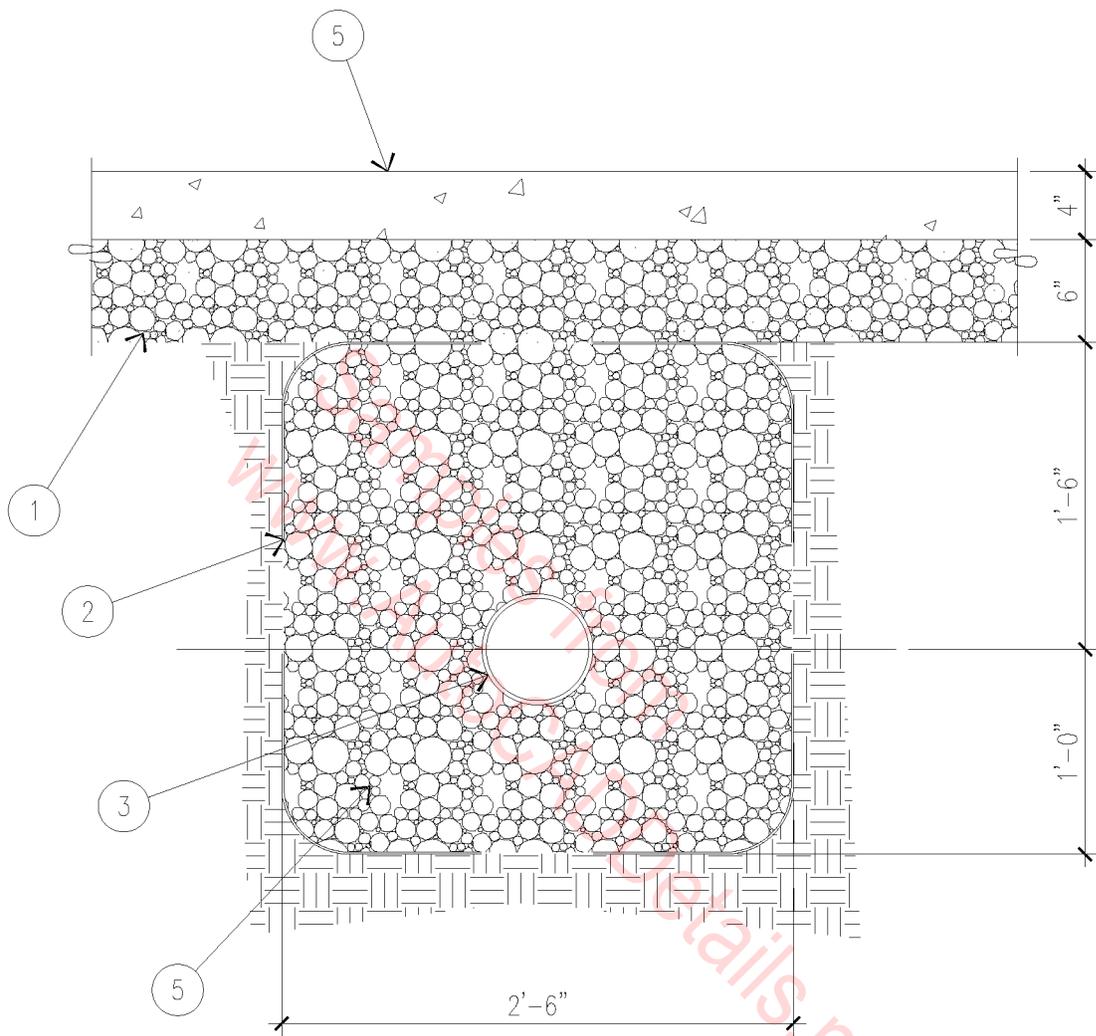
1. CLEAN SAND AND GRAVEL.
2. FILTER FABRIC.
3. 6" Ø PERFORATED DRAIN PIPE.
4. 3/4" WASHED GRAVEL.
5. CONCRETE FLOOR.



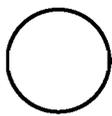
UNDERSLAB DRAIN

1" = 1'-0"

02D-1012



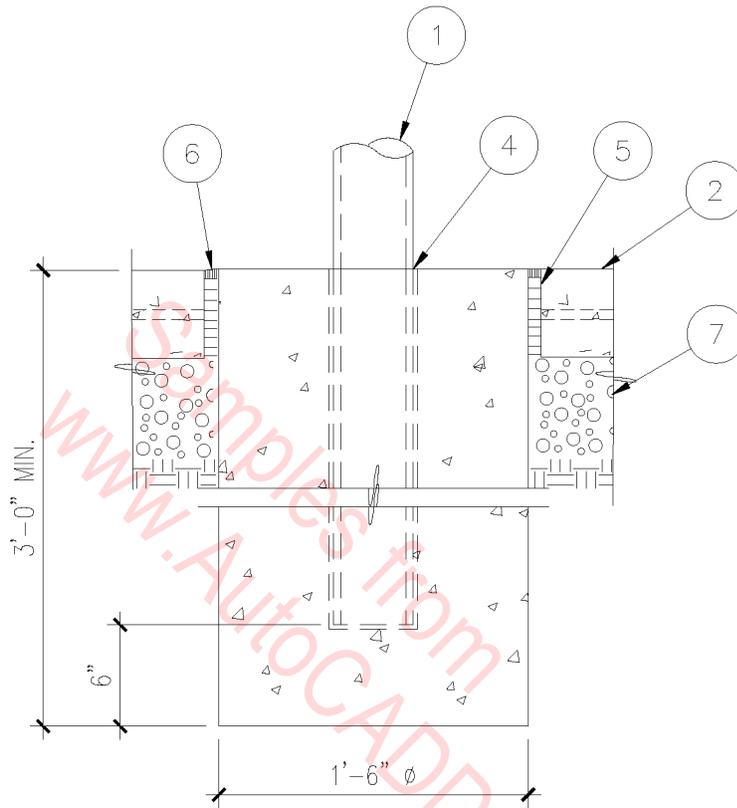
1. CLEAN SAND AND GRAVEL.
2. FILTER FABRIC.
3. 6" ϕ PERFORATED DRAIN PIPE.
4. 3/4" WASHED GRAVEL.
5. CONCRETE FLOOR.



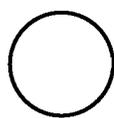
UNDERSLAB DRAIN

1" = 1'-0"

02D-1012



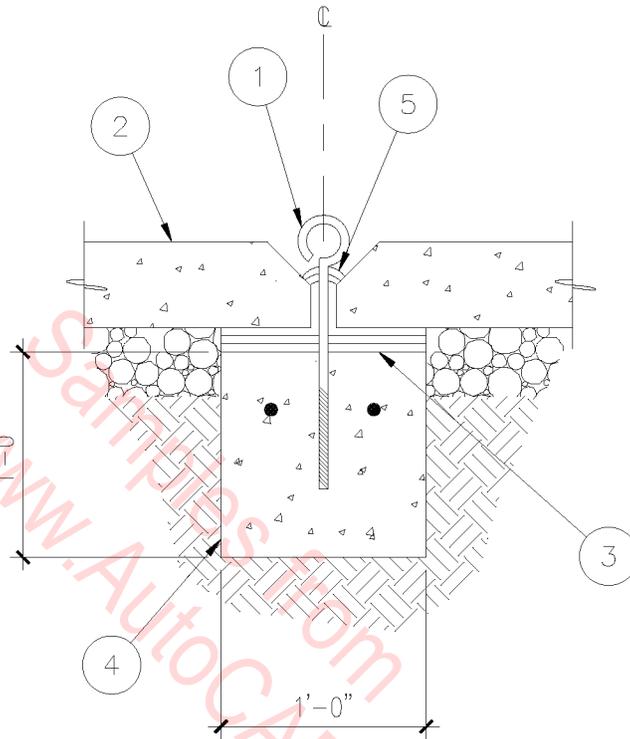
1. TENNIS NET POST & STEEL SLEEVE.
2. REINFORCED CONCRETE SLAB ON SUBGRADE.
3. CONCRETE FOOTING.
4. TACK WELD POST IN SLEEVE.
5. 1/2" WIDE CONTINUOUS EXPANSION JOINT.
6. CAULK LEVEL WITH TOP OF SLAB AT EXPANSION JOINT.
7. A.B.C.



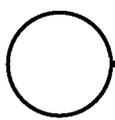
TENNIS NET FOOTING

1" = 1'-0"

02D-2001



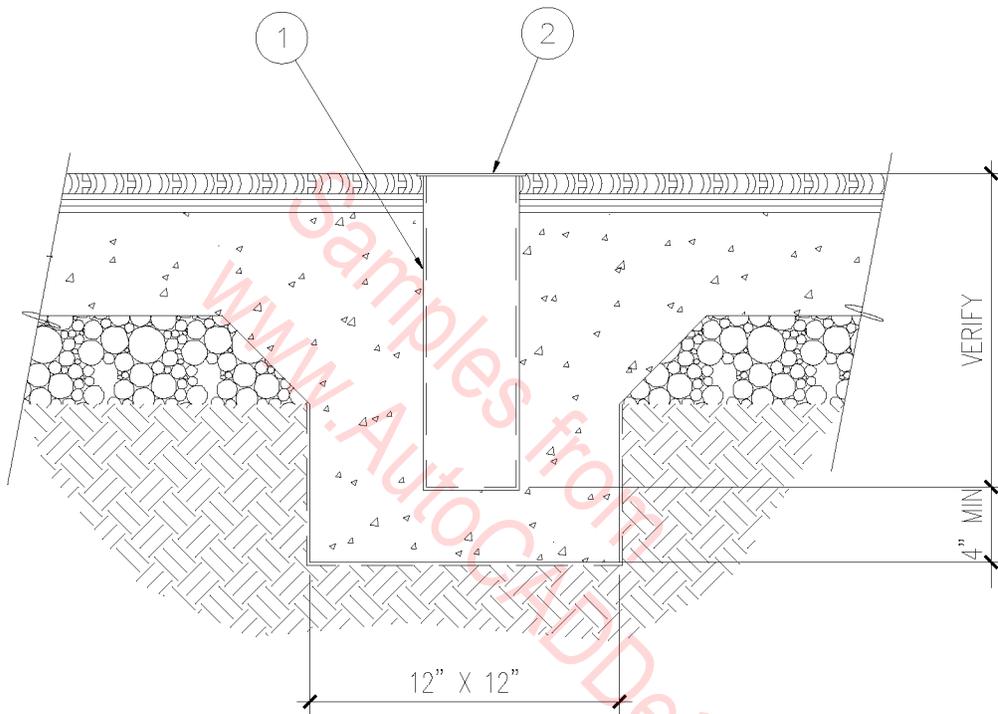
1. TENNIS NET CENTER COURT HOLD – DOWN EYE HOOK (3/4" EYE).
2. REINFORCED CONCRETE SLAB ON A.B.C.
3. (3) LAYERS 30# FELT AS CONTINUOUS BOND BREAKER BETWEEN COURT SLABS & CONTINUOUS FOOTING.
4. 12" X 12" X CONTINUOUS FOOTING CENTERLINE OF EACH TENNIS COURT.
5. CAULK AROUND EYE HOOK.



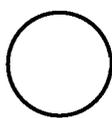
TENNIS NET TIEDOWN

1" = 1'-0"

02D-2002



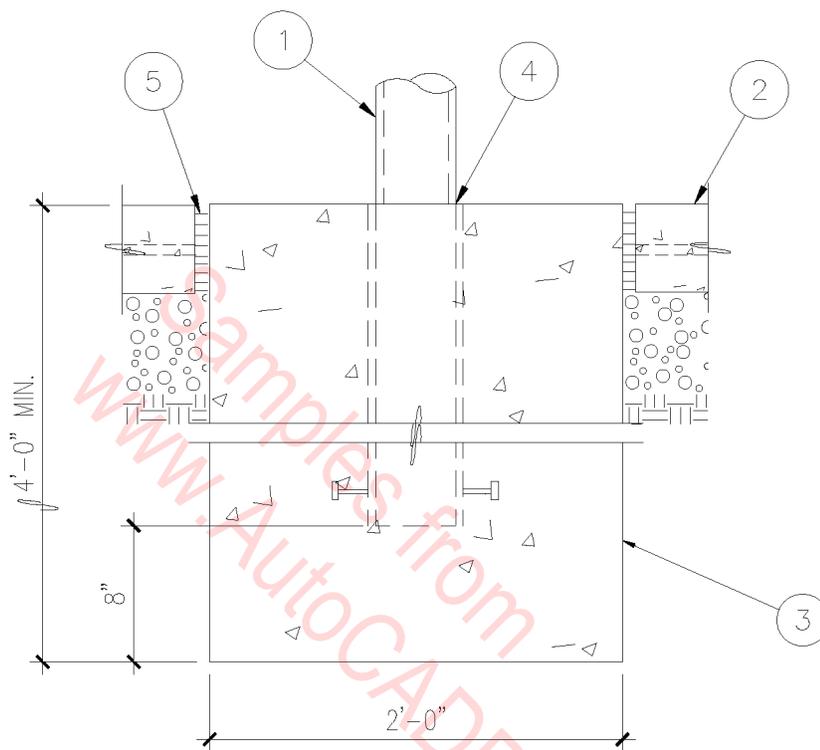
- 1. VOLLEYBALL STANDARD SLEEVE.
- 2. TRIM RING, LET INTO FLOORING.



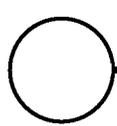
VOLLEYBALL ANCHOR

1 1/2" = 1'-0"

02D-2003



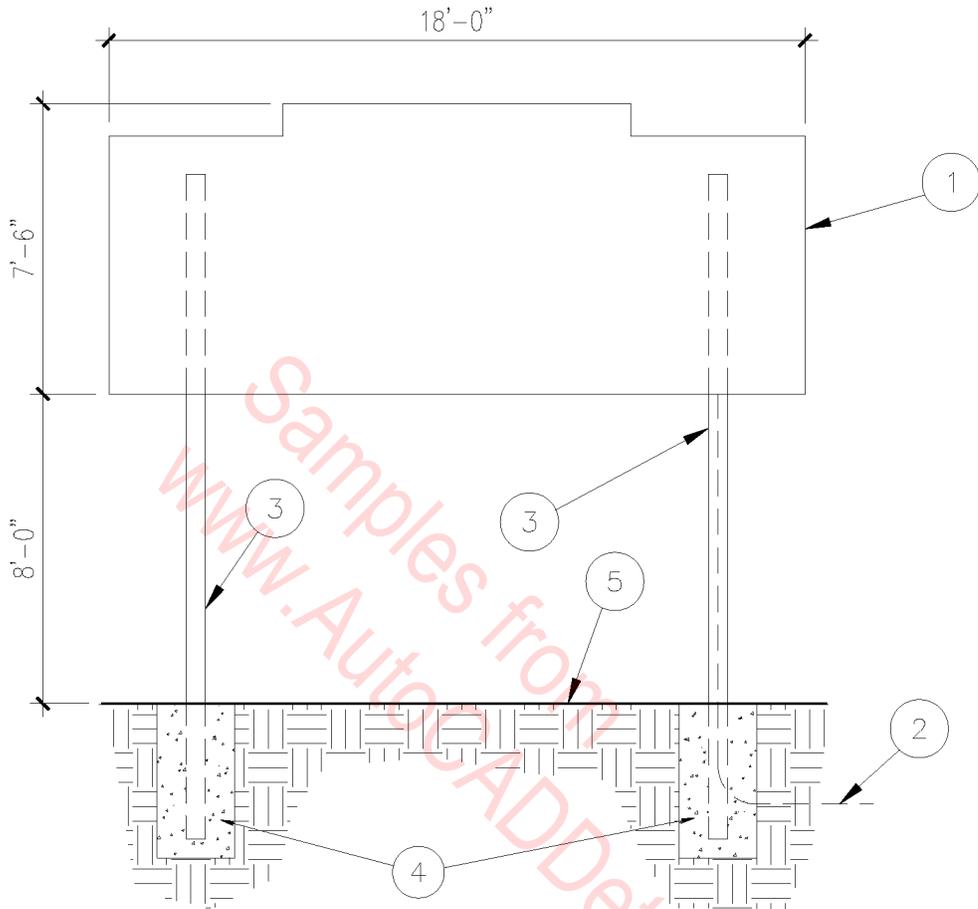
1. BASKETBALL GOAL SUPPORT POST & SLEEVE. CAP SLEEVE BOTTOM & PROVIDE (2) 3" LONG NELSON STUDS.
2. REINFORCED CONCRETE SLAB ON SUBGRADE.
3. CONCRETE FOOTING.
4. TACK WELD POST IN SLEEVE.
5. 1/2" CONTINUOUS EXPANSION JOINT.



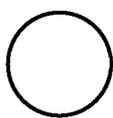
BACKSTOP FOOTING

SCALE: 1" = 1'-0"

02D-2004



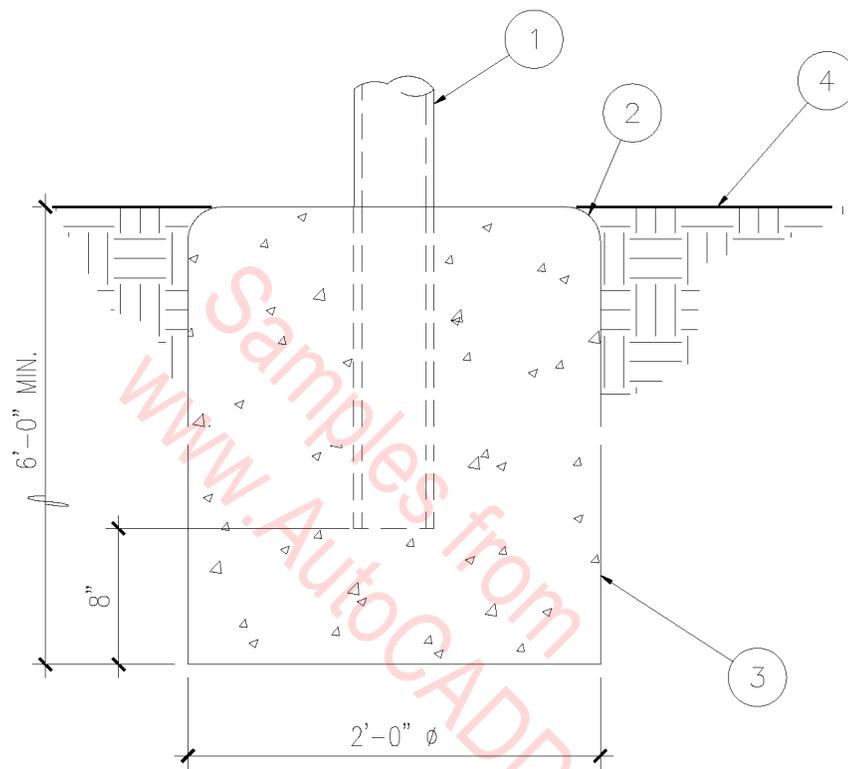
1. ELECTRONIC FOOTBALL SCOREBOARD.
2. ELECTRIC CONDUIT TO SCOREBOARD TO BE CAST IN FOOTING ALONG SIDE SUPPORT COLUMN.
3. STEEL BEAM SCOREBOARD SUPPORT COLUMN BY MANUFACTURER. SIZE AND WEIGHT BY THE SCOREBOARD MANUFACTURER.
4. CONCRETE FOOTINGS.
5. FINISH GRADE.



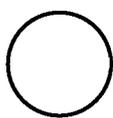
FOOTBALL SCOREBOARD

SCALE: 3/16" = 1'-0"

02D-2005



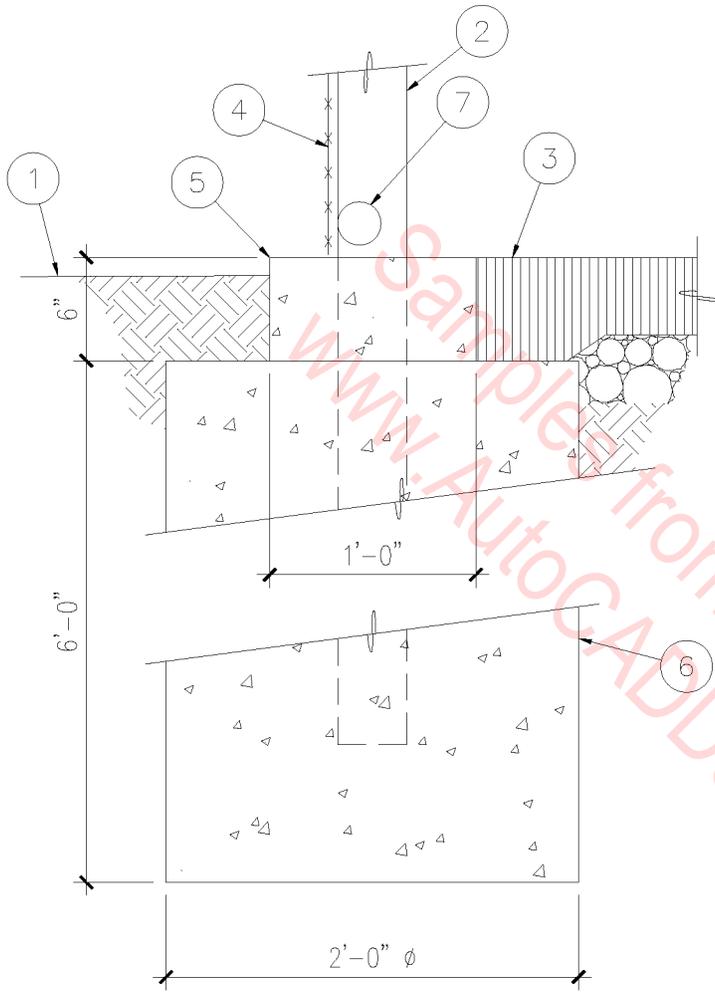
1. STEEL COLUMN – SIZE & TYPE AS PER SCORE BOARD MANUFACTURER.
2. TOOLED EDGE.
3. CONCRETE FOOTING REINFORCING REQUIREMENTS.
4. FINISH GRADE.



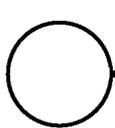
SCOREBOARD FOOTING

SCALE: 1" = 1'-0"

02D-2006



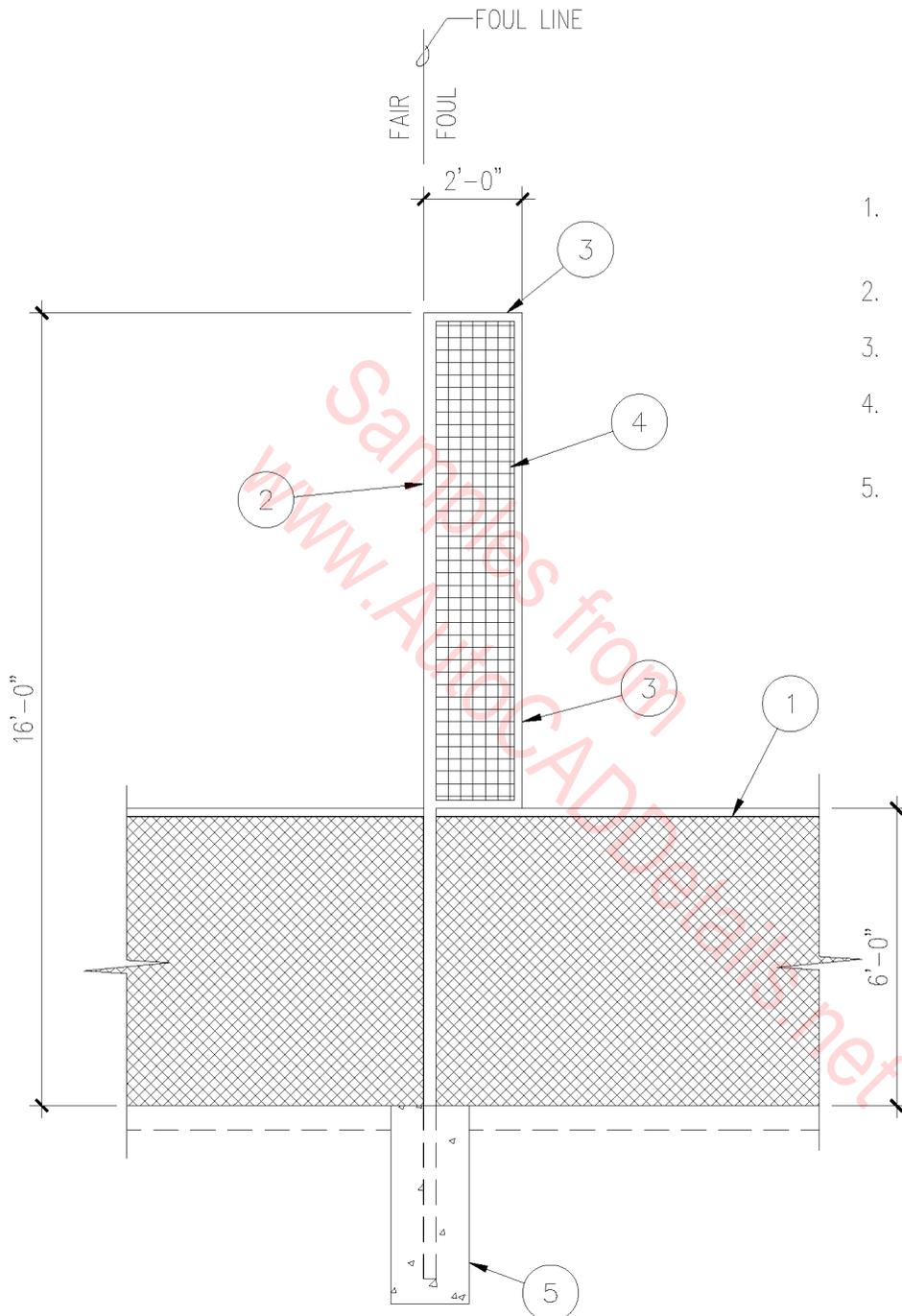
1. FINISH GRADE.
2. BACKSTOP POST.
3. ASPHALTIC CONCRETE ON PREPARED FILL.
4. WOVEN WIRE FABRIC TO TOP OF MOW STRIP.
5. CONTINUOUS CONCRETE MOW STRIP.
6. CONCRETE FOOTING BEYOND.
7. BOTTOM RAIL.



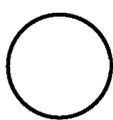
TURNDOWN @ BACKSTOP

1" = 1'-0"

02D-2007



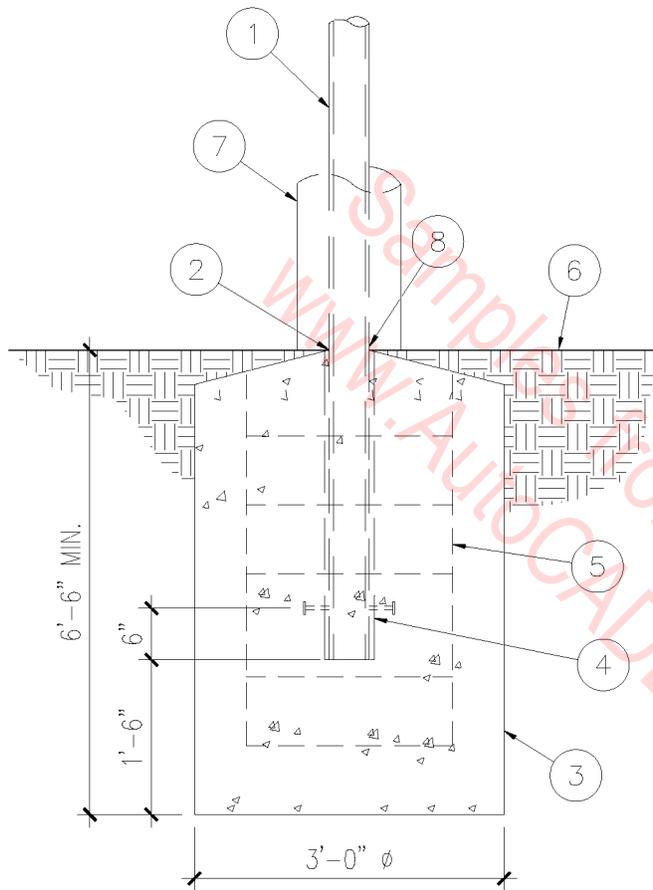
1. 6'-0" HIGH CHAINLINK FENCE WITH CONCRETE MOW STRIP.
2. 3" X 3" X 1/4" TUBE STEEL POST.
3. 2" X 2" X 1/8" TUBE STEEL FRAME.
4. 1" X 1" 10 X 10 W.W.F. WELDED TO FRAME ALL AROUND.
5. CONCRETE FOOTING.



BASEBALL FOUL POLE

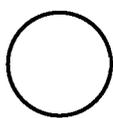
SCALE: 1/4" = 1'-0"

02D-2008



1. GALVANIZED HEAVY WALL STEEL TUBE GOAL POST.
2. TACK WELD POST IN SLEEVE.
3. CONCRETE FOOTING.
4. 8" INSIDE ϕ GALVANIZED HEAVY WALL STEEL TUBE SLEEVE W/ BOTTOM CAP & (2) 3" LONG NELSON STUDS.
5. (8) #8 REBARS & #3 TIES @ 16" O.C.
6. FINISH GRADE.
7. POLE PADDING.
8. PROVIDE SLEEVE PLUG AT REMOVABLE GOAL POSTS.

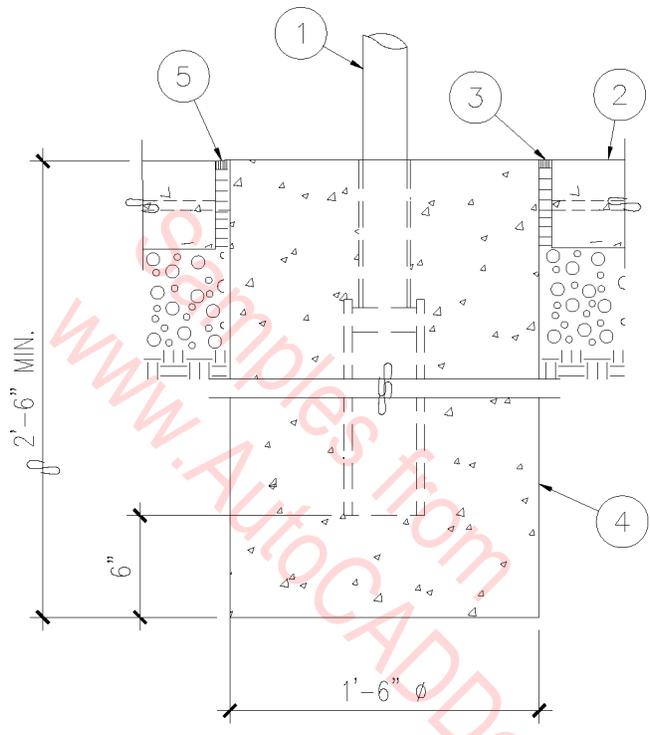
* DO NOT TACK WELD AT REMOVABLE GOAL POSTS



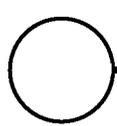
GOAL POST FOOTING

SCALE: 1/2" = 1'-0"

02D-2009



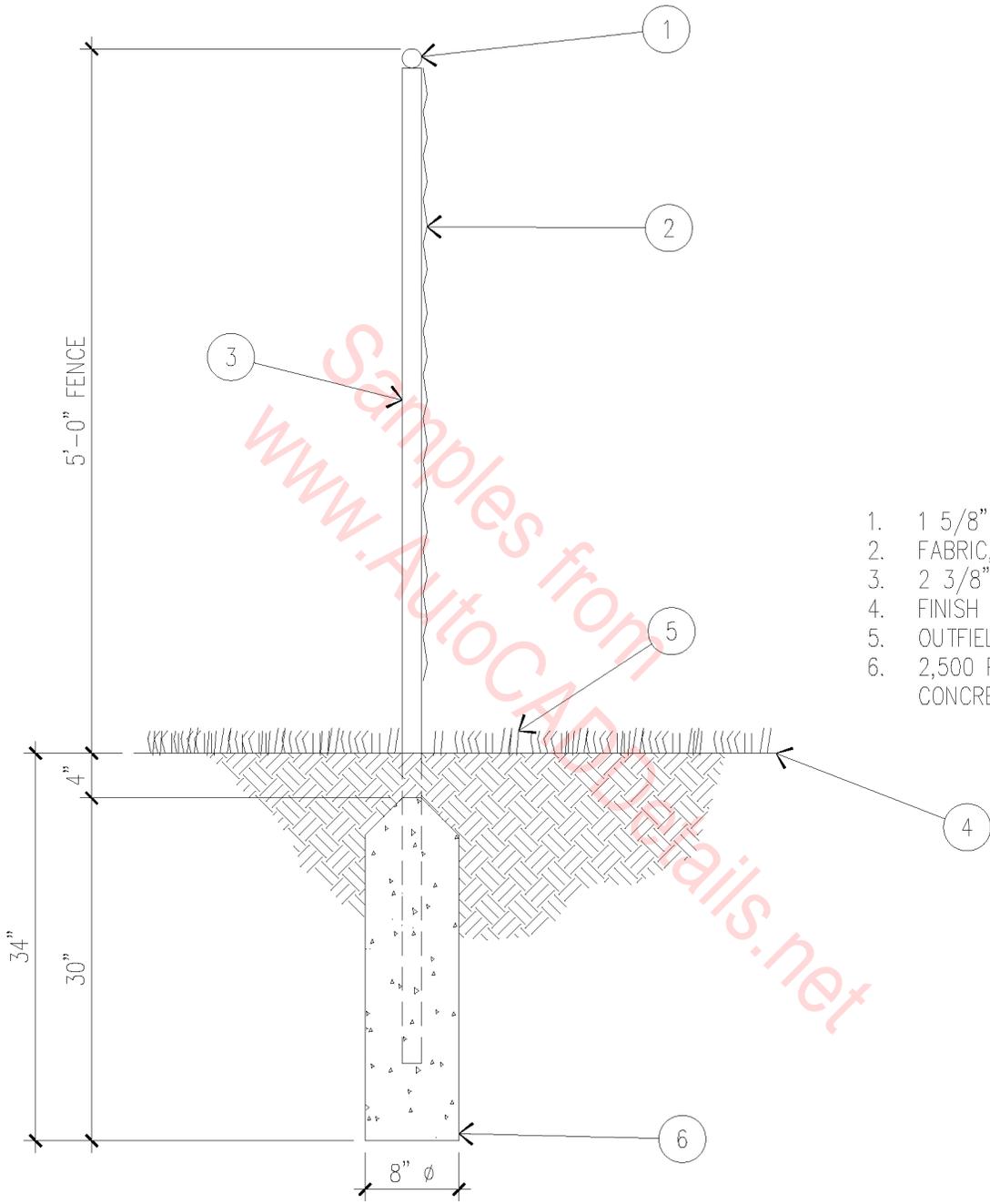
1. REMOVABLE BADMINTON NET POST.
2. 6" REINFORCED BASKETBALL COURT SLAB.
3. 1/2" WIDE CONTINUOUS EXPANSION JOINT.
4. CONCRETE FOOTING.
5. CAULK LEVEL WITH TOP OF SLAB AT EXPANSION JOINT.



BADMINTON POST FOOTING

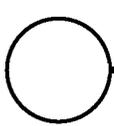
SCALE: 1" = 1'-0"

02D-2010



1. 1 5/8" Ø TOP RAIL.
2. FABRIC, #9 GAUGE 2" WIRE.
3. 2 3/8" Ø LINE POSTS.
4. FINISH GRADE.
5. OUTFIELD GRASS.
6. 2,500 PSI CLASS 'B' CONCRETE FOOTING.

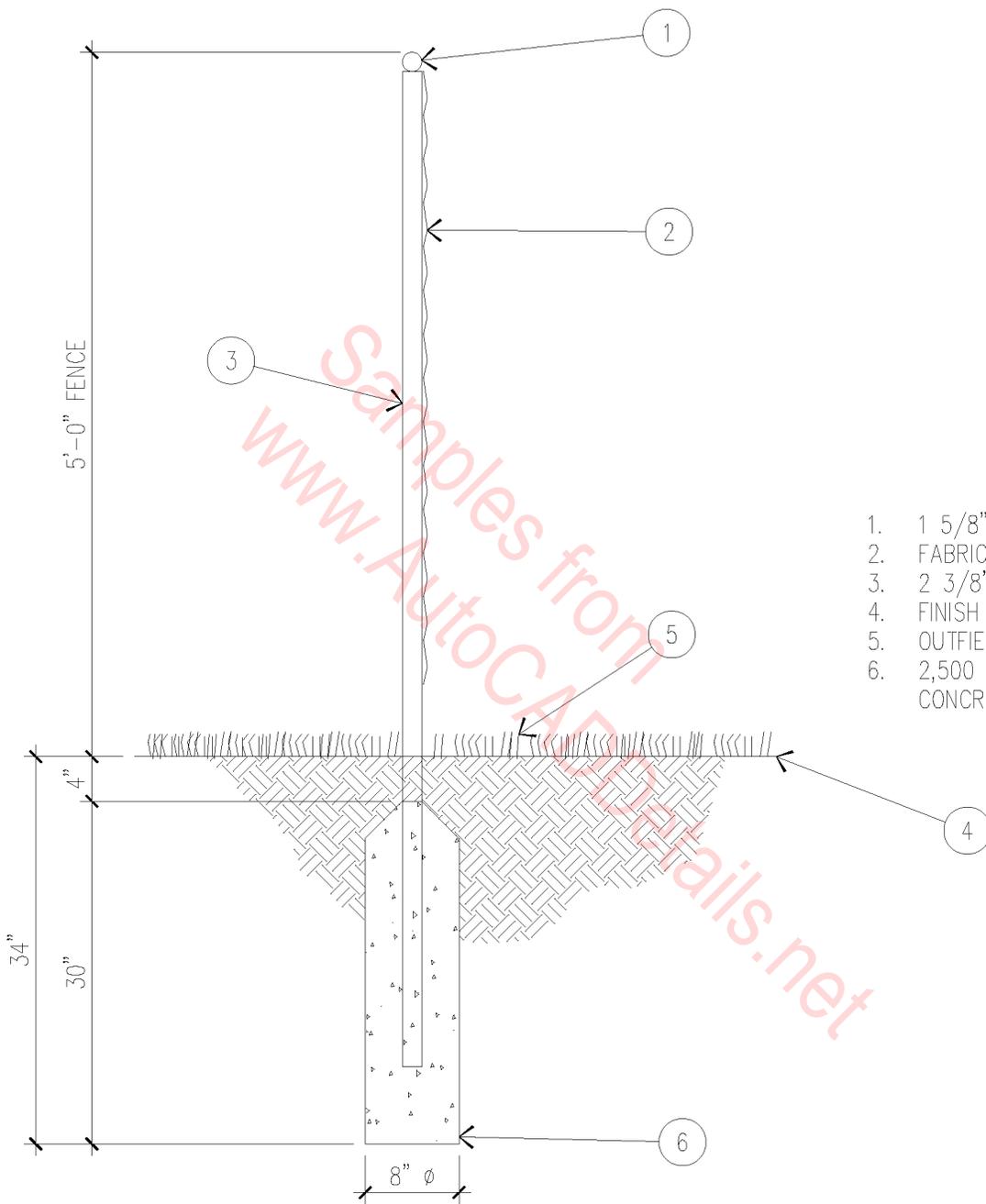
Samples from
www.AutoCADDetails.net



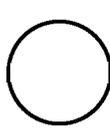
OUTFIELD FENCE

3/4" = 1'-0"

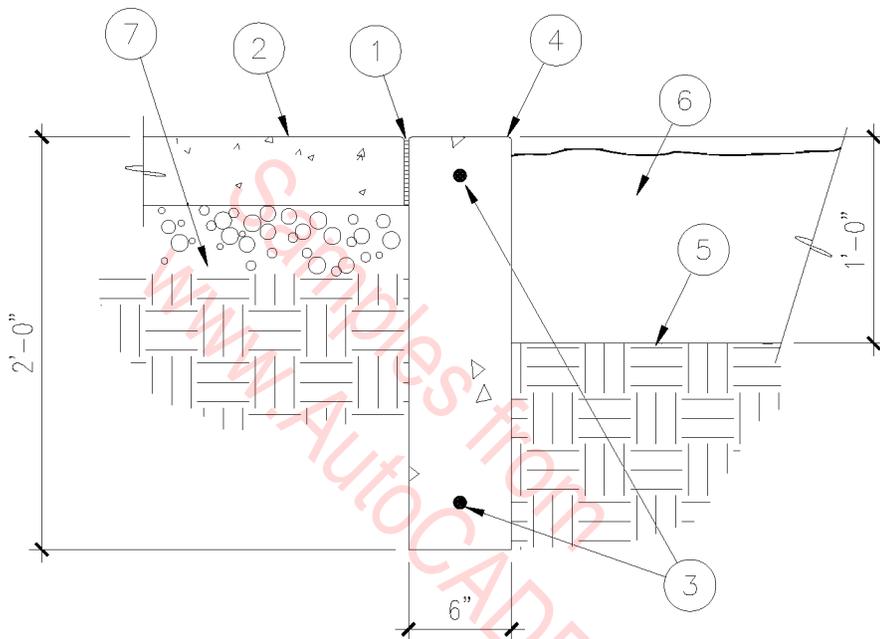
02D-2011



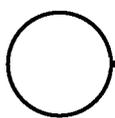
1. 1 5/8" ϕ TOP RAIL.
2. FABRIC, #9 GAUGE 2" WIRE.
3. 2 3/8" ϕ LINE POSTS.
4. FINISH GRADE.
5. OUTFIELD GRASS.
6. 2,500 PSI CLASS 'B' CONCRETE FOOTING.


 OUTFIELD FENCE
 3/4" = 1'-0"

02D-2011



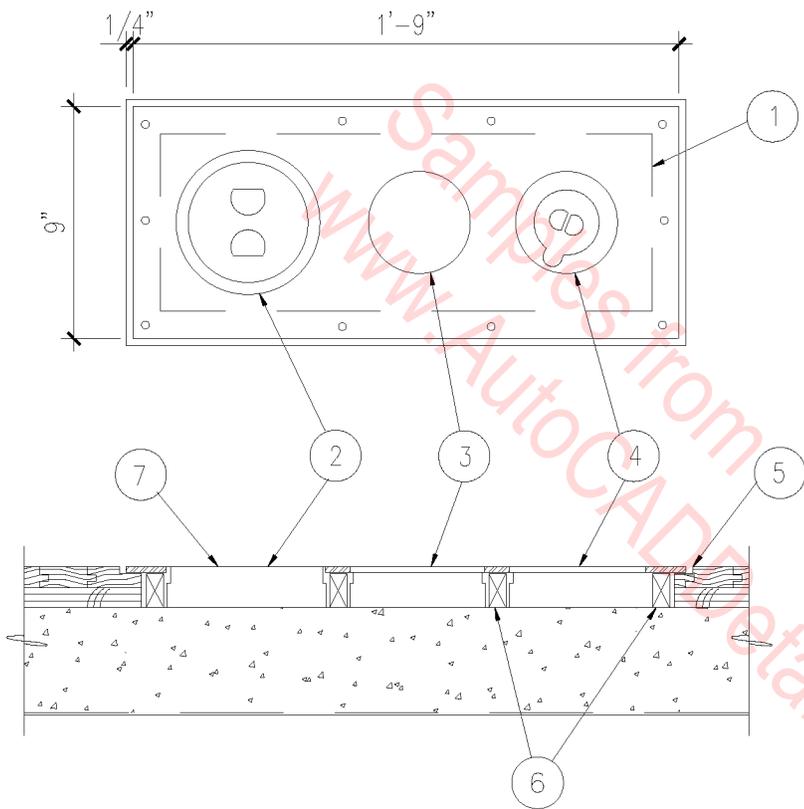
1. TOOLED EDGE.
2. CONCRETE SLAB ON A.B.C.
3. CONCRETE CURB REINFORCEMENT WITH (2) #4 REBARS CONTINUOUS.
4. RADIUS EDGE.
5. FINISH GRADE.
6. SAND.
7. SUB GRADE.



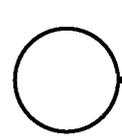
SIDEWALK CURB @ SAND

1" = 1'-0"

02D-3002



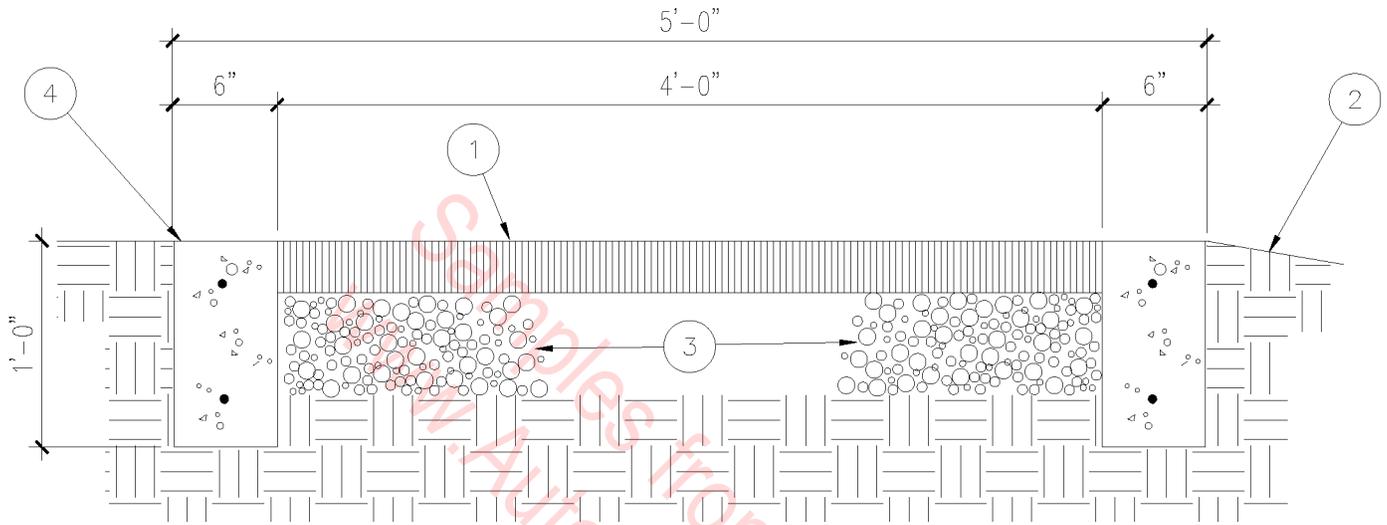
1. 1/4" THICK BRASS PLATE- MILL AFTER FIELD VERIFYING OUTLET LOCATIONS. ATTACH W/ BRASS FLAT HEAD COUNTER-SUNK FASTENERS.
2. POWER OUTLET COVER PLATE.
3. SCOREBOARD CONTROL OUTLET COVER PLATE.
4. MICROPHONE OUTLET COVER PLATE.
5. ROUT WOOD TO FIT PLATE FLUSH.
6. SHIM W/ K.D. LUMBER CUT TO FIT.
7. J-BOX TYP.-VERIFY DEPTH & IF SLAB DEPRESSION IS REQUIRED.



GYM FLOOR OUTLET

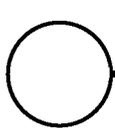
1 1/2" = 1'-0"

02D-3003



1. 3" ASPHALTIC CONCRETE SURFACE COURSE.
2. FINISH GRADE.
3. 6" AGGREGATE BASE COURSE.
4. 6" X 12" CONCRETE CURB WITH (2) #4 REBARS CONTINUOUS.

NOTE: EXPANSION JOINTS AT 20'-0" O.C.

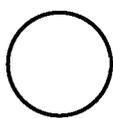
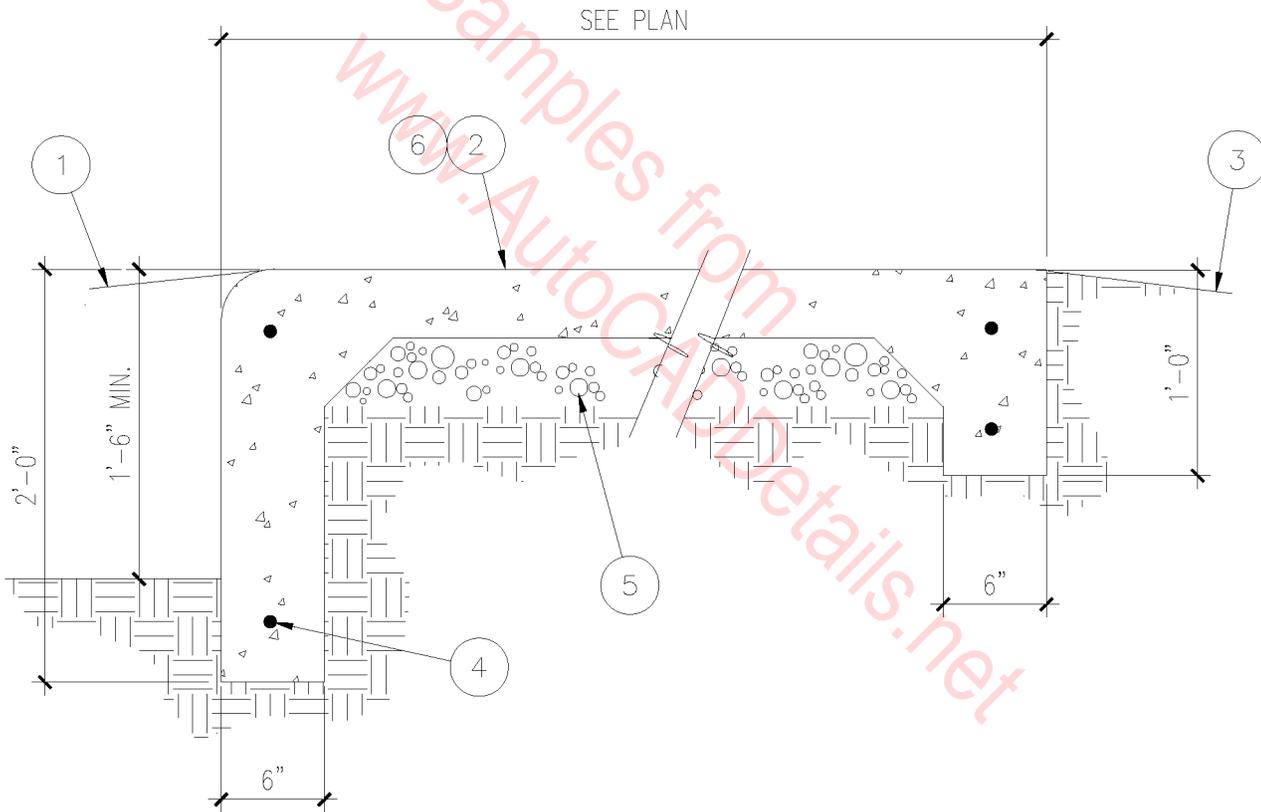


LONG JUMP APPROACH

SCALE: 1" = 1'-0"

02D-3004

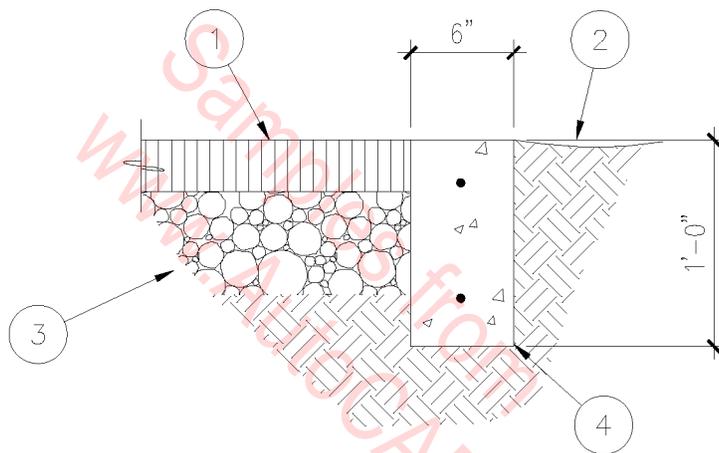
1. 1'-6" MIN. DEEP SAND IN LONG JUMP PIT. FLUSH TOP OF SAND WITH TOP OF CONCRETE.
2. CONCRETE APRON SLAB ALL AROUND SAND PIT.
3. FINISH GRADE.
4. #4 REBARS CONTINUOUS ALL AROUND.
5. 4" PREPARED FILL.
6. PAINT EXPOSED CONCRETE SURFACE WITH WHITE PAINT, 6" WIDE AT OUTSIDE AND INSIDE EDGE.



TURNDOWN @ LONG JUMP

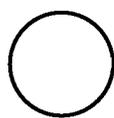
SCALE: 1" = 1'-0"

02D-3005



1. 3" ASPHALTIC CONCRETE SURFACE COURSE.
2. FINISHED GRADE.
3. 6" AGGREGATE BASE COURSE.
4. 6" X 12" CONCRETE CURB WITH (2) #4 REBARS CONTINUOUS.

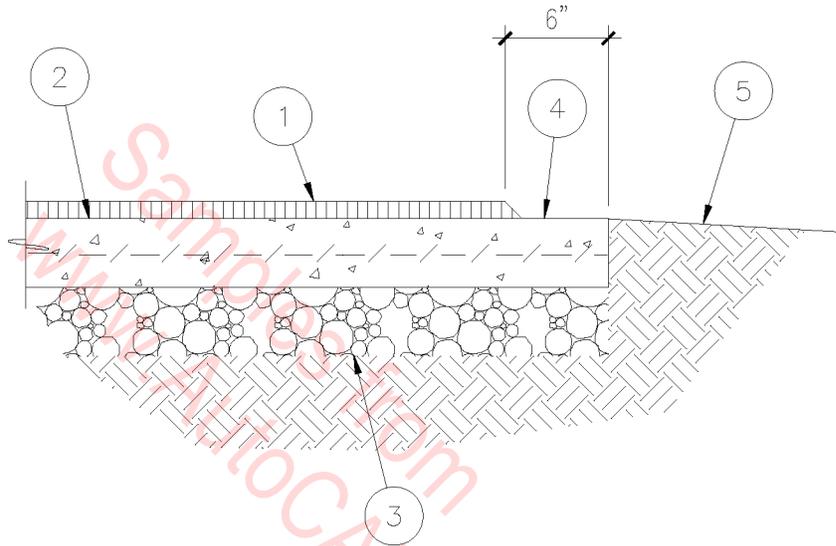
NOTE: EXPANSION JOINTS AT 20'-0" O.C.



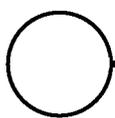
ASPHALT HIGH JUMP

1" = 1'-0"

02D-3006



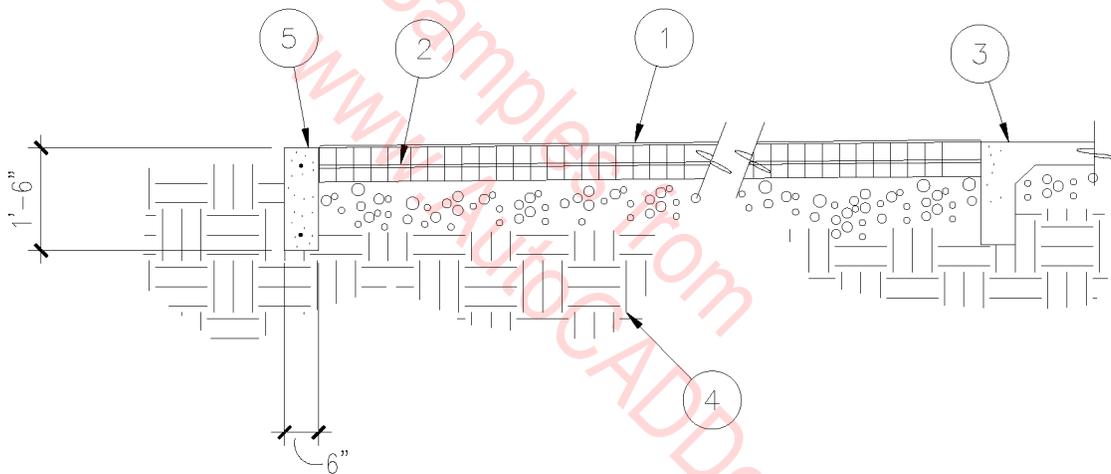
1. ALL WEATHER SYNTHETIC TRACK, SURFACE ALL AROUND PIT APRON AND RUNWAYS.
2. CONCRETE SLAB WITH 4X4 - 10/10 W.W.F. REINFORCING.
3. A.B.C. FILL.
4. PAINT EXPOSED CONCRETE SURFACE WITH WHITE PAINT.
5. FINISH GRADE.



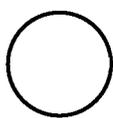
CONCRETE HIGH JUMP

1" = 1'-0"

02D-3007



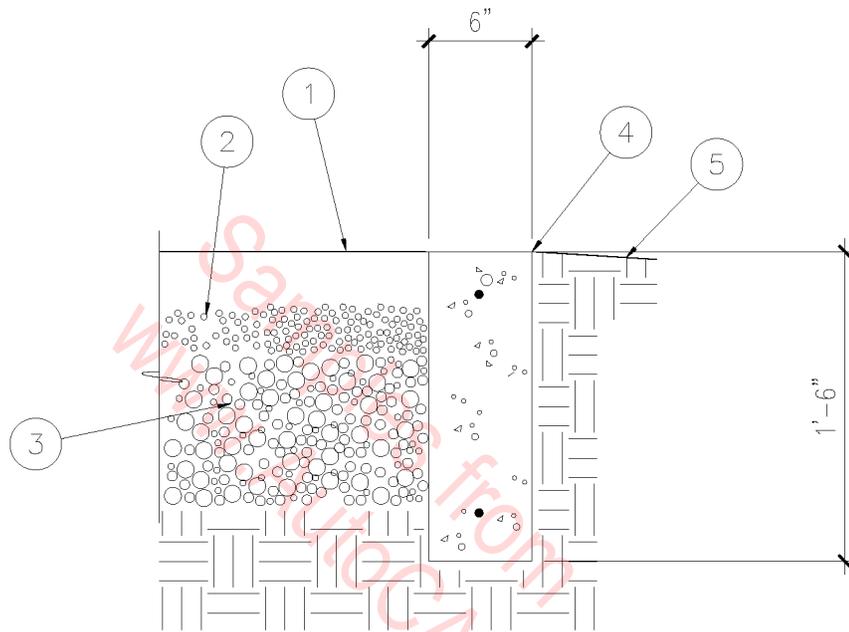
1. ALL - WEATHER SYNTHETIC TRACK SURFACE.
2. 2 LAYERS ASPHALT CONCRETE PAVING.
3. CONCRETE TURNDOWN.
4. SUBGRADE.
5. 6" CONCRETE CURB WITH (2) #4 REBARS CONTINUOUS.



ASPHALT TRACK SECTION

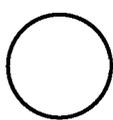
SCALE: 1" = 1'-0"

02D-3008



1. 3" DECOMPOSED GRANITE SURFACE COURSE.
2. 3" KEY COURSE.
3. 9" AGGREGATE BASE COURSE.
4. 6" X 1'-6" CONCRETE CURB WITH
5. (2) #4 REBARS CONTINUOUS.
FINISH GRADE.

NOTE: EXPANSION JOINTS AT 20'-0" O.C.

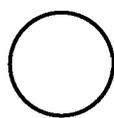
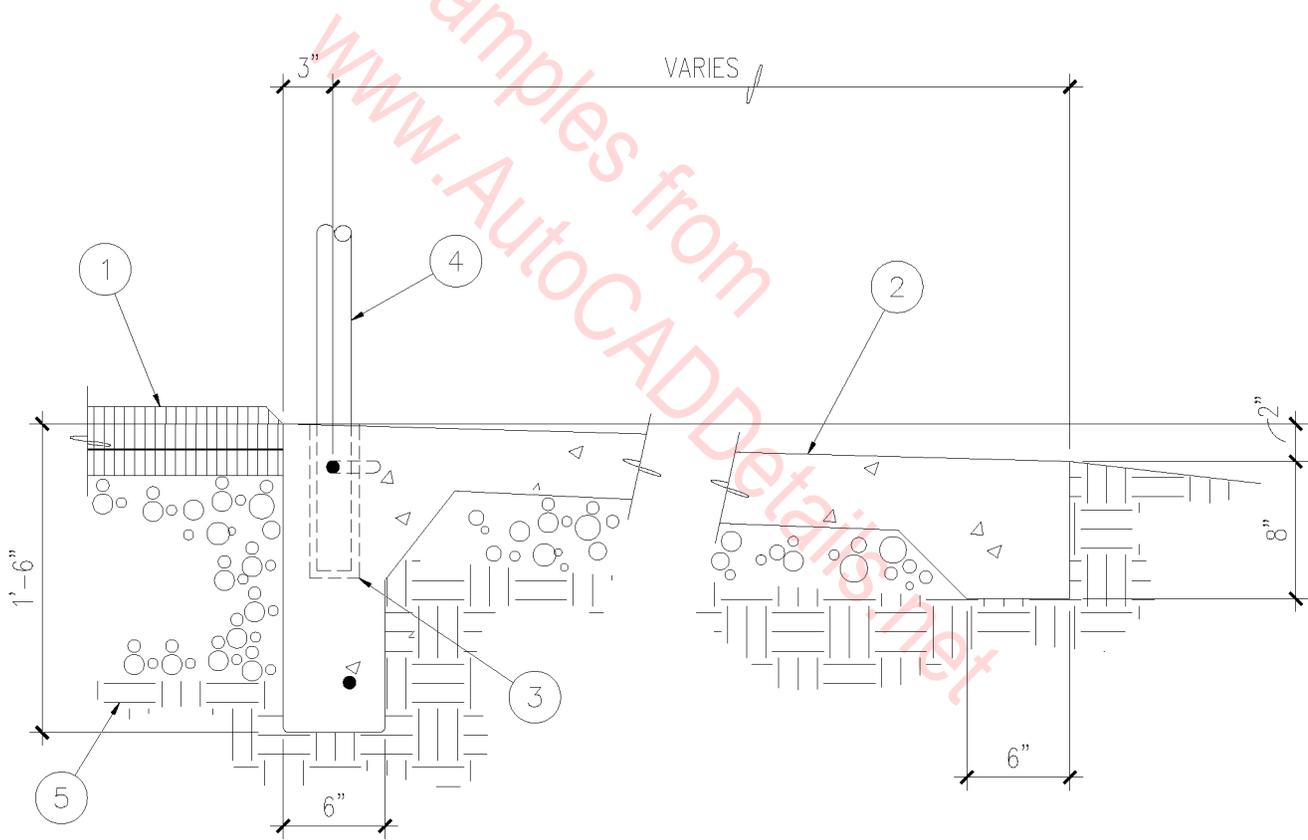


TRACK CURB

SCALE: 1" = 1'-0"

02D-3009

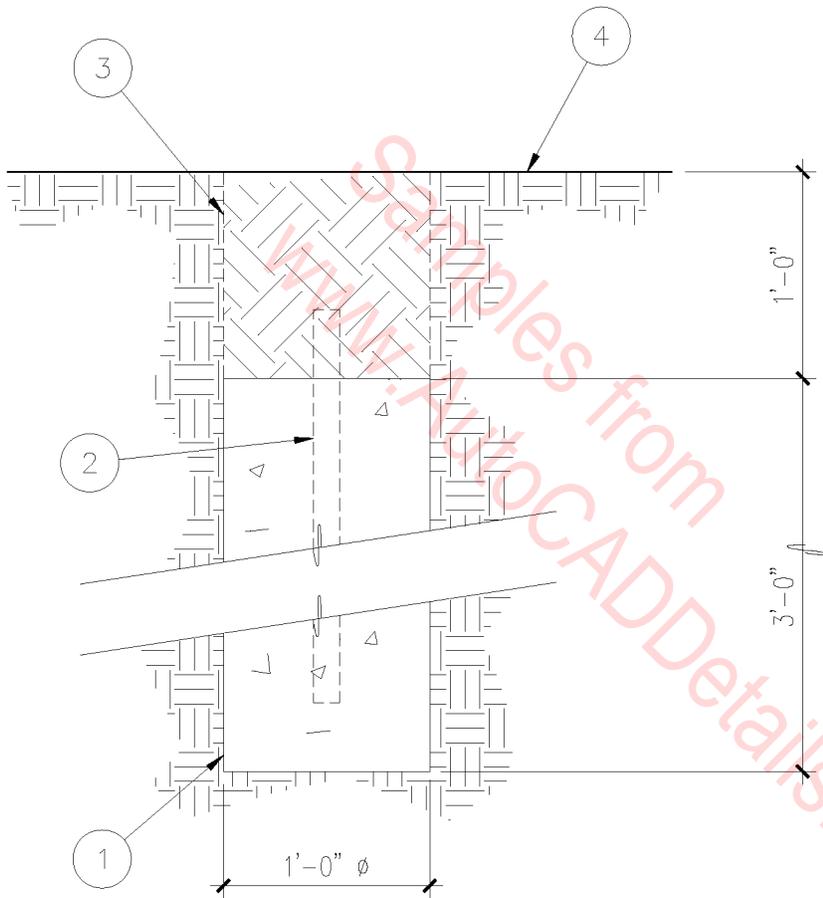
1. ALL - WEATHER SYNTHETIC TRACK SURFACE OVER 2 LAYERS ASPHALT CONCRETE PAVING.
2. CONCRETE SIDEWALK WITH 6" X 1'-6" TURNDOWN AT TRACK SIDE AND 6" X 8" THICKENED EDGE AT LAWN SIDE OVER SUBGRADE.
3. PIPE SLEEVE FOR FENCE POSTS. OFFSET CONTINUOUS REBAR AROUND EACH SLEEVE.
4. FENCE POST AT 10'-0" MAX. SPACING.
5. SUBGRADE.



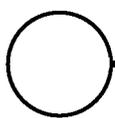
SIDEWALK @ TRACK

SCALE: 1" = 1'-0"

02D-3010



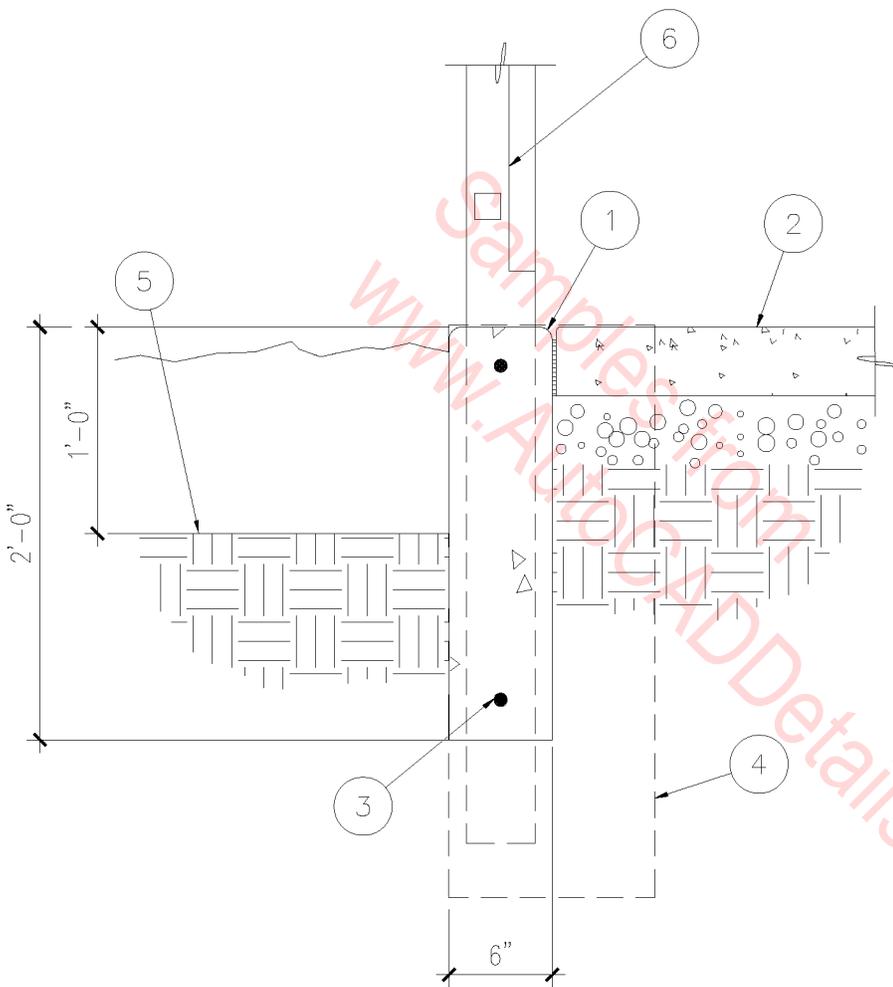
1. 12" DIA. CONCRETE FOOTING.
2. 1 1/2" DIA. GALVANIZED STEEL RIGID CONDUIT.
3. EARTH AND TURF FILL OVER CONDUIT AFTER ALL LAYOUT WORK IS COMPLETED.
4. FINISH GRADE.



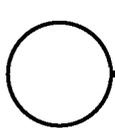
TRACK REFERENCE POINT

SCALE: 1" = 1'-0"

02D-3011



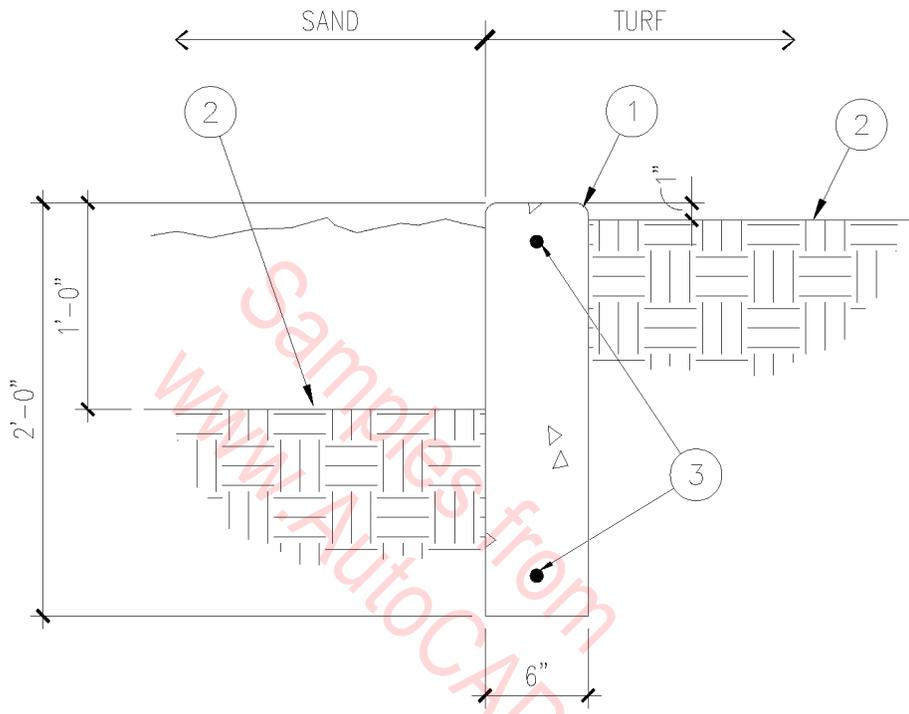
1. 3/4" TOOLED EDGE.
2. CONCRETE SLAB ON A.B.C.
3. CONCRETE CURB REINFORCEMENT WITH (2) #4 REBARS CONTINUOUS.
4. LINE OF 12" DIA. CONCRETE FOOTING @ FENCE POST WHERE OCCURS.
5. FINISH GRADE.
6. ORNAMENTAL IRON FENCE.



FENCE CURB @ SAND

1" = 1'-0"

02D-3012



1. 3/4" TOOLED EDGE.
2. FINISH GRADE.
3. CONCRETE CURB REINFORCEMENT WITH (2) #4 REBARS CONTINUOUS.
4. SAND.
5. TURF.

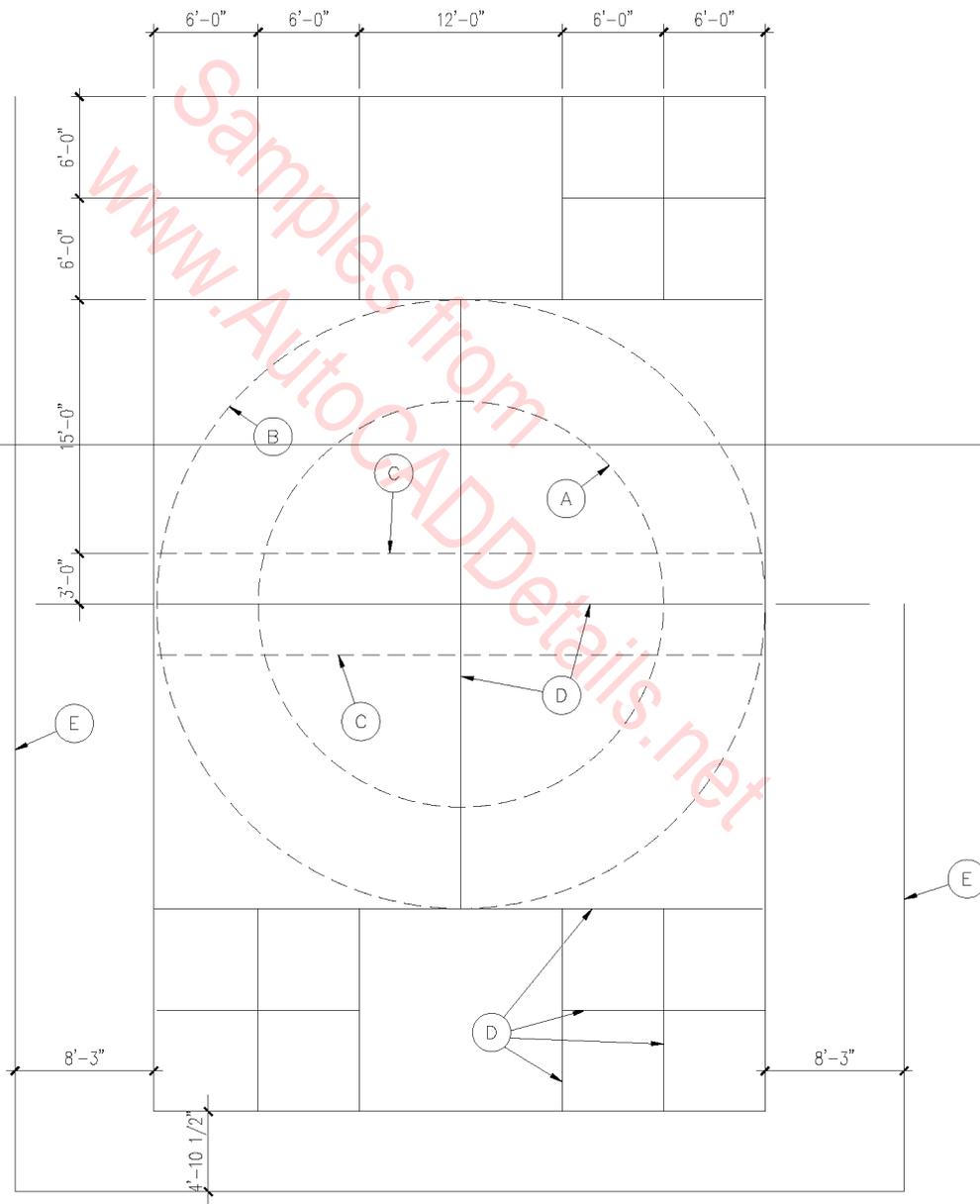
○ CURB @ SAND PIT
 1" = 1'-0"

02D-3013

PHYSICAL EDUCATION COURT

LAYOUT NOTES

- A. 2" BLUE LINE - 24' DIA.
- B. 2" RED LINE - 36' DIA.
- C. 2" YELLOW LINE.
- D. 2" BLACK LINE.
- E. FACE OF WALL.

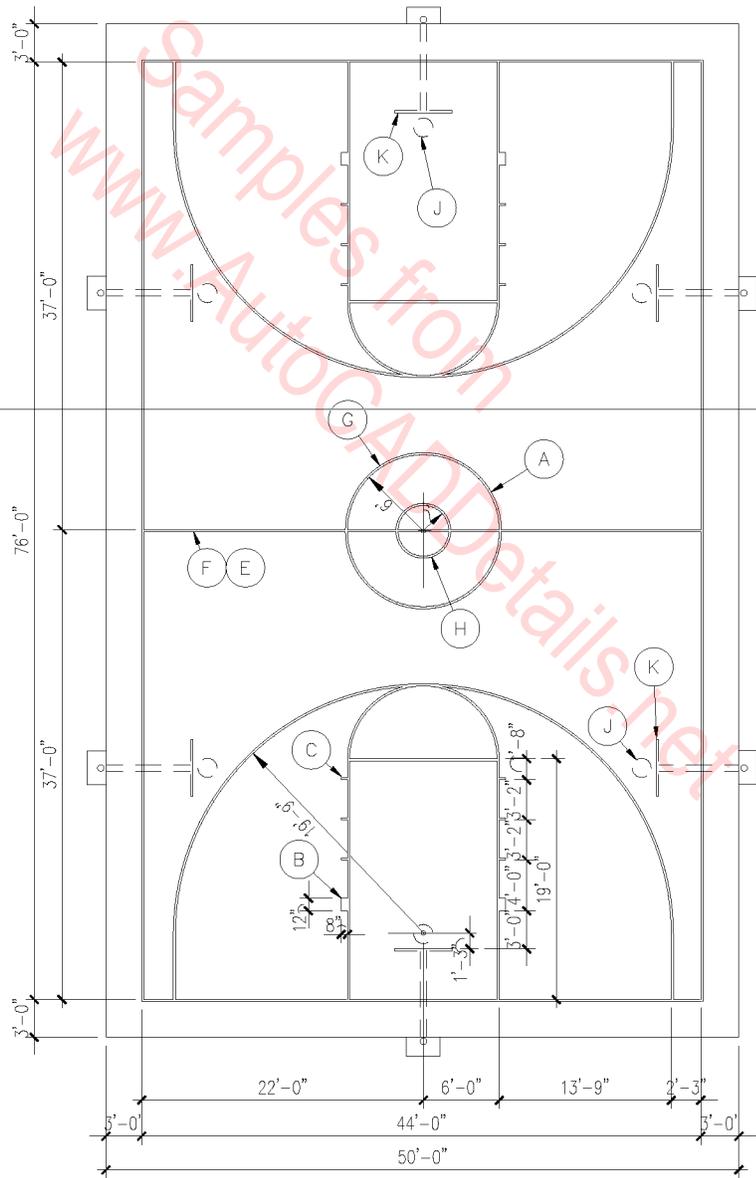


BADMINTON
VOLLEYBALL COURT

SCALE: 1/8" = 1'-0"

02D-3014

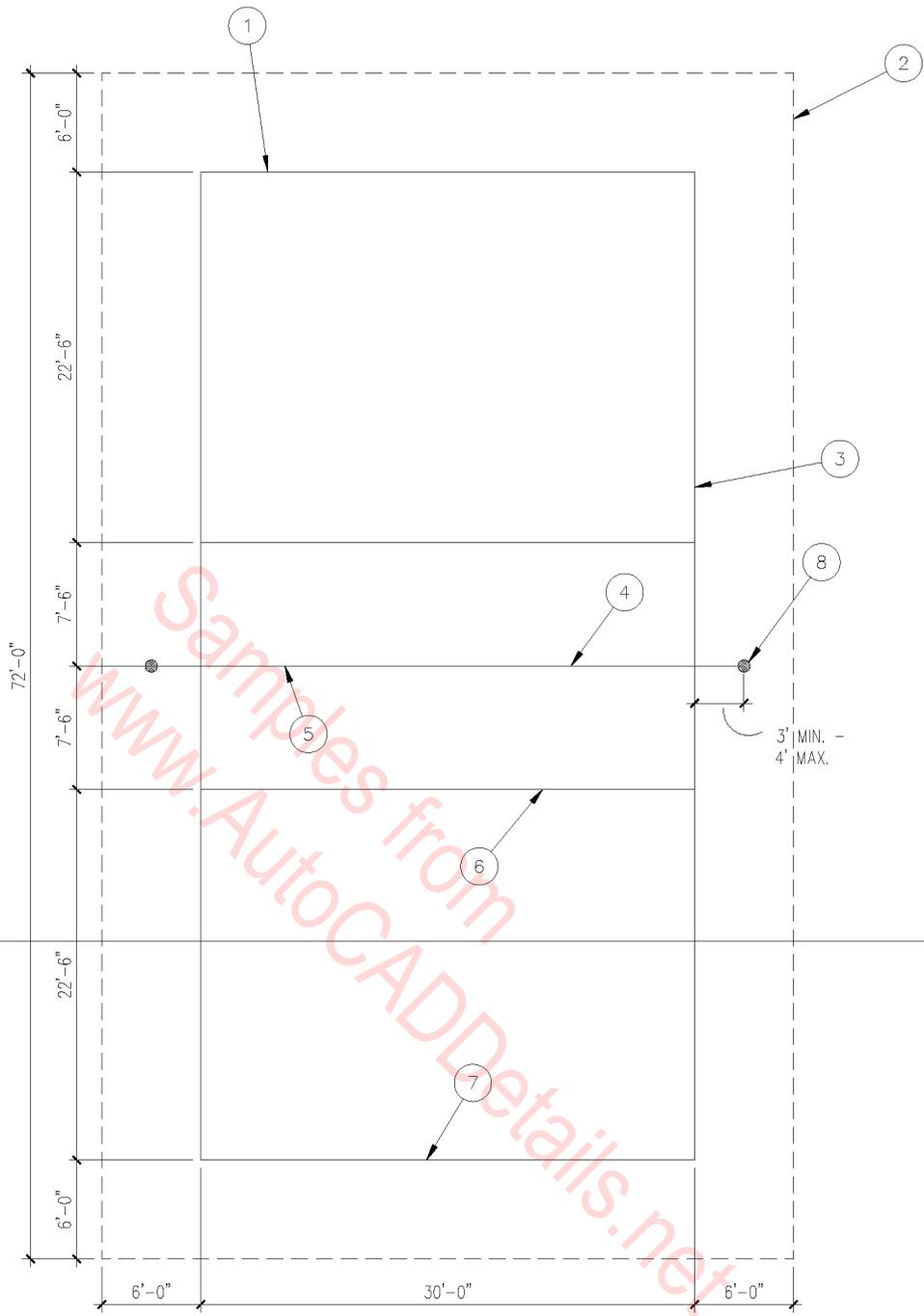
- A. 2" LINES TYPICAL.
- B. 12" WIDE X 8" DEEP.
- C. 2" WIDE X 8" DEEP.
- D. NOT USED.
- E. DIVISION LINE.
- F. BOUNDARY LINES AND DIVISION LINES, COLOR BLACK, ALL OTHER LINES CONTRASTING COLOR.
- G. 6'-0" OUTSIDE RADIUS.
- H. 2'-0" INSIDE RADIUS.
- J. 18" RIM.
- K. BACKBOARD.



BASKETBALL COURT

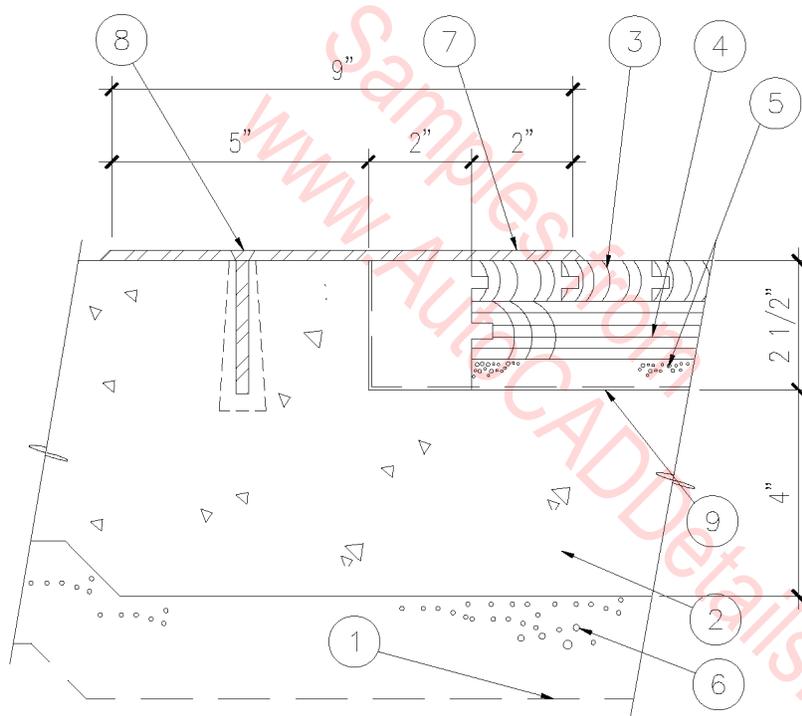
SCALE: 3/32" = 1'-0"

02D-3015

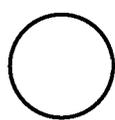


1. SERVICE AREA AT EACH END.
2. 6'-0" MINIMUM CLEARANCE.
3. SIDE LINES.
4. 4" WIDE CENTERLINE.
5. 3' DEEP X 32' LONG NET - 8'-0" TO TOP AT CENTER.
6. SPIKING LINE.
7. ALL LINES 2" WIDE U.N.O.
8. POST.

NOTE: CEILING AT 20'-0" MINIMUM.



1. VAPOR BARRIER. LAP AND SEAL CONTINUOUS WITH 3" PLASTIC TAPE.
2. CONCRETE SLAB.
3. GYMNASIUM WOOD FLOORING SYSTEM.
4. 2-LAYERS, 1/2" CDX PLYWOOD.
5. 3/8" CLOSED CELL POLYURETHANE FOAM PAD.
6. 4" SAND FILL.
7. 1/8" STAINLESS STEEL PLATE WITH BEVELED EDGES.
8. COUNTERSUNK FLAT HEAD FASTENERS @ 12" O.C.
9. (2) LAYER 15# FELT.

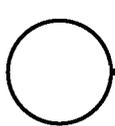
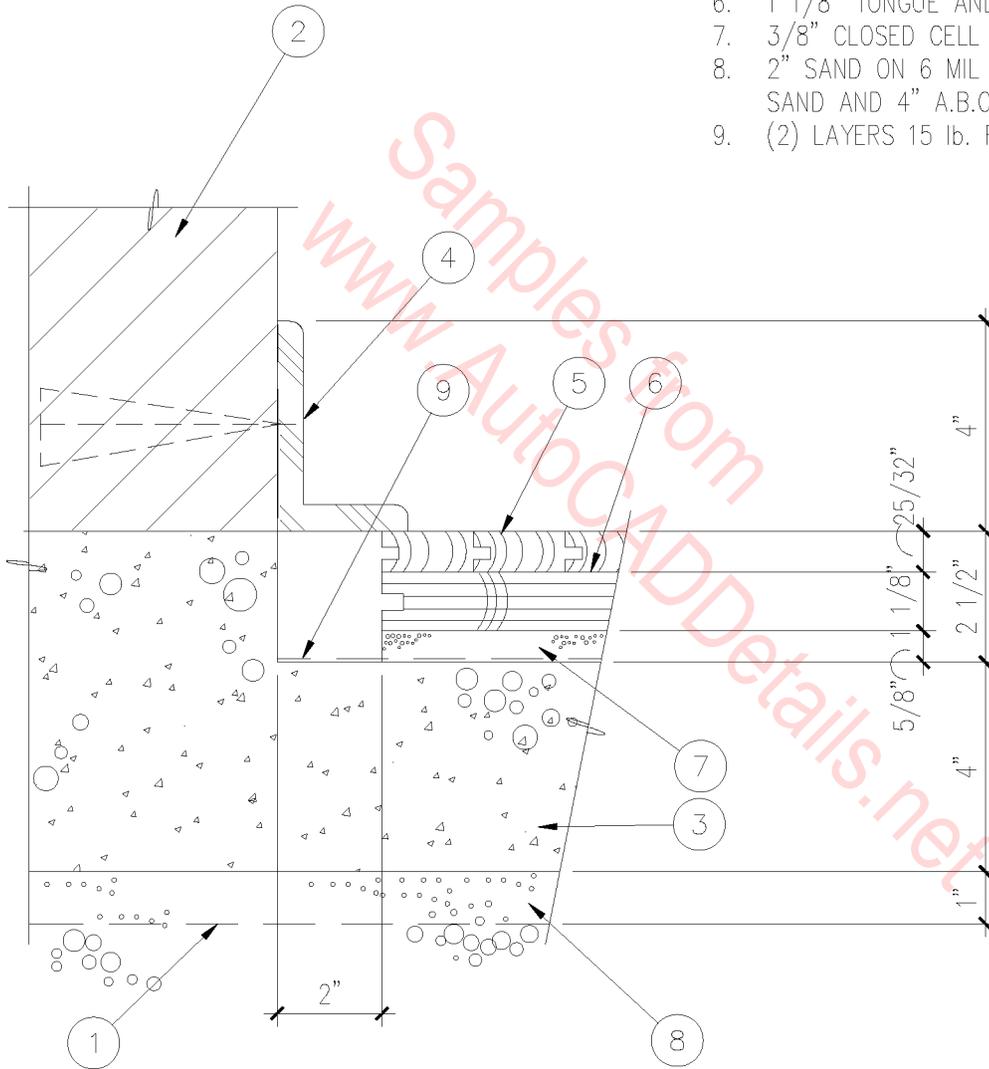


GYM FLOOR THRESHOLD

SCALE: 3" = 1'-0"

02D-3018

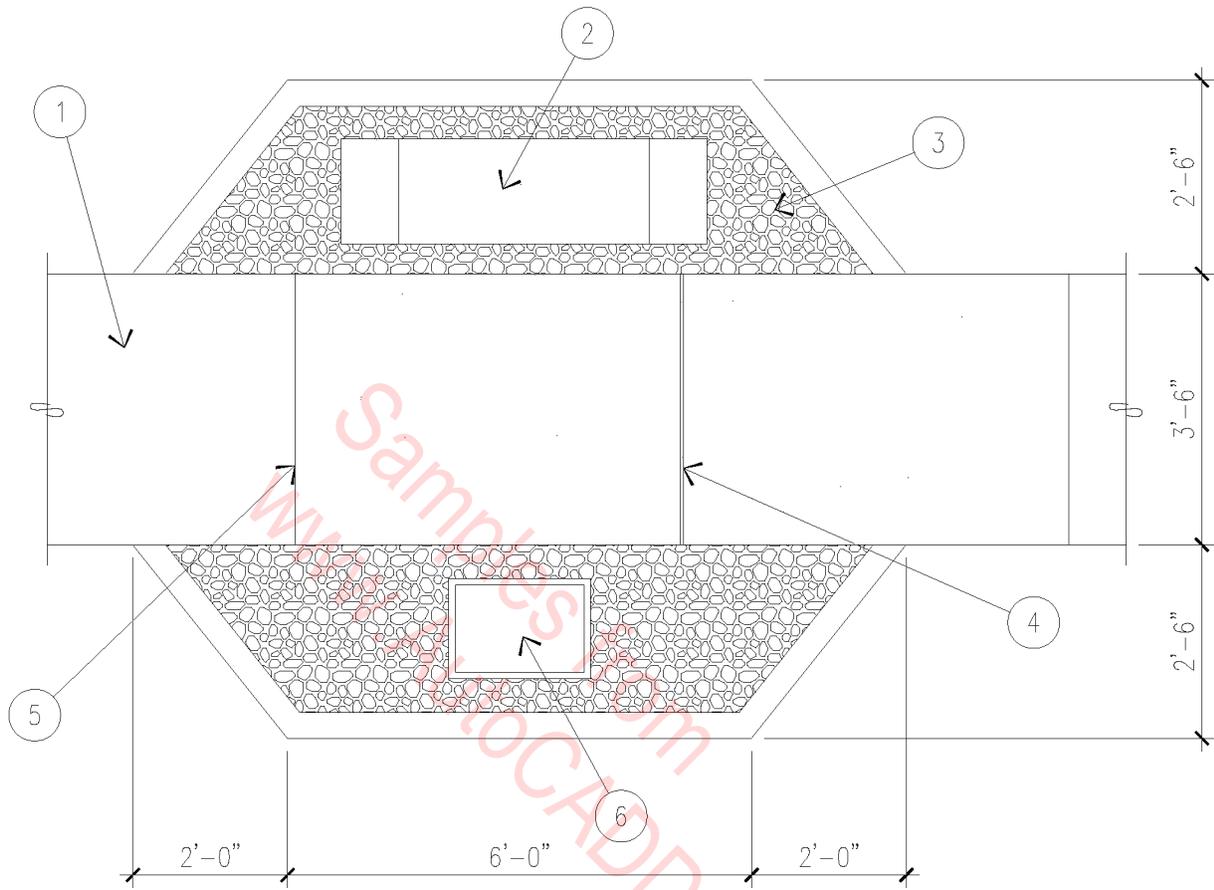
1. 6 MIL VAPOR BARRIER. LAP AND SEAL, CONTINUOUS 3" PLASTIC TAPE.
2. MASONRY WALL.
3. 4" CONCRETE SLAB.
4. 3" X 4" VENTED ALUMINUM COVE BASE.
5. 25/32" MAPLE TONGUE AND GROOVE FLOORING.
6. 1 1/8" TONGUE AND GROOVE PLYWOOD.
7. 3/8" CLOSED CELL POLYURETHANE FOAM PAD.
8. 2" SAND ON 6 MIL VAPOR BARRIER ON 2" SAND AND 4" A.B.C.
9. (2) LAYERS 15 lb. FELT.



GYM FLOOR BASE

SCALE: 3" = 1'-0"

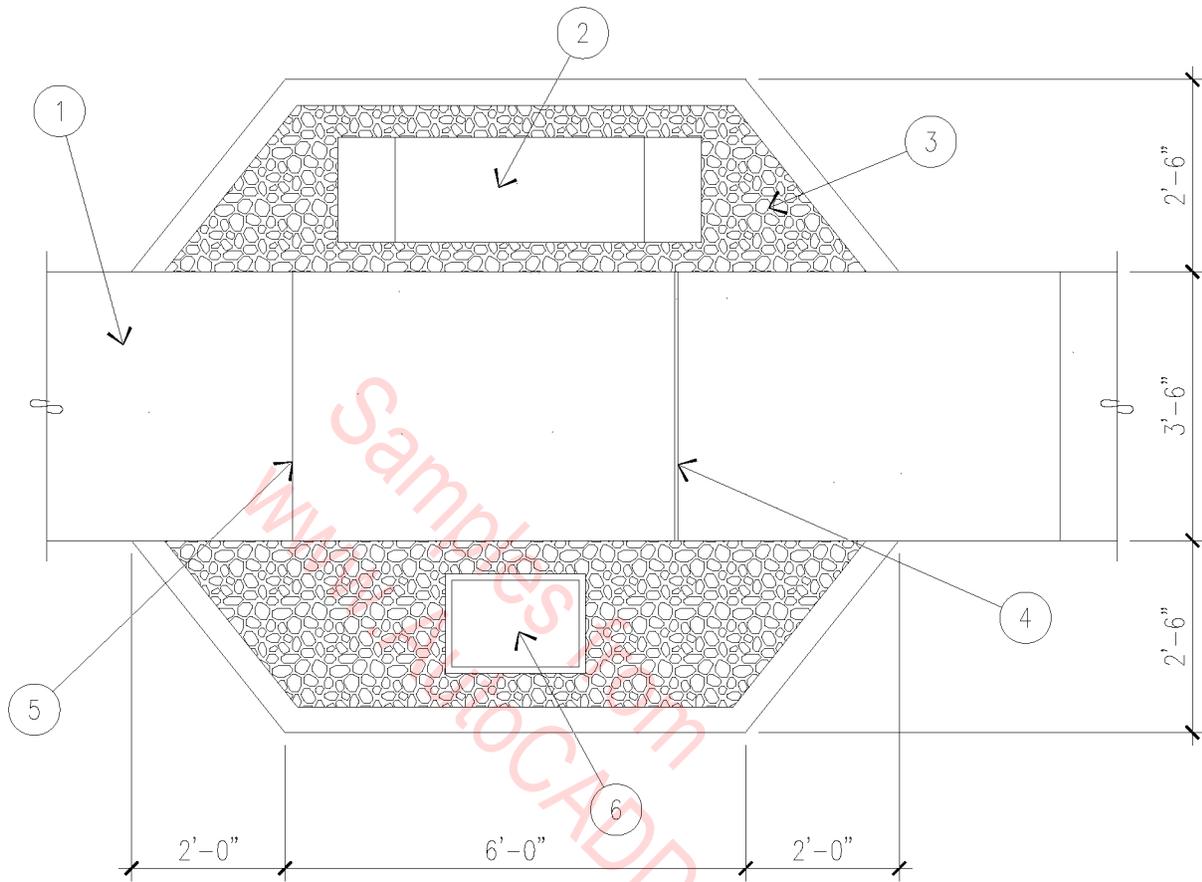
02D-3019



1. 4" CONCRETE WALK WITH MEDIUM ROCK SALT FINISH.
2. PRECAST CONCRETE BENCH.
3. DECOMPOSED GRANITE - SEE LANDSCAPE PLAN.
4. EXPANSION JOINT AT 25'-0" O.C.
5. CONTROL JOINT SET AT 5'-0" O.C.
6. CHARCOAL BAR-B-QUE.

○ BAR-B-QUE AREA
 3/8" = 1'-0"

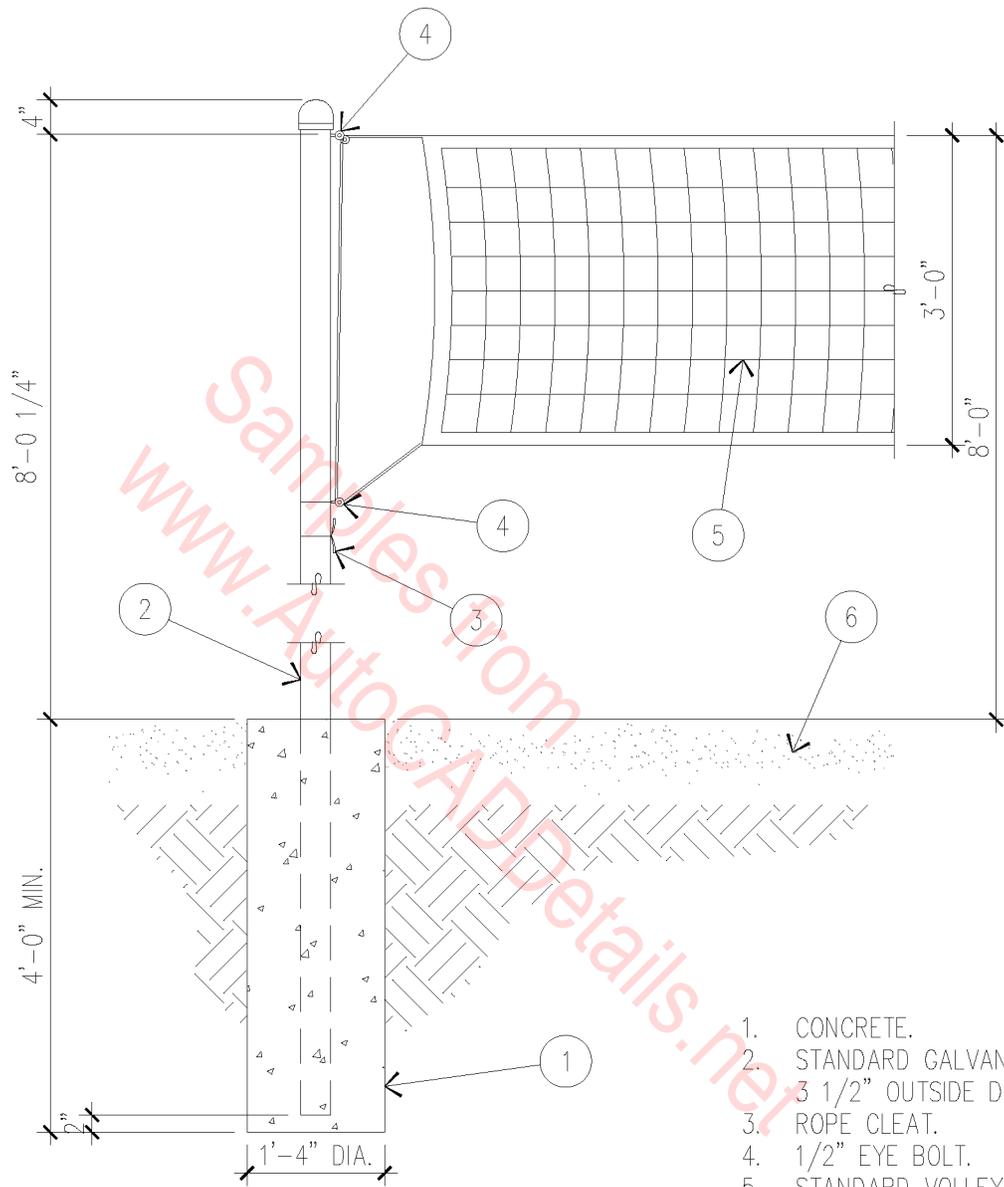
02D-3020



1. 4" CONCRETE WALK WITH MEDIUM ROCK SALT FINISH.
2. PRECAST CONCRETE BENCH.
3. DECOMPOSED GRANITE - SEE LANDSCAPE PLAN.
4. EXPANSION JOINT AT 25'-0" O.C.
5. CONTROL JOINT SET AT 5'-0" O.C.
6. CHARCOAL BAR-B-QUE.

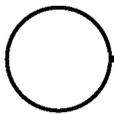
○ BAR-B-QUE AREA
 3/8" = 1'-0"

02D-3020



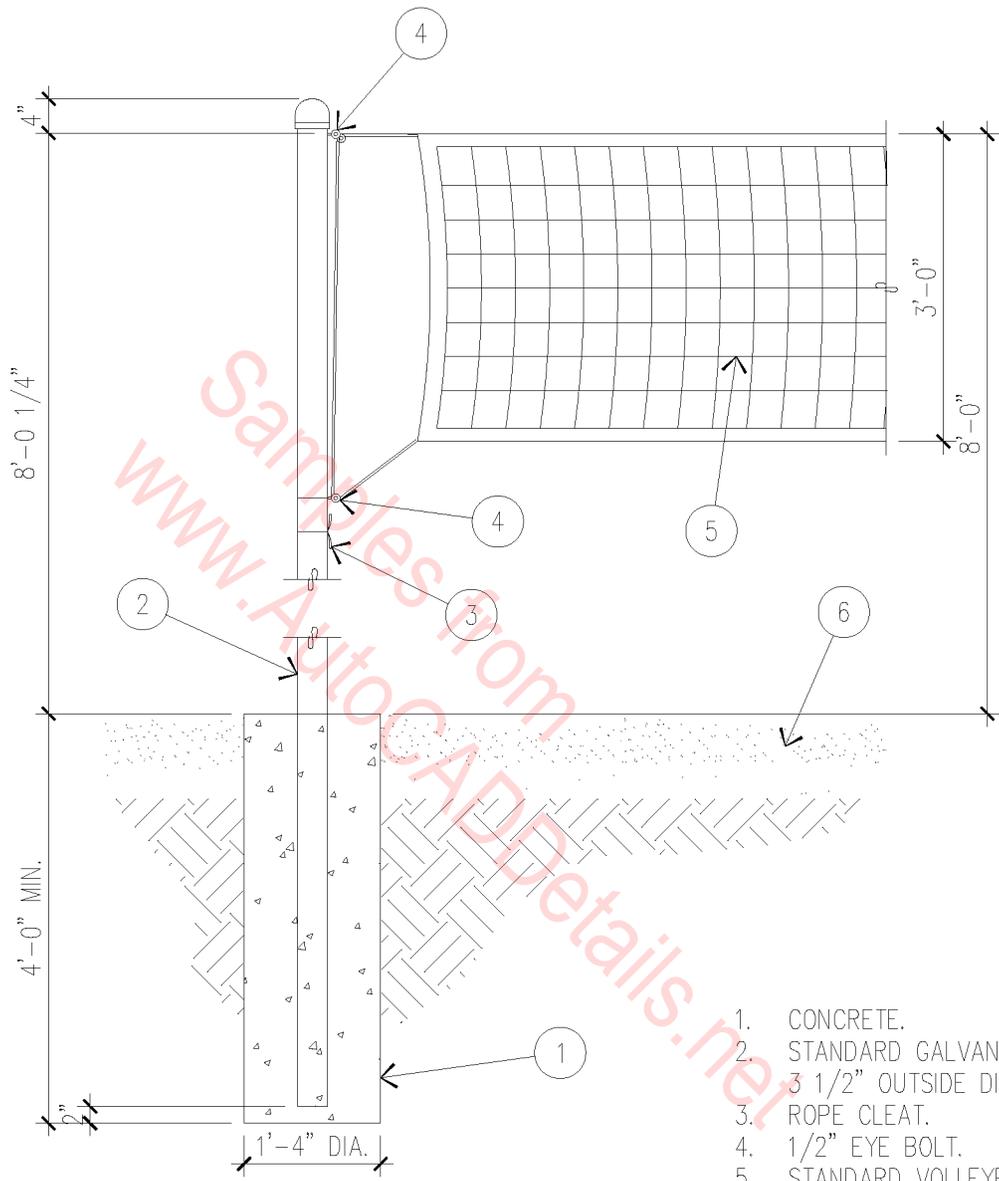
1. CONCRETE.
2. STANDARD GALVANIZED STEEL POST, 3 1/2" OUTSIDE DIAMETER.
3. ROPE CLEAT.
4. 1/2" EYE BOLT.
5. STANDARD VOLLEYBALL NET.
6. 6" MINIMUM SAND FILL.

VOLLEYBALL NET AND POST



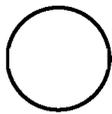
1/2" = 1'-0"

02D-3021



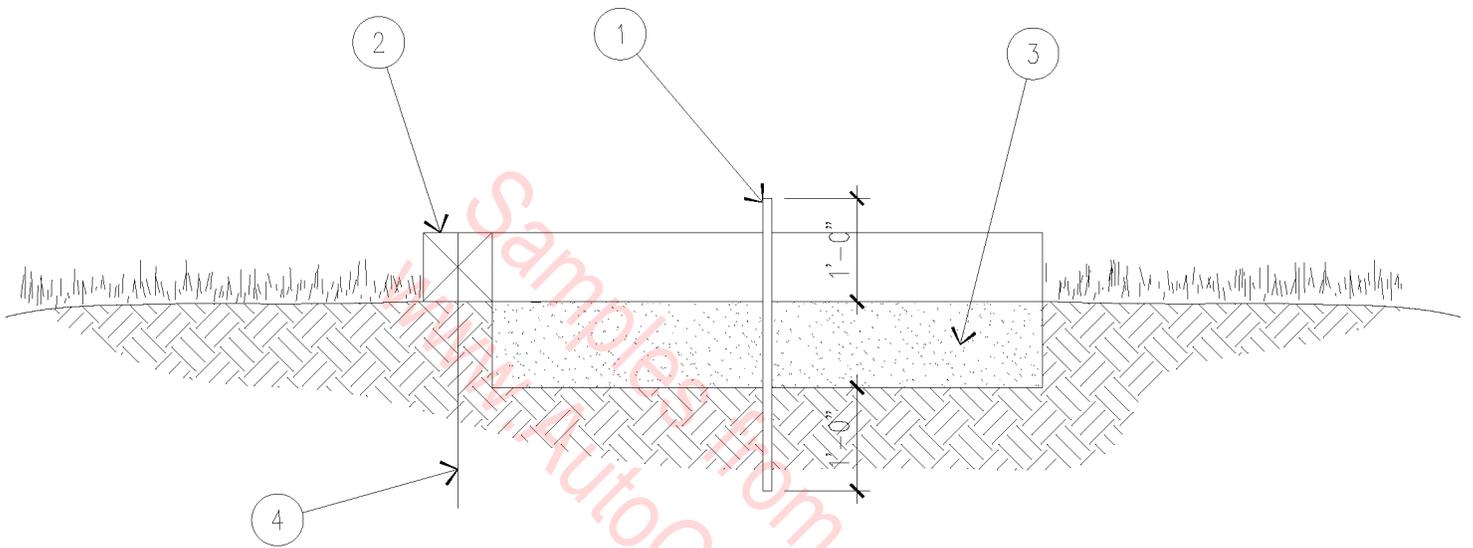
1. CONCRETE.
2. STANDARD GALVANIZED STEEL POST, 3 1/2" OUTSIDE DIAMETER.
3. ROPE CLEAT.
4. 1/2" EYE BOLT.
5. STANDARD VOLLEYBALL NET.
6. 6" MINIMUM SAND FILL.

VOLLEYBALL NET AND POST



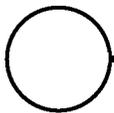
1/2" = 1'-0"

02D-3021



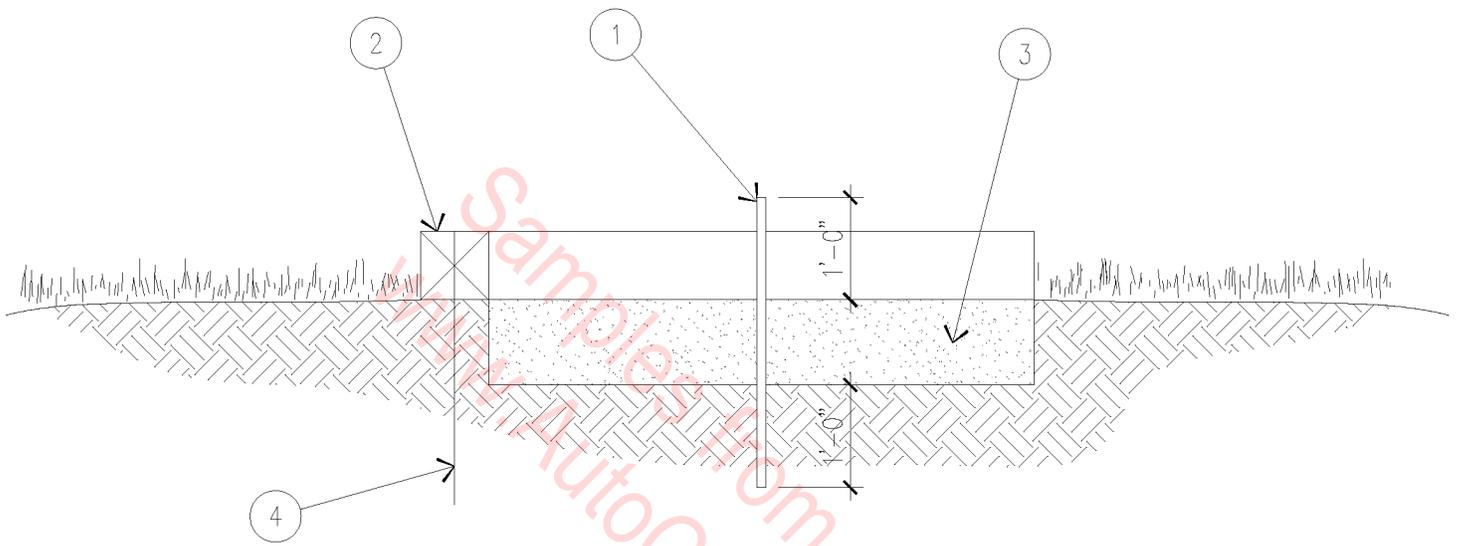
1. 1" DIAMETER STEEL PEG, 1'-0" HIGH.
2. PRESSURE TREATED 8X8 TIMBER.
3. SAND FILL.
4. (3) #4 REBAR 2'-0" INTO GROUND FOR EACH TIMBER.

HORSESHOE BOX SECTION



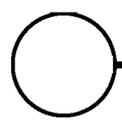
$1/2'' = 1'-0''$

02D-3022



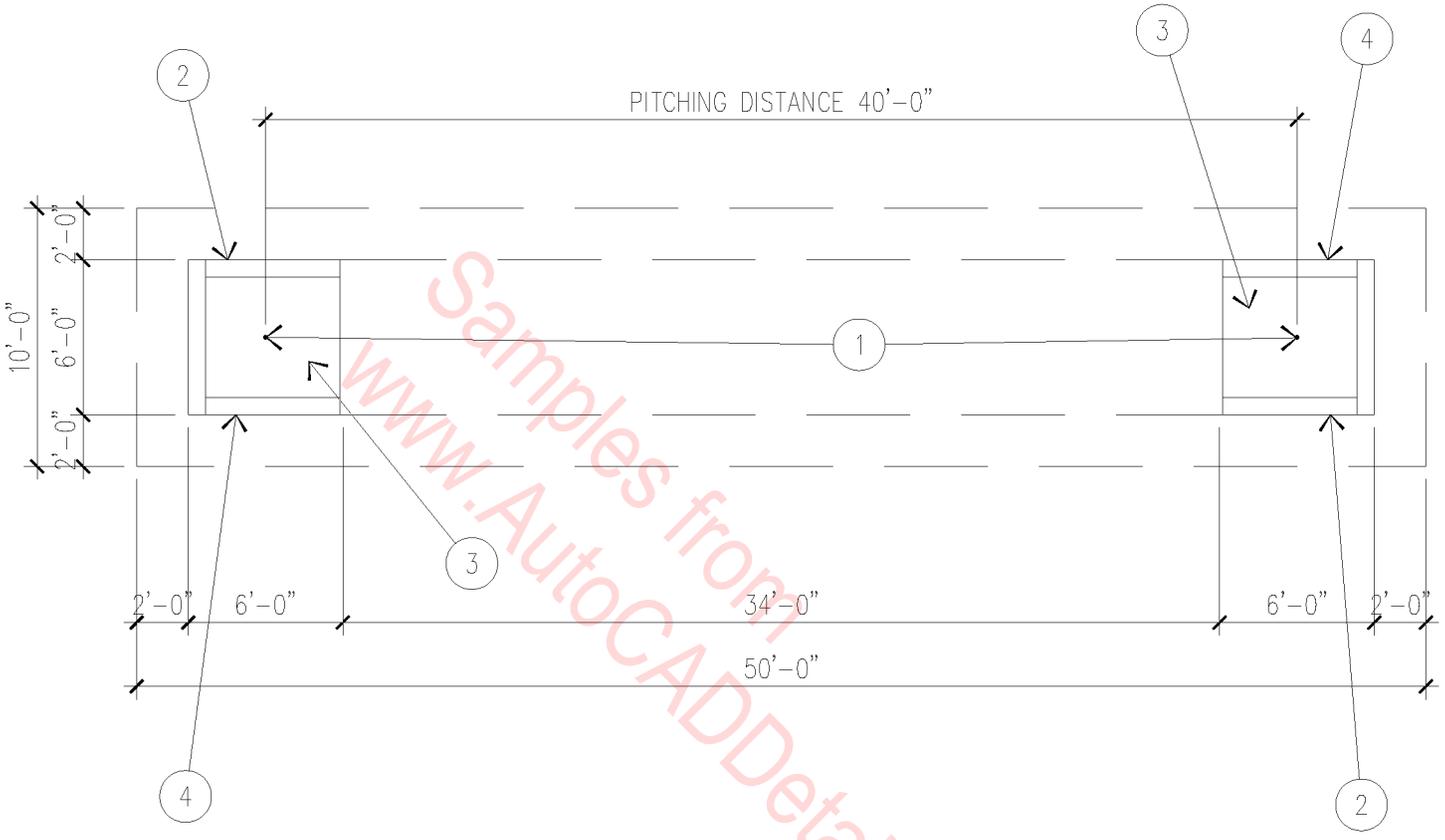
1. 1" DIAMETER STEEL PEG, 1'-0" HIGH.
2. PRESSURE TREATED 8X8 TIMBER.
3. SAND FILL.
4. (3) #4 REBAR 2'-0" INTO GROUND FOR EACH TIMBER.

HORSESHOE BOX SECTION



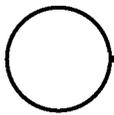
1/2" = 1'-0"

02D-3022



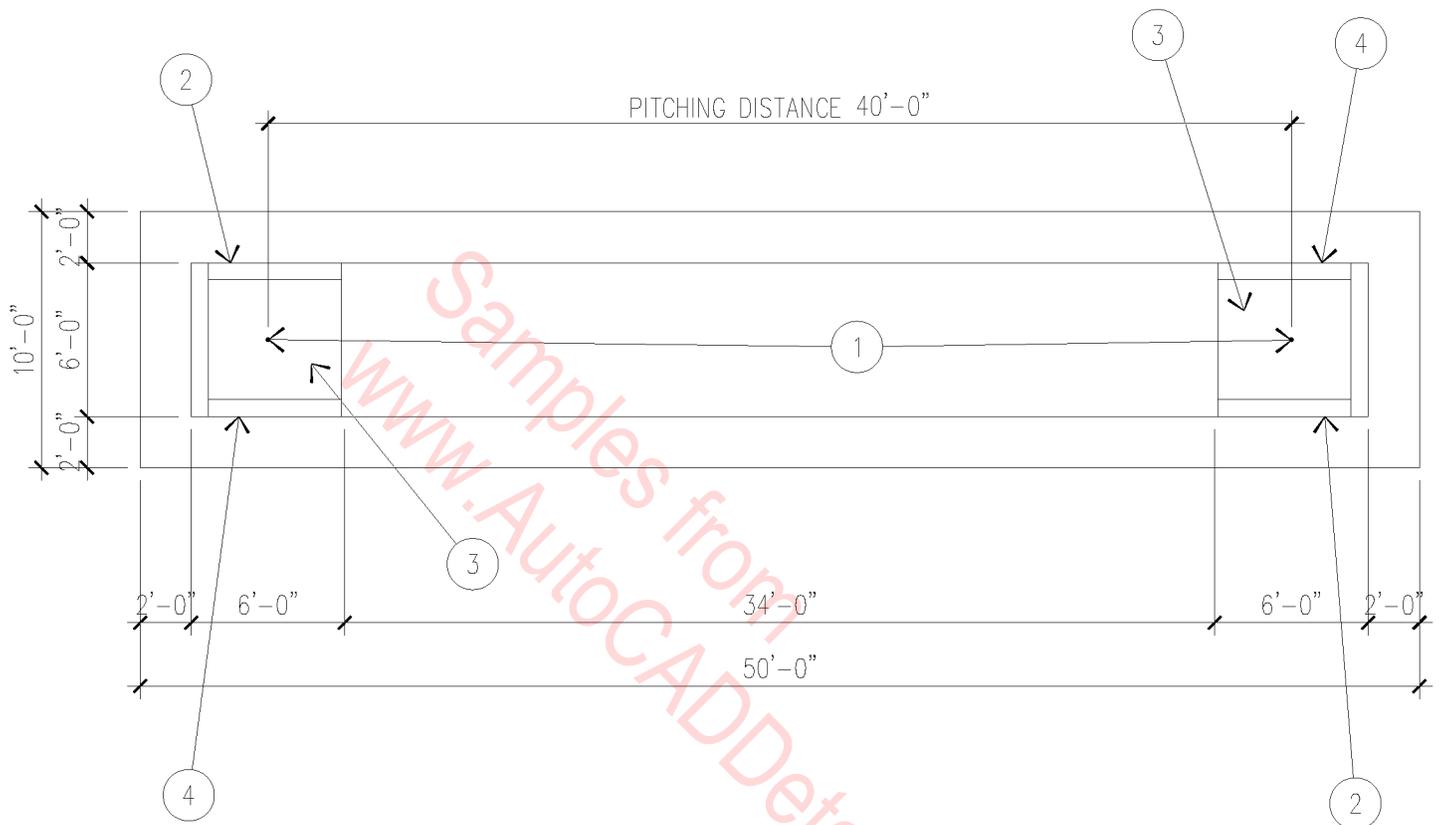
1. 1" DIAMETER STEEL PEG, 1'-0" HIGH.
2. PRESSURE TREATED 8X8 TIMBER.
3. SAND FILL.
4. (3) #4 REBAR 2'-0" INTO GROUND FOR EACH TIMBER.

HORSESHOE BOX LAYOUT



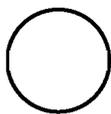
1/8" = 1'-0"

02D-3023



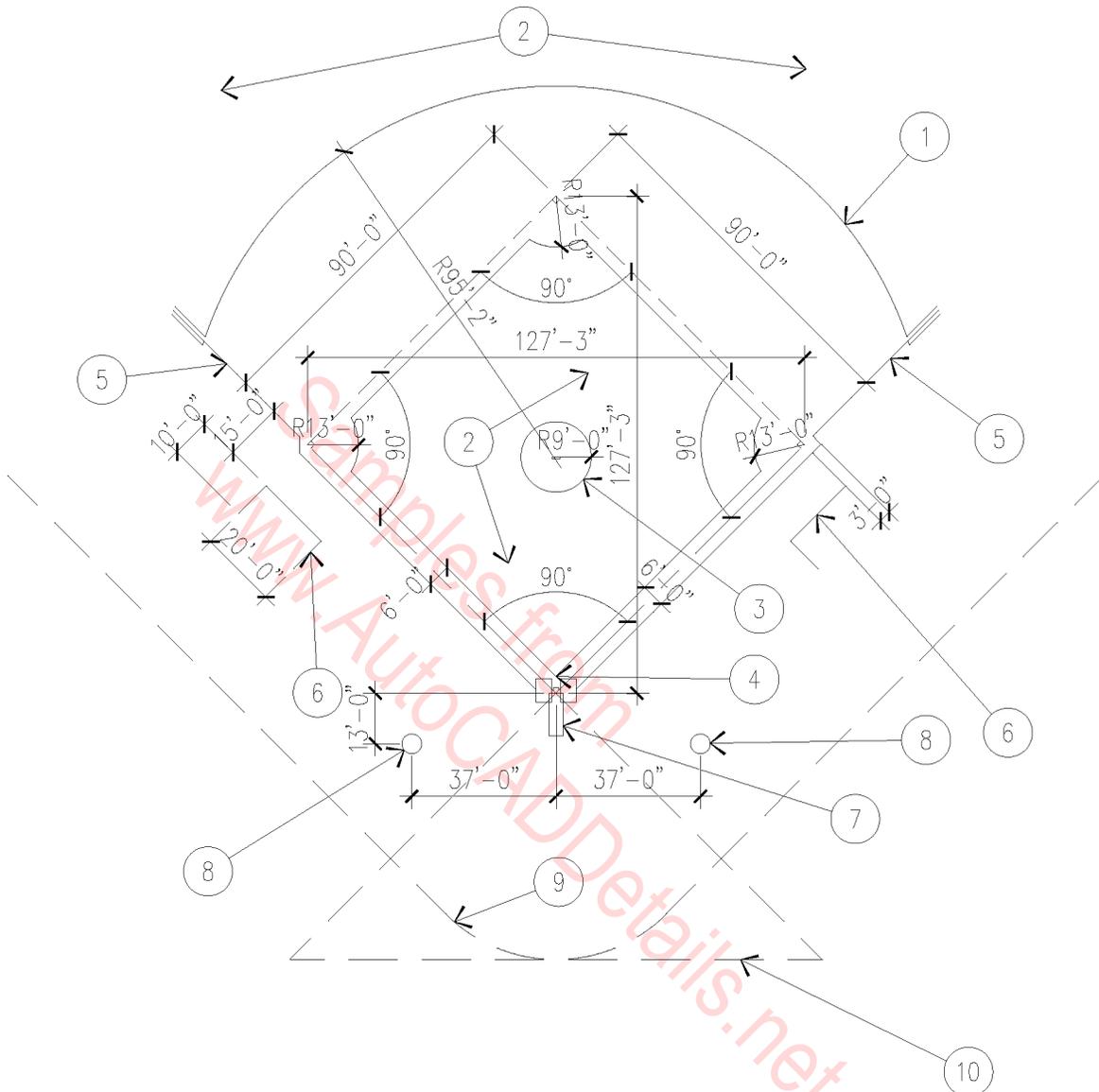
1. 1" DIAMETER STEEL PEG, 1'-0" HIGH.
2. PRESSURE TREATED 8X8 TIMBER.
3. SAND FILL.
4. (3) #4 REBAR 2'-0" INTO GROUND FOR EACH TIMBER.

HORSESHOE BOX LAYOUT

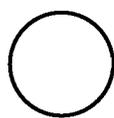


1/8" = 1'-0"

02D-3023



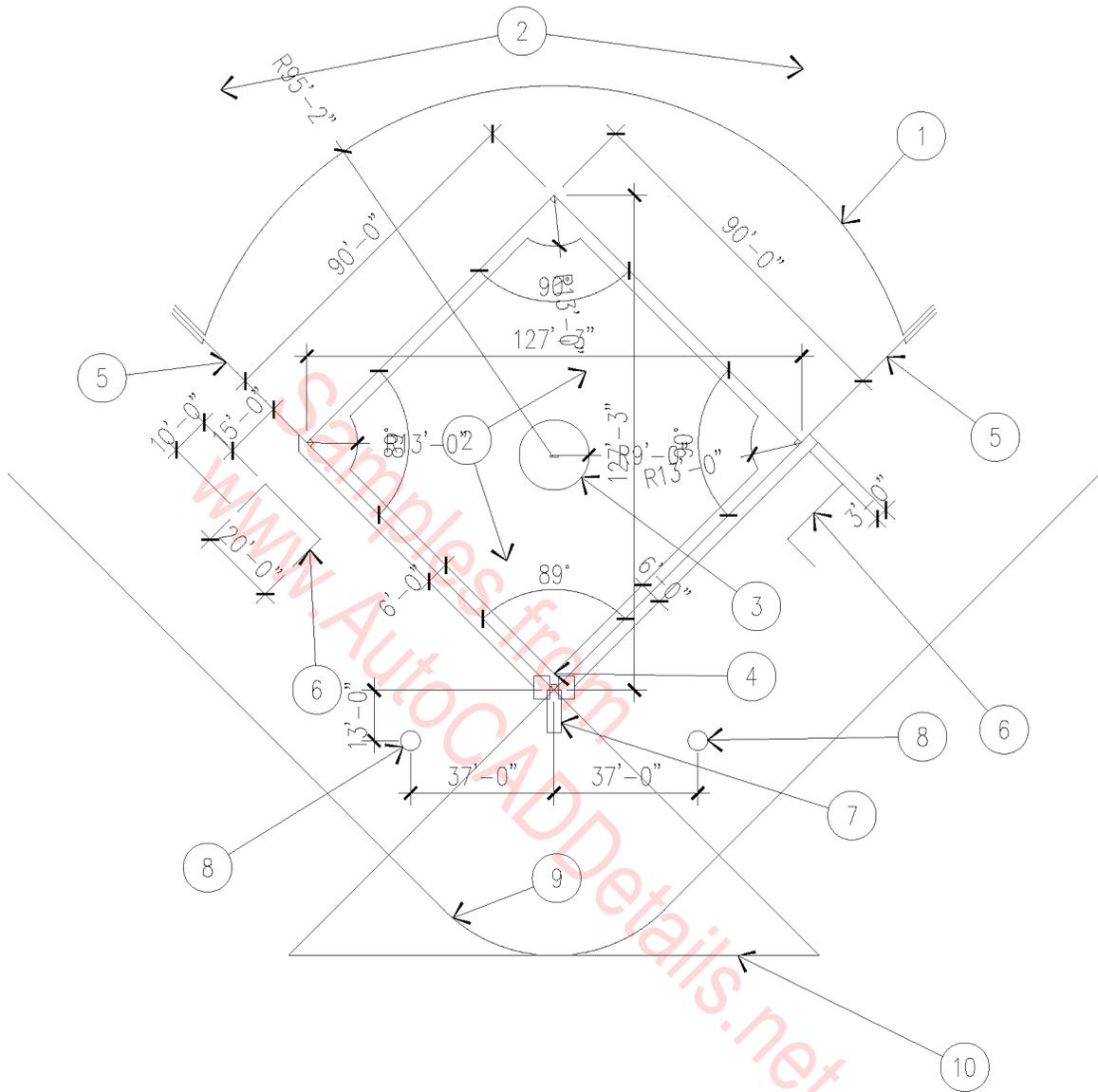
- | | |
|---|---|
| 1. SKINNED AREA INDICATED WITHIN HEAVY BLACK LINES. | 6. COACH'S BOX. |
| 2. TURF. | 7. CATCHER'S BOX. |
| 3. PITCHER'S MOUND. | 8. NEXT BATTERS BOX, 5'-0" Ø. |
| 4. HOME. | 9. GRANDSTAND OR FENCE 60'-0" FROM FOUL LINE. |
| 5. FOUL LINE. | 10. BACKSTOP LINE. |



BASEBALL FIELD

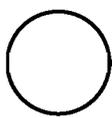
1" = 50'-0"

02D-3024



1. SKINNED AREA INDICATED WITHIN HEAVY BLACK LINES.
2. TURF.
3. PITCHER'S MOUND.
4. HOME.
5. FOUL LINE.

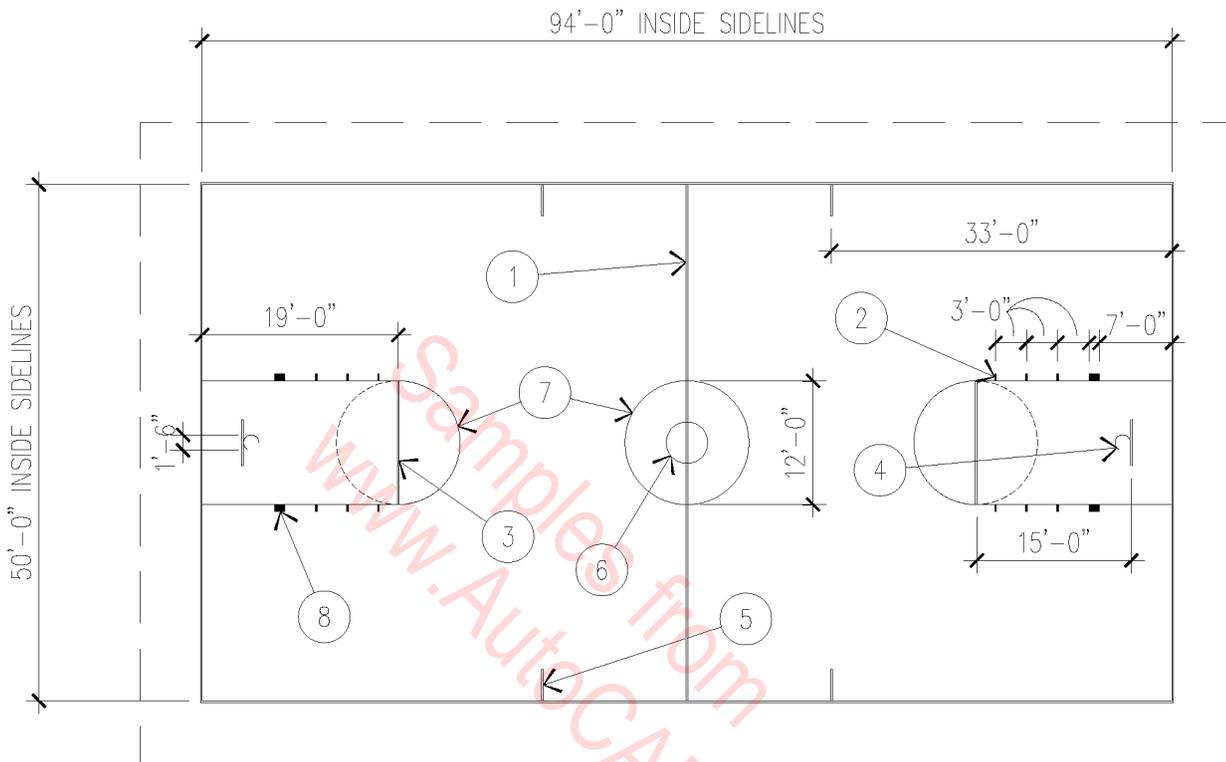
6. COACH'S BOX.
7. CATCHER'S BOX.
8. NEXT BATTERS BOX, 5'-0" ϕ .
9. GRANDSTAND OR FENCE 60'-0" FROM FOUL LINE.
10. BACKSTOP LINE.



BASEBALL FIELD

1" = 50'-0"

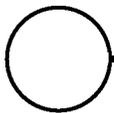
02D-3024



1. DIVISION LINE.
2. 2" WIDE BY 8" DEEP.
3. FREE THROW LINE.
4. BASKET.
5. 2" WIDE BY 3'-0" DEEP.
6. 2'-0" RADIUS.
7. 6'-0" RADIUS.
8. 12" WIDE BY 8" DEEP.

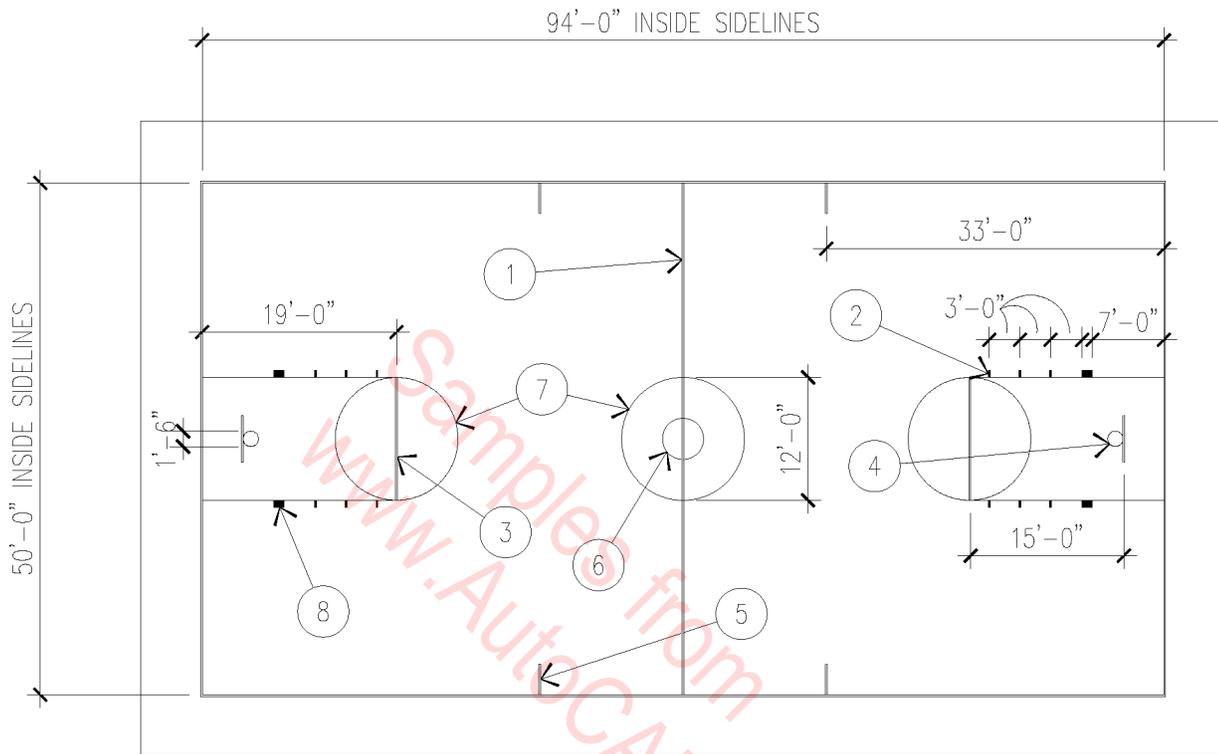
NOTE: ALL PAINTED LINES TO BE 2" WIDE.

COLLEGE BASKETBALL COURT



1" = 20'-0"

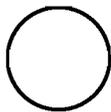
02D-3025



1. DIVISION LINE.
2. 2" WIDE BY 8" DEEP.
3. FREE THROW LINE.
4. BASKET.
5. 2" WIDE BY 3'-0" DEEP.
6. 2'-0" RADIUS.
7. 6'-0" RADIUS.
8. 12" WIDE BY 8" DEEP.

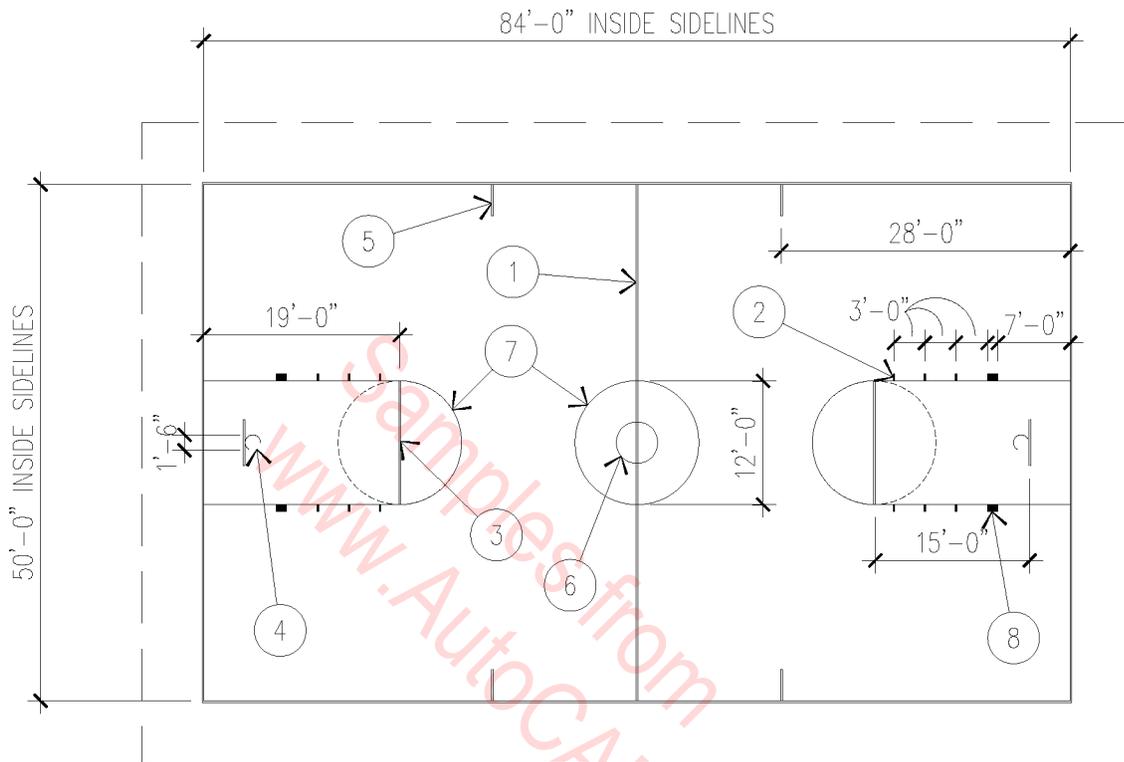
NOTE: ALL PAINTED LINES TO BE 2" WIDE.

COLLEGE BASKETBALL COURT



1" = 20'-0"

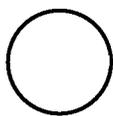
02D-3025



1. DIVISION LINE.
2. 2" WIDE BY 8" DEEP.
3. FREE THROW LINE.
4. BASKET.
5. 2" WIDE BY 3'-0" DEEP.
6. 2'-0" RADIUS.
7. 6'-0" RADIUS.
8. 12" WIDE BY 8" DEEP.

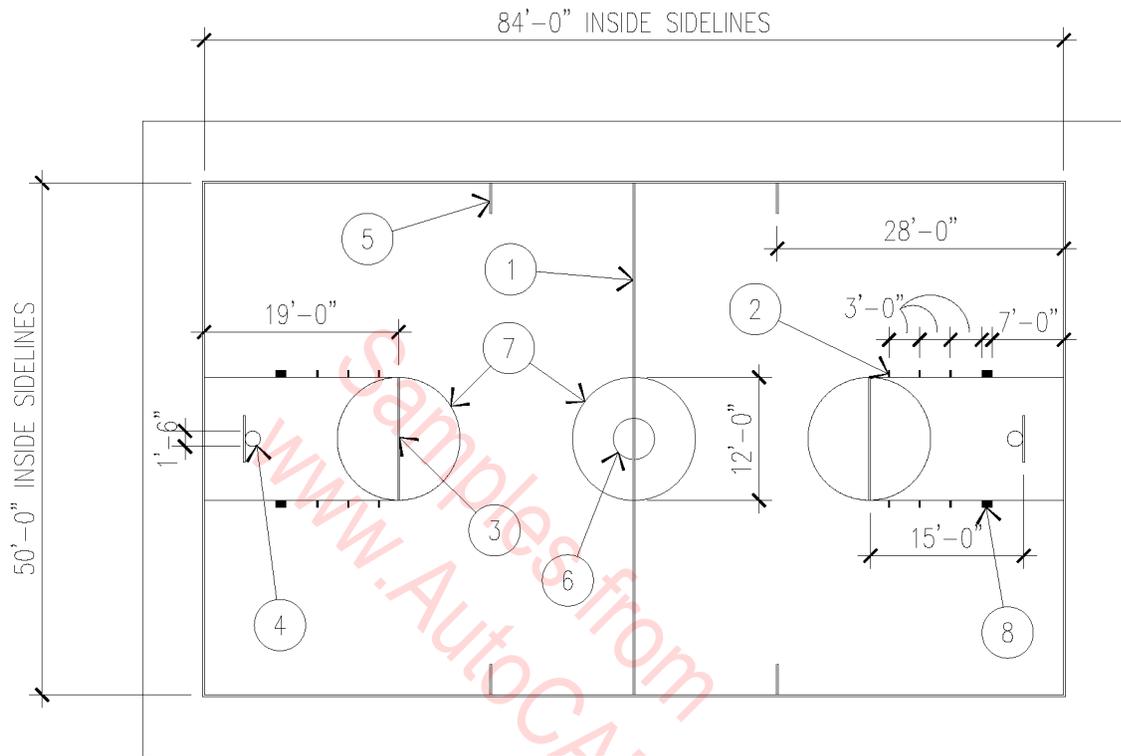
NOTE: ALL PAINTED LINES TO BE 2" WIDE.

HIGH SCHOOL BASKETBALL COURT



1" = 20'-0"

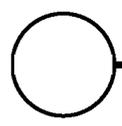
02D-3026



1. DIVISION LINE.
2. 2" WIDE BY 8" DEEP.
3. FREE THROW LINE.
4. BASKET.
5. 2" WIDE BY 3'-0" DEEP.
6. 2'-0" RADIUS.
7. 6'-0" RADIUS.
8. 12" WIDE BY 8" DEEP.

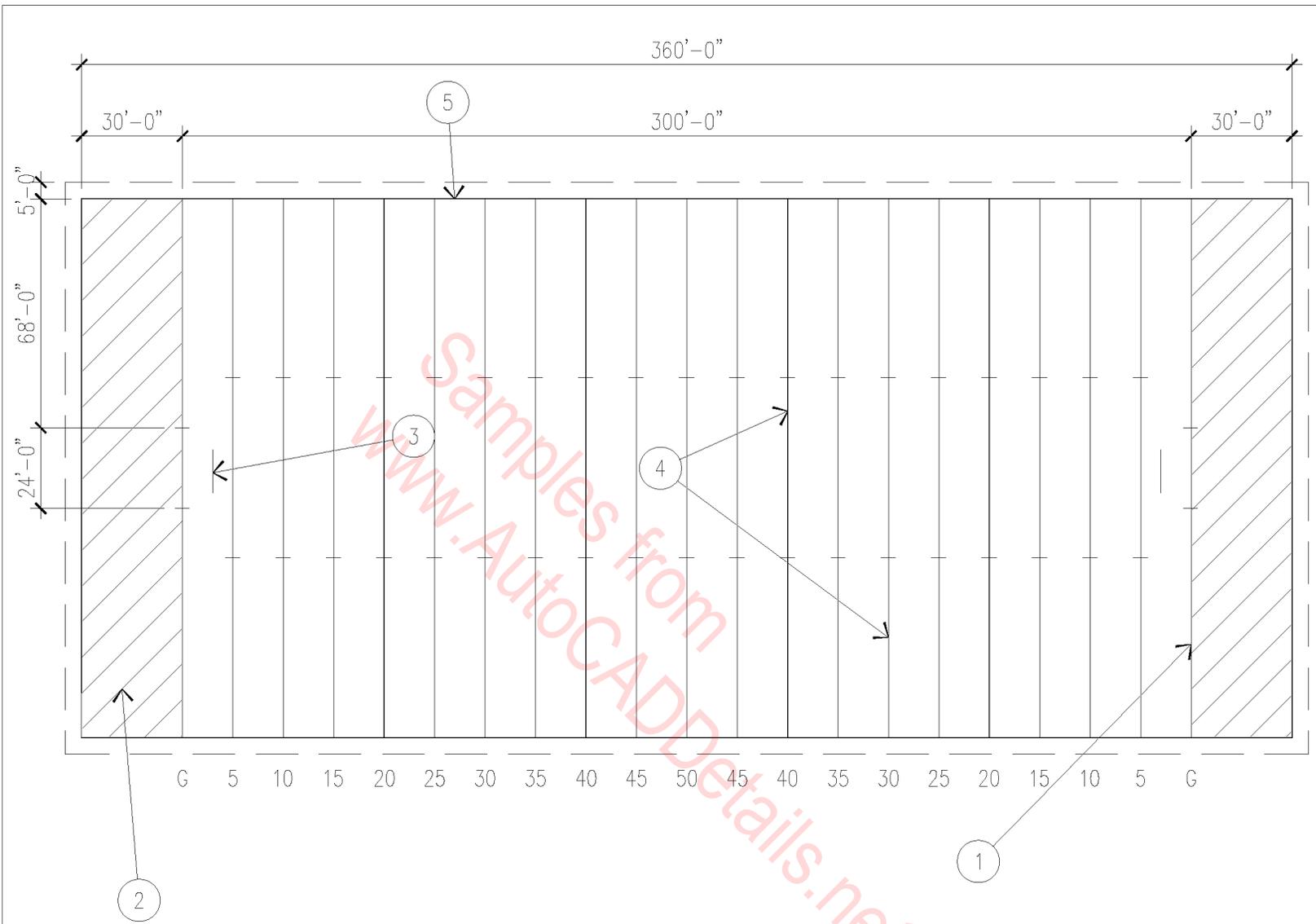
NOTE: ALL PAINTED LINES TO BE 2" WIDE.

HIGH SCHOOL BASKETBALL COURT

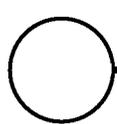


1" = 20'-0"

02D-3026



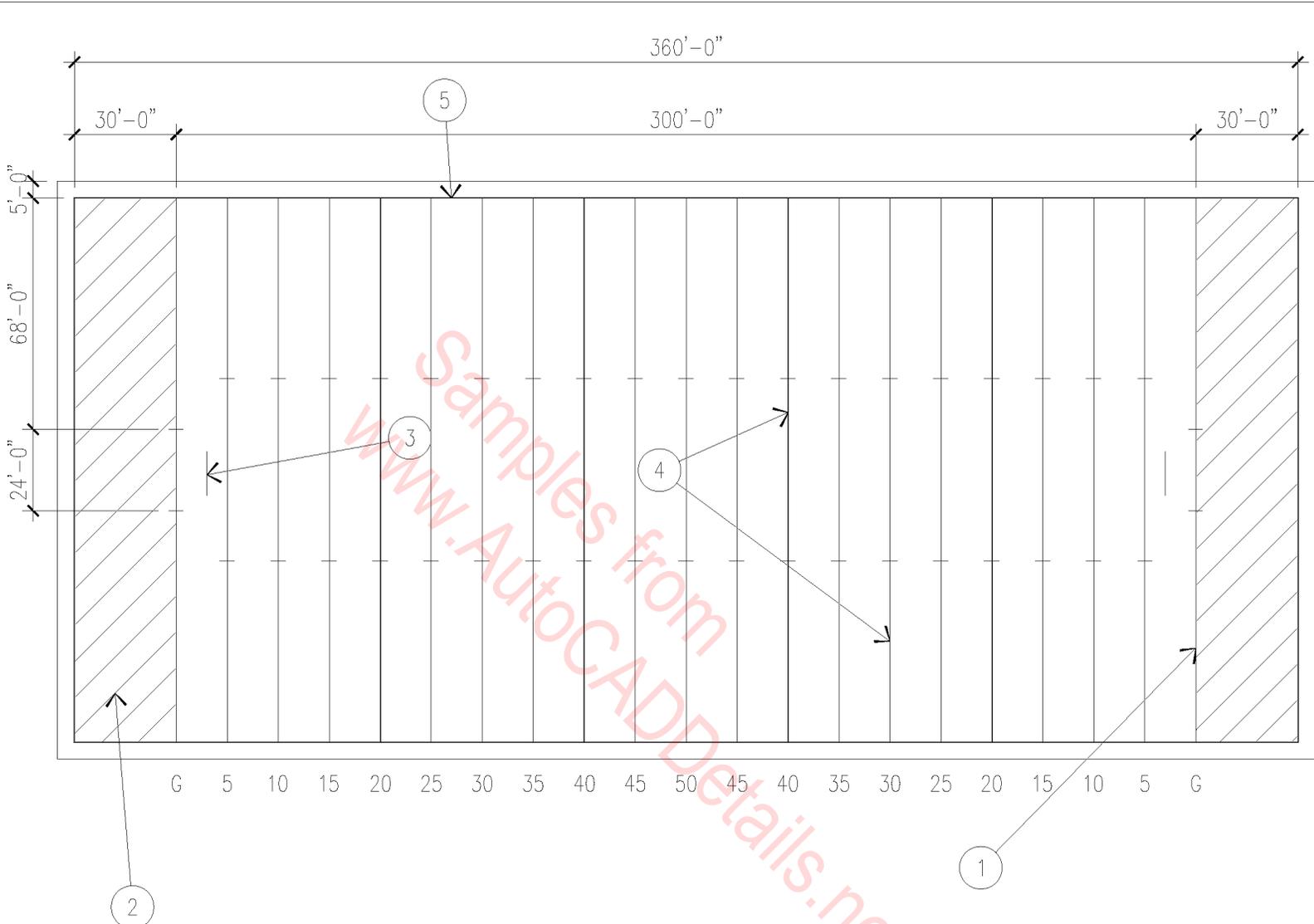
- 1. GOAL LINE.
- 2. END ZONE.
- 3. 3 YARD LINE.
- 4. IN BOUNDS LINE.
- 5. SIDELINE.



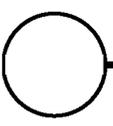
FOOTBALL FIELD

1" = 50'-0"

02D-3027



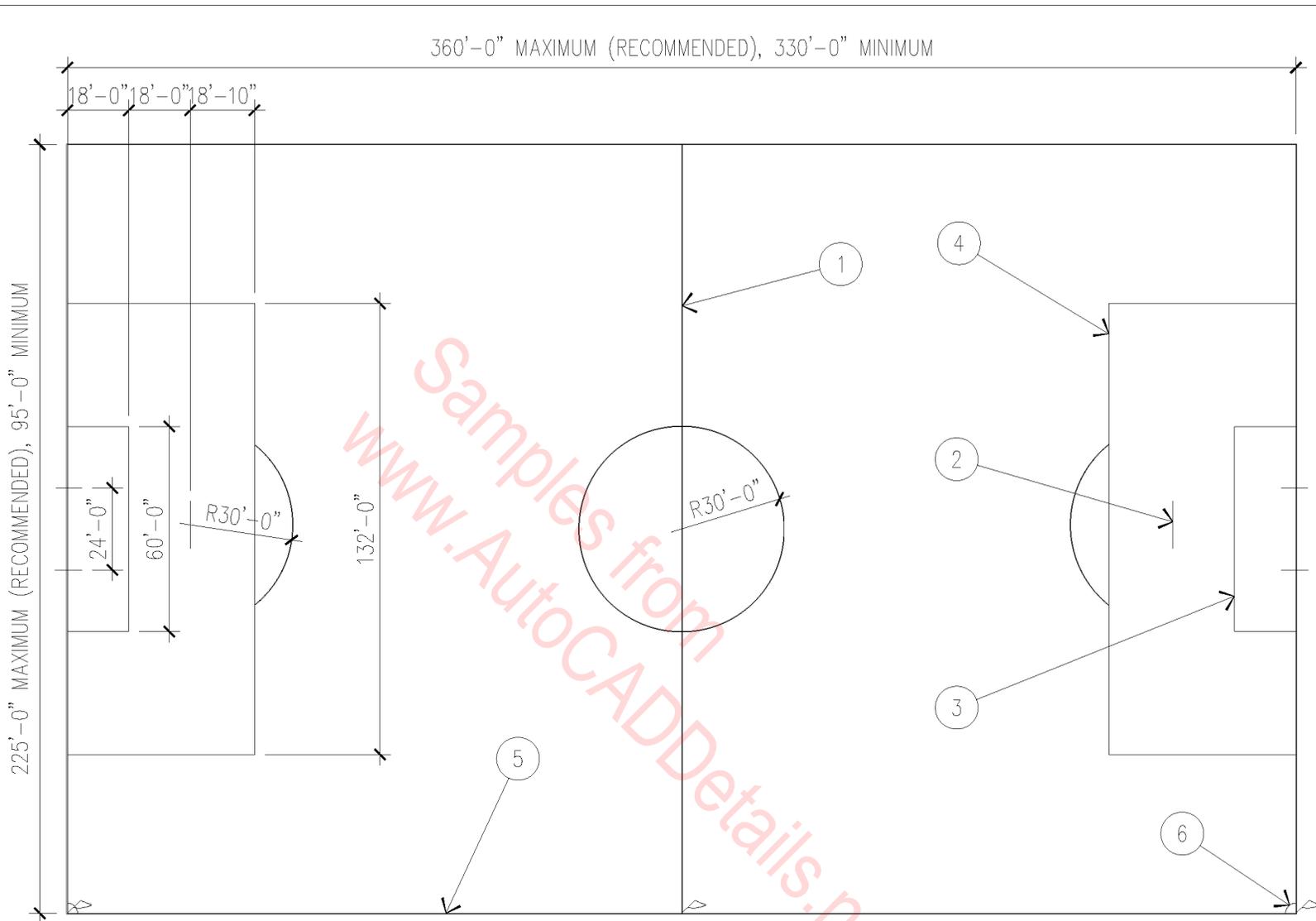
1. GOAL LINE.
2. END ZONE.
3. 3 YARD LINE.
4. IN BOUNDS LINE.
5. SIDELINE.



FOOTBALL FIELD

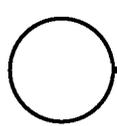
1" = 50'-0"

02D-3027



Samples from
www.AutoCADDetails.net

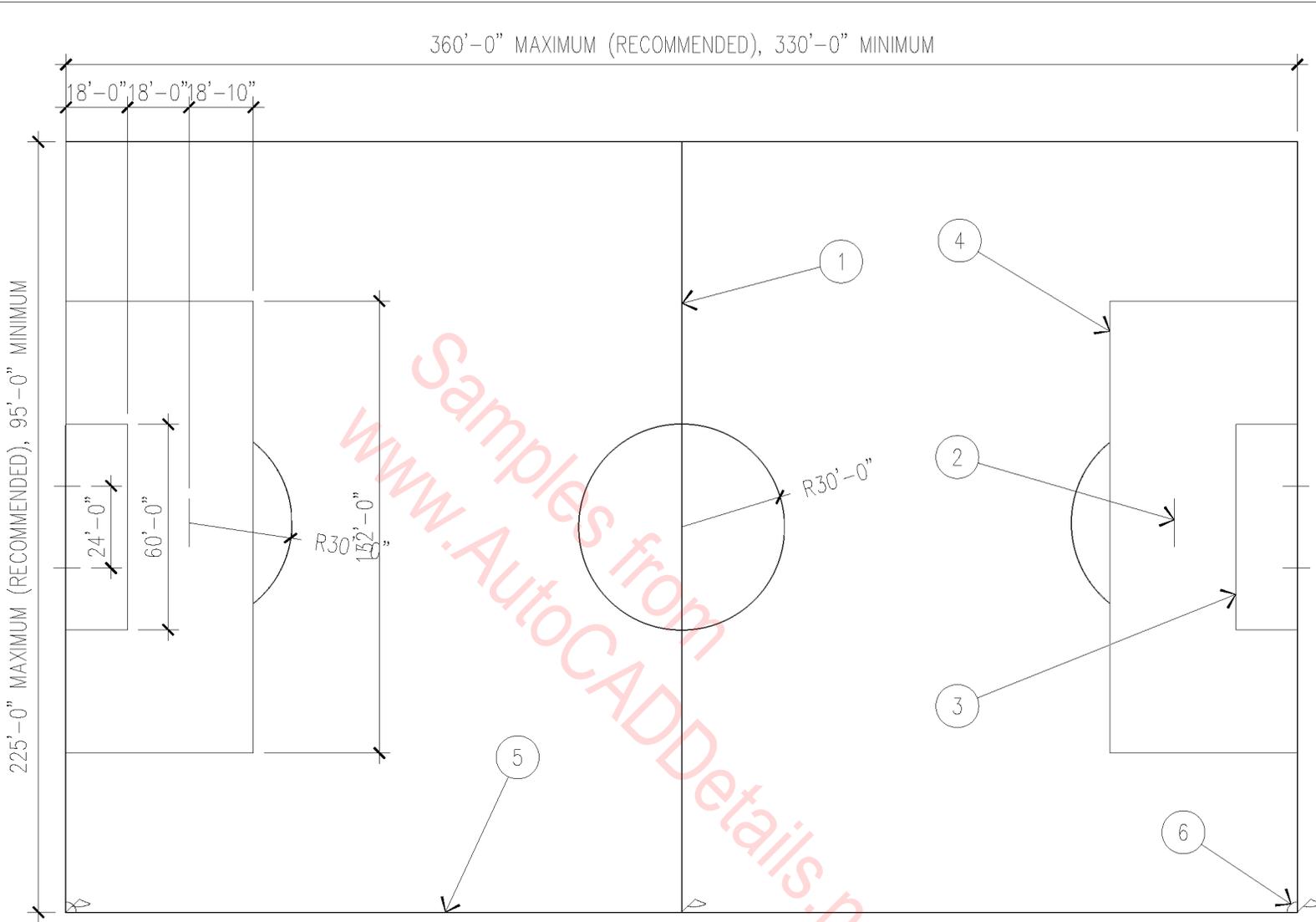
1. HALFWAY LINE.
2. PENALTY KICK MARK.
3. PENALTY AREA.
4. GOAL AREA.
5. TOUCH LINE.
6. 3'-0" \varnothing CORNER KICK AREA.



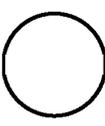
SOCCER FIELD

1" = 50'-0"

02D-3028



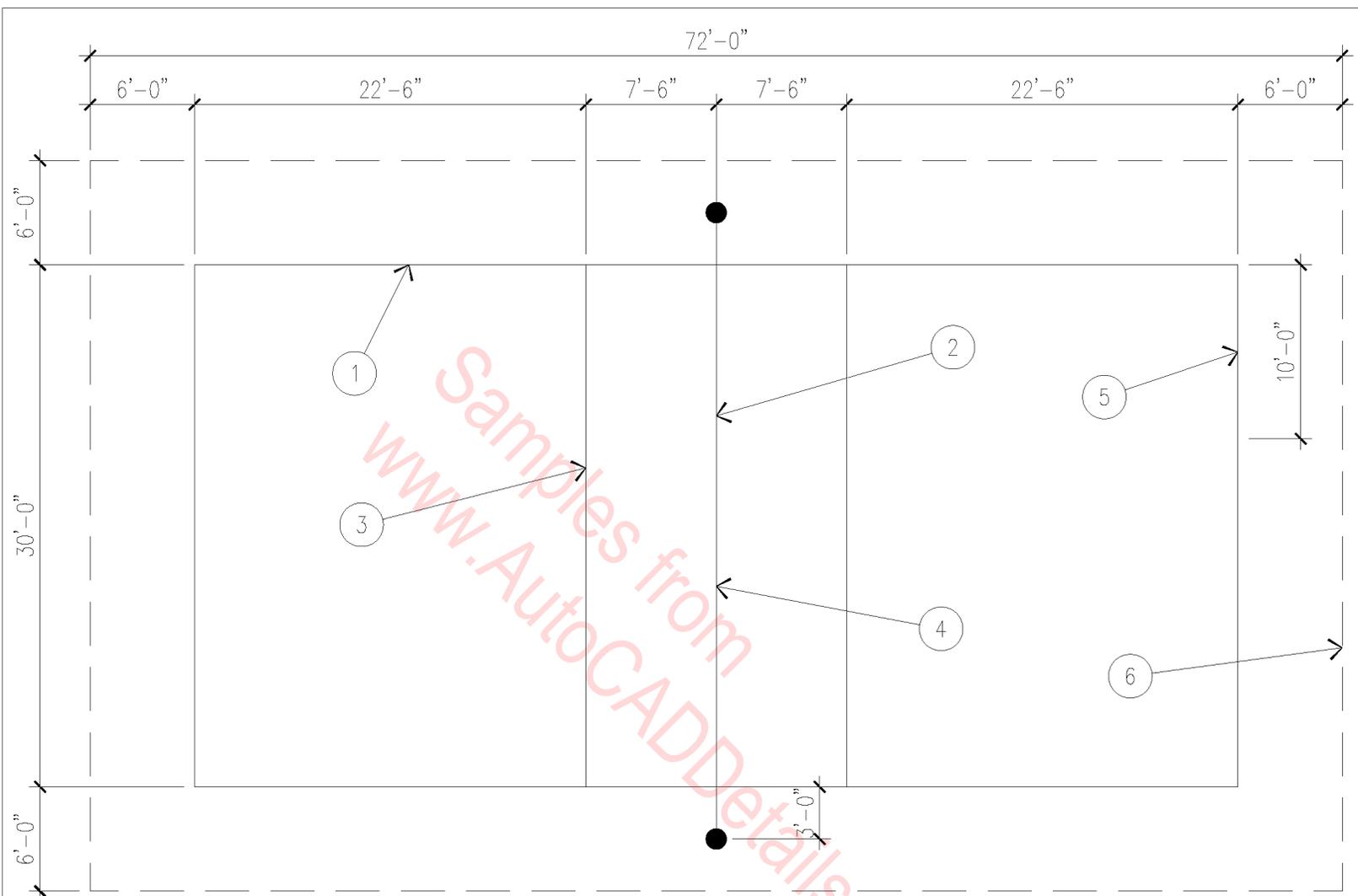
1. HALFWAY LINE.
2. PENALTY KICK MARK.
3. PENALTY AREA.
4. GOAL AREA.
5. TOUCH LINE.
6. 3'-0" Ø CORNER KICK AREA.



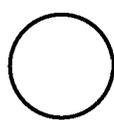
SOCCER FIELD

1" = 50'-0"

02D-3028



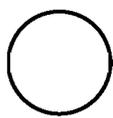
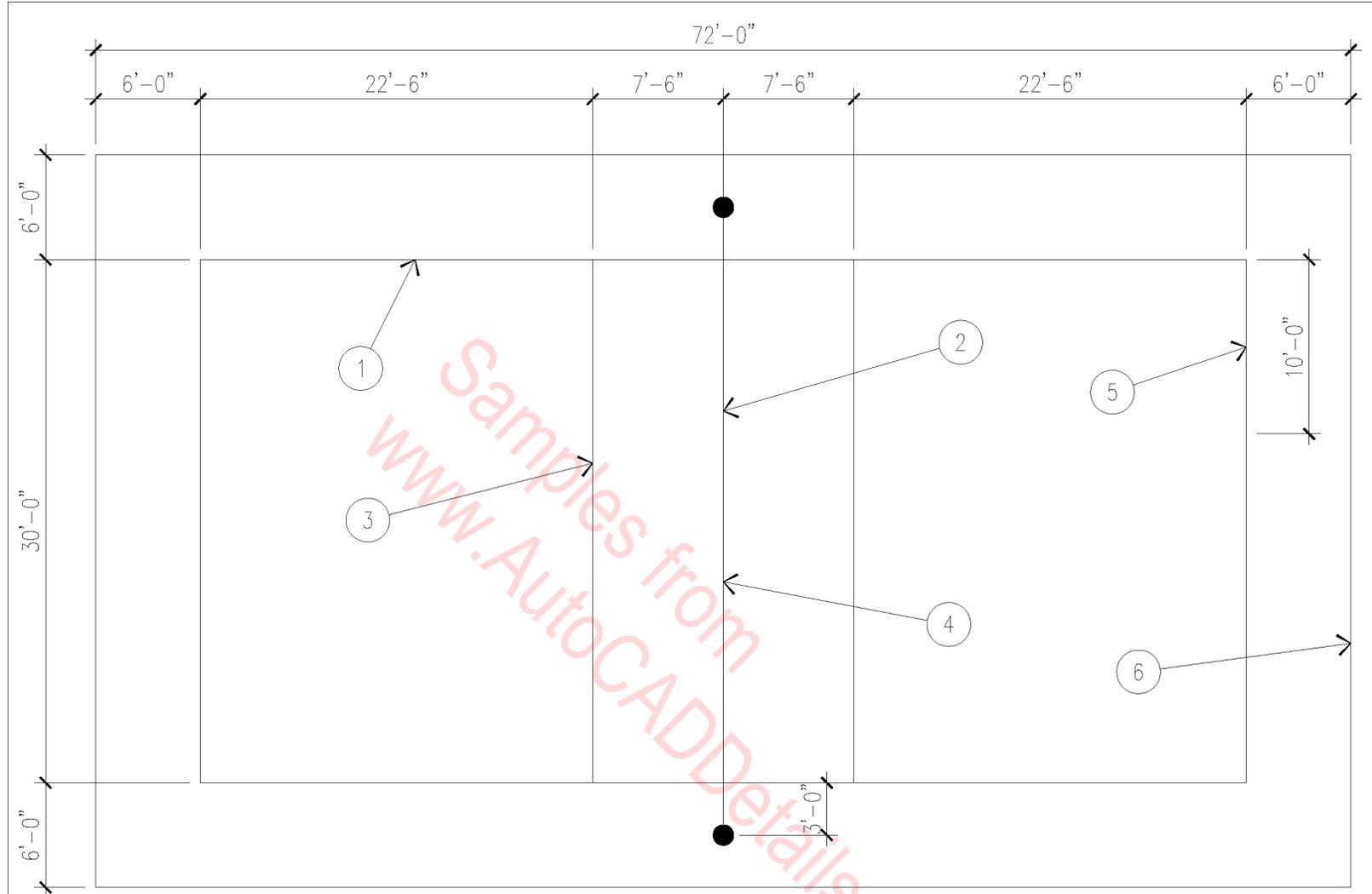
1. SIDE LINE.
2. CENTER LINE 4" WIDE.
3. SPIKING LINE.
4. NET: 3'-0" DEEP, 32'-0" LONG,
8'-0" TO TOP AT CENTER.
5. SERVICE AREA AT EACH END.
6. END LINE.



VOLLEYBALL COURT

1" = 10'-0"

02D-3029

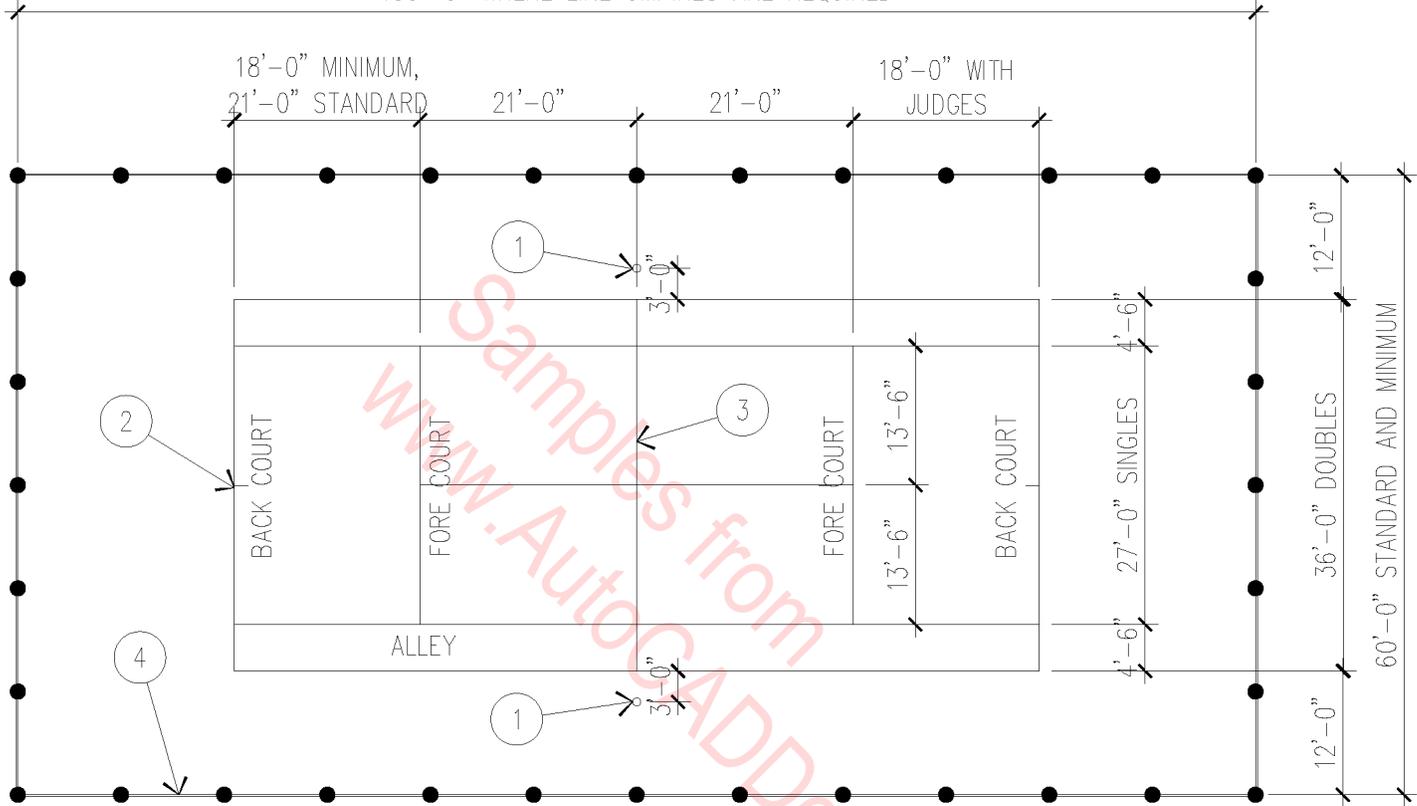


VOLLEYBALL COURT

1" = 10'-0"

02D-3029

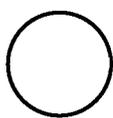
120'-0" MINIMUM FOR CHAMPIONSHIP PLAY,
130'-0" WHERE LINE UMPIRES ARE REQUIRED



1. POST.
2. CENTER MARK.
3. NET: 3'-0" AT CENTER, 3'-6" AT POSTS.
4. FULL ENCLOSURE CHAIN LINK FENCE AT 10'-0" HIGH.

NOTES:

- A. DIMENSIONS GIVEN TO OUTSIDE OF LINES EXCEPT CENTER LINE.
- B. LINES 2" WIDE EXCEPT BASE LINE MAY BE 4" WIDE.
- C. DISTANCE TO ADJACENT COURT TO BE 16'-0" FOR CHAMPIONSHIP PLAY, 12'-0" MINIMUM.

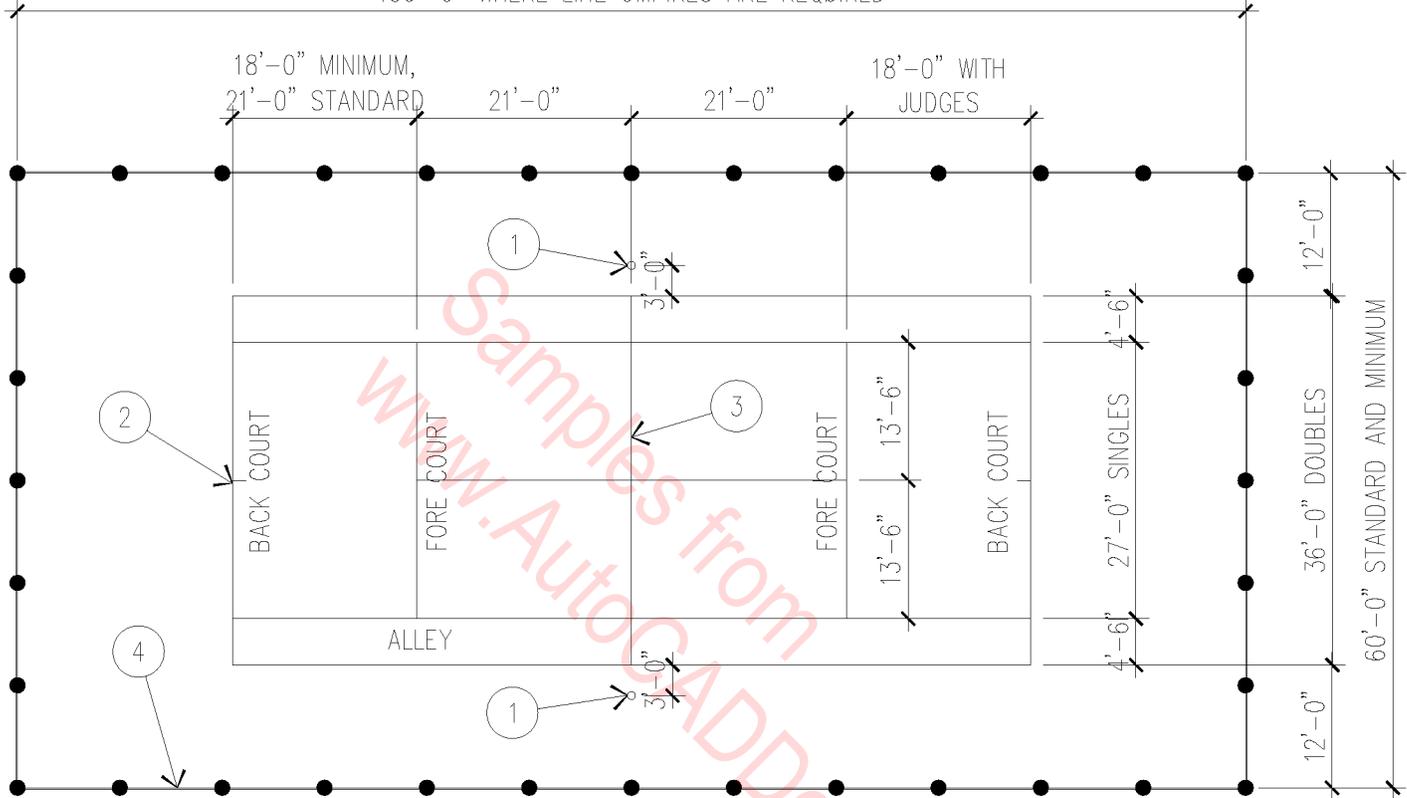


TENNIS COURT

1" = 20'-0"

02D-3030

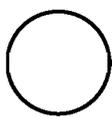
120'-0" MINIMUM FOR CHAMPIONSHIP PLAY,
130'-0" WHERE LINE UMPIRES ARE REQUIRED



1. POST.
2. CENTER MARK.
3. NET: 3'-0" AT CENTER, 3'-6" AT POSTS.
4. FULL ENCLOSURE CHAIN LINK FENCE AT 10'-0" HIGH.

NOTES:

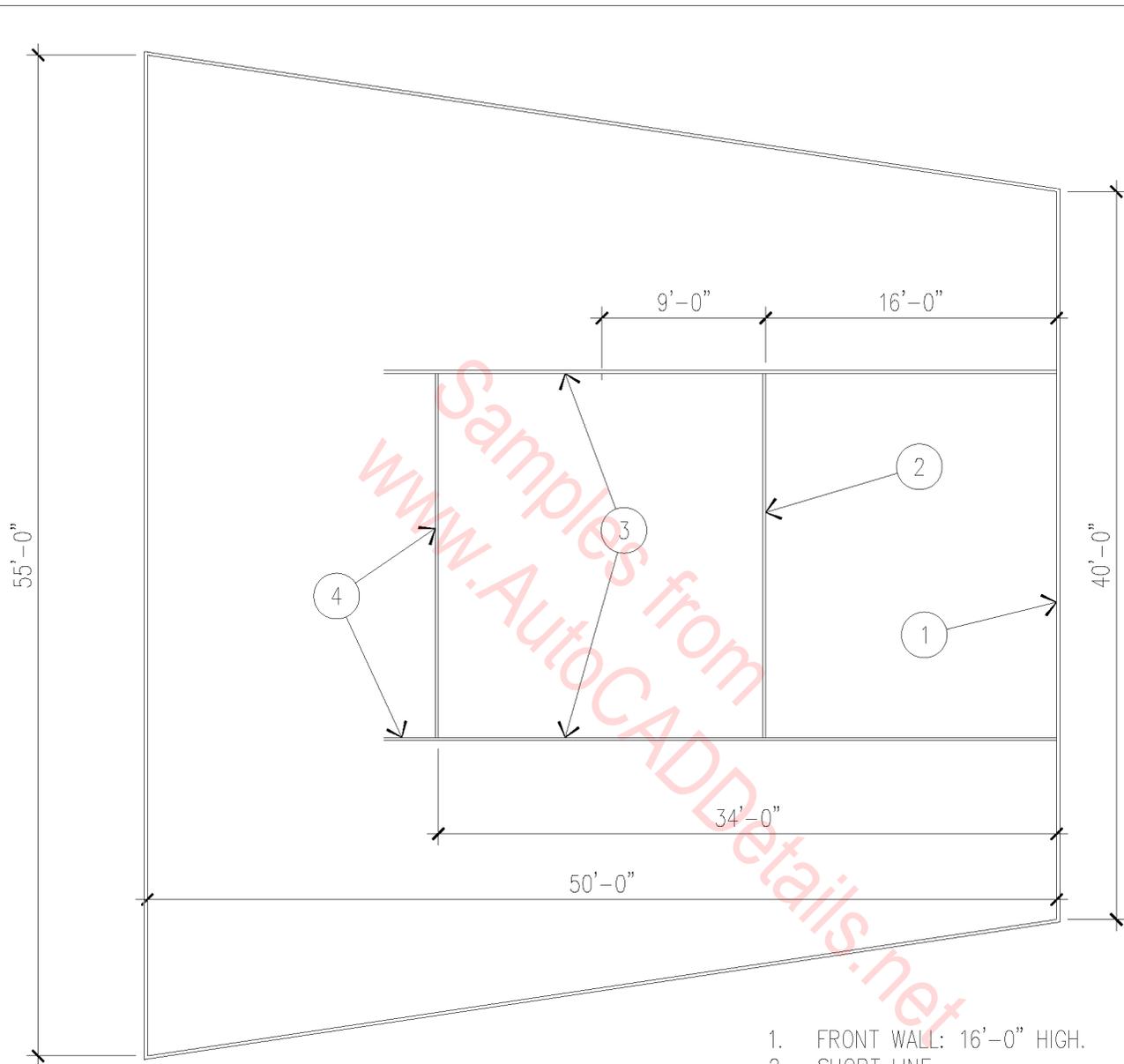
- A. DIMENSIONS GIVEN TO OUTSIDE OF LINES EXCEPT CENTER LINE.
- B. LINES 2" WIDE EXCEPT BASE LINE MAY BE 4" WIDE.
- C. DISTANCE TO ADJACENT COURT TO BE 16'-0" FOR CHAMPIONSHIP PLAY, 12'-0" MINIMUM.



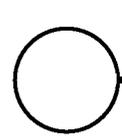
TENNIS COURT

1" = 20'-0"

02D-3030



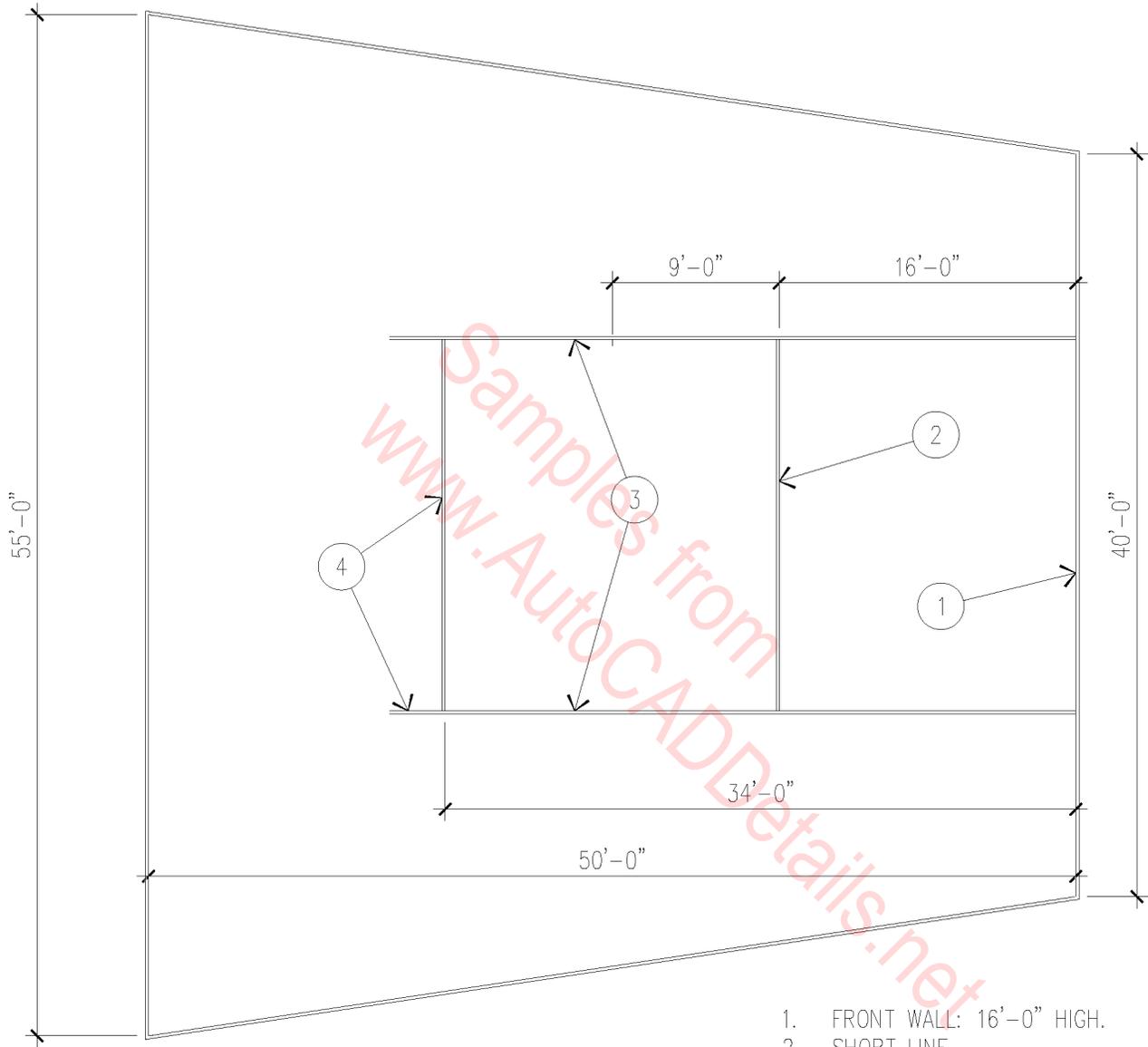
1. FRONT WALL: 16'-0" HIGH.
2. SHORT LINE.
3. SERVICE LINE.
4. ALL LINES SHALL BE RED OR BLACK AT 1 1/2" WIDE.



HANDBALL COURT

1" = 10'-0"

02D-3031



1. FRONT WALL: 16'-0" HIGH.
2. SHORT LINE.
3. SERVICE LINE.
4. ALL LINES SHALL BE RED OR BLACK AT 1 1/2" WIDE.

○ **HANDBALL COURT**
 1" = 10'-0"

02D-3031