



SEE SHEET L-3 FOR LANDSCAPE IRRIGATION PLAN

IRRIGATION LEGEND

- NON-PRESSURE LATERAL, 3/4" PE TUBING
- PRESSURE MAIN LINE, 1" PVC SCH 40 PIPE
- CONTROL VALVE, RAINBIRD LFV-100 AND RBY100MPTX FILTER
- CONTROLLER, RAINBIRD ESP-4M OUTDOOR CONTROLLER AND RSD RAIN SENSOR
- BALL VALVE, DURA PLASTIC, LINE-SIZED
- FIBCO 860U 3/4" REDUCED PRESSURE ZONE ASSEMBLY WITH UNION END BALL VALVES
- SLEEVE, PVC SCH 40, SIZED TWICE THE COMBINED DIAMETERS OF TUBING WITHIN, MINIMUM
- CONTROLLER STATION NUMBER
- POINT OF CONNECTION (PC)
- PROTECTIVE BOULDER

LEGEND

- Property Line
- Ex Water Line
- Ex Sanitary Sewer
- Ex Electric Line
- Ex Fiber Optics
- Ex Dirt Road
- Ex Gravel Road
- Ex Chain Link Fence
- Ex STL Fence
- Ex Barb Wire Fence
- Proposed Fence
- Prop. Water Line
- Ex. Telephone Manhole
- Prop. Yard Hydrant
- Prop. Water Meter

Rev #	Date	Description	By	CHKD

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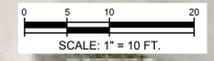
CITY OF SANTA FE
 SANTA FE, NM
CITY OF SANTA FE WATER DIVISION
HOSPITAL TANK REPLACEMENT PROJECT
WATER SUPPLY LINE FOR IRRIGATION

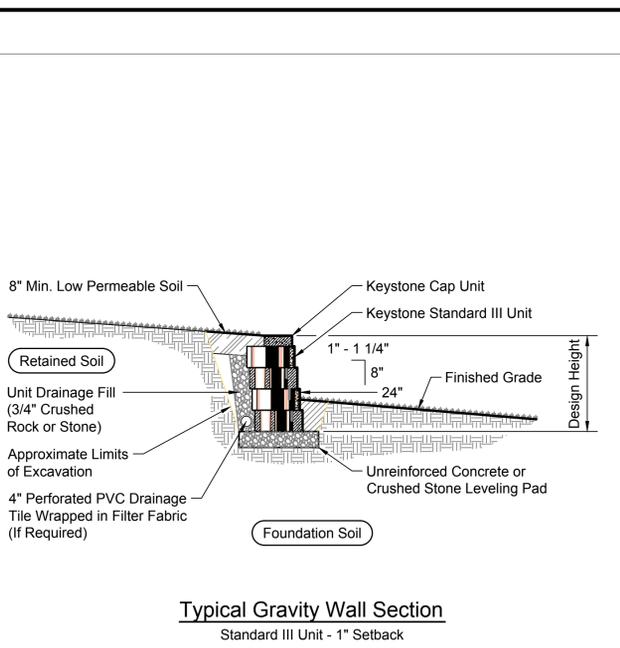
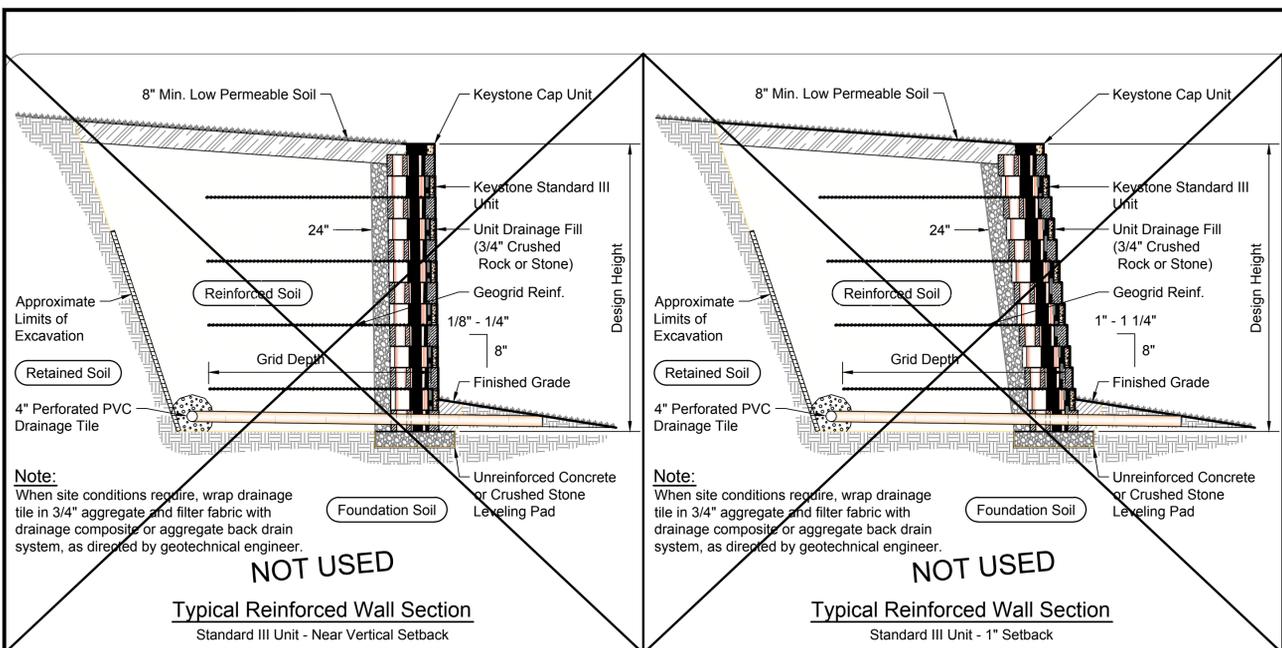


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Designed ECY	Drawn BE	Checked PGF
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Date: 2/19/2016
 Scale: Horiz: 1" = 10 FT
 Vert: N/A
 Project No: 9223842
 Sheet: M-7

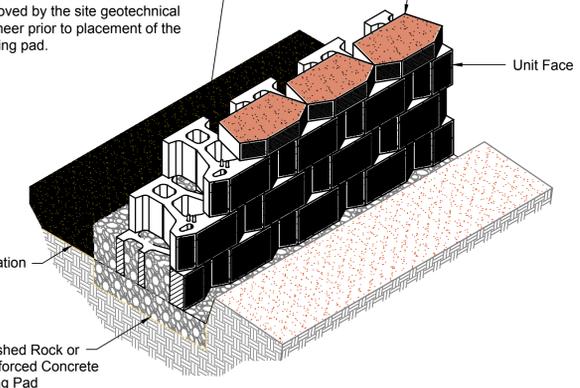




Base Leveling Pad Notes:

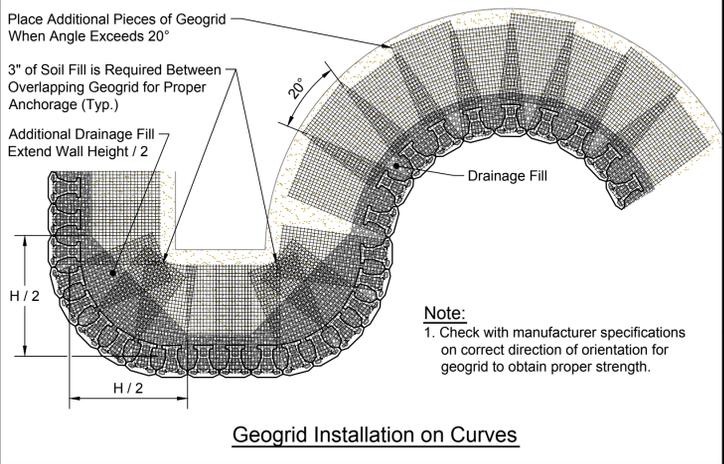
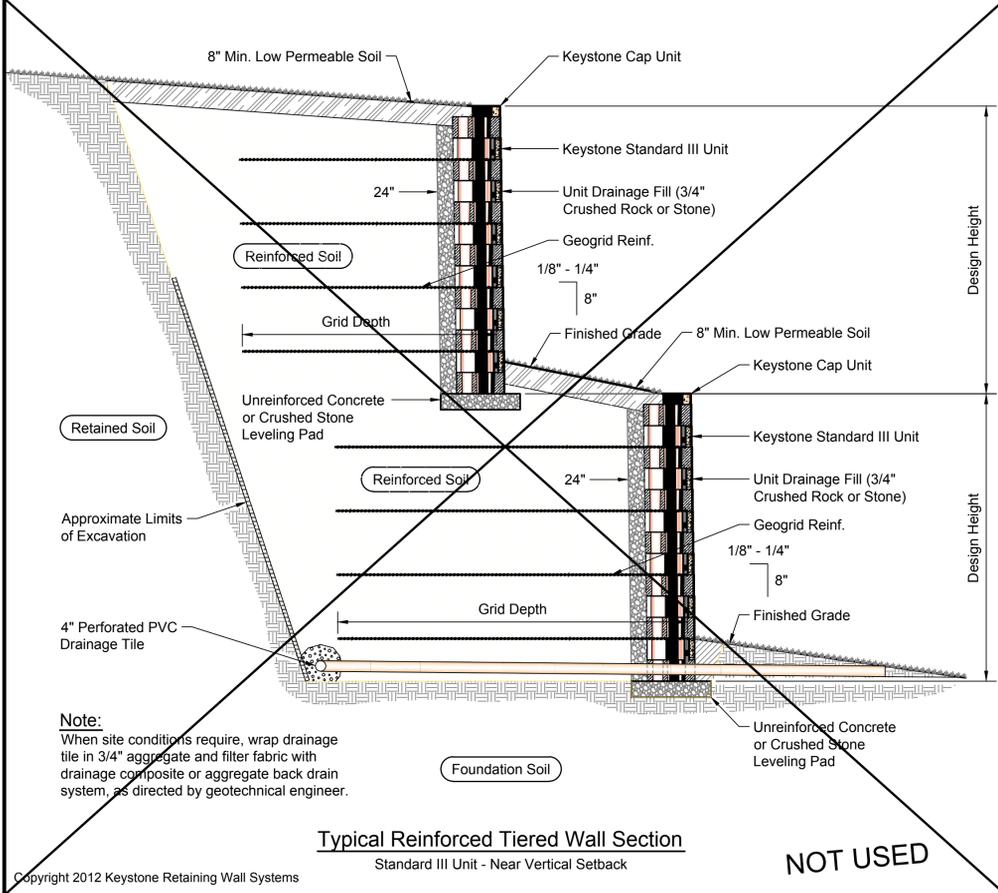
- The leveling pad is to be constructed of crushed stone or 2,000 psi unreinforced concrete.
- The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

Standard III Unit		Cap Unit	
Width:	18"	Width:	18"
*Depth:	18"	*Depth:	10 1/2"
Height:	8"	Height:	4"
*Weight:	86 lbs	*Weight:	45 lbs

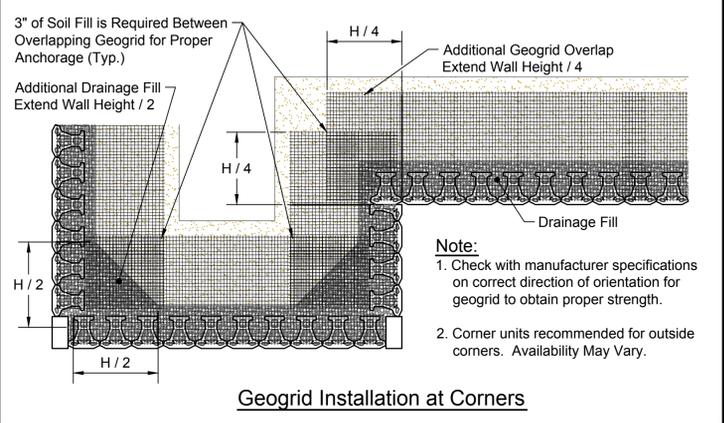


Standard III Unit/Base Pad Isometric Section View

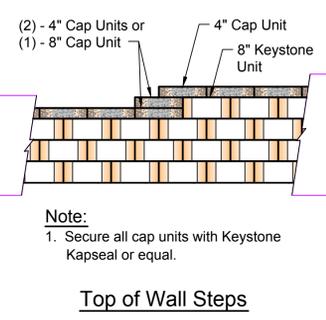
*Dimensions & Weight May Vary by Region



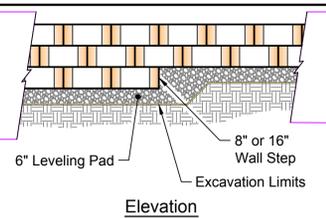
Geogrid Installation on Curves



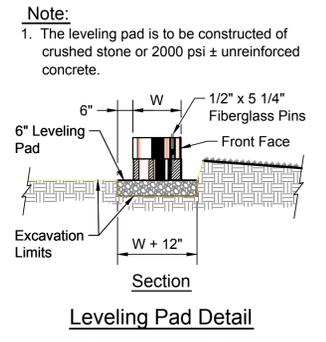
Geogrid Installation at Corners



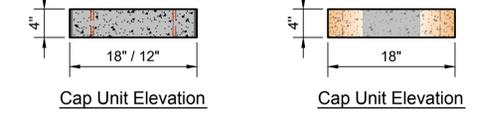
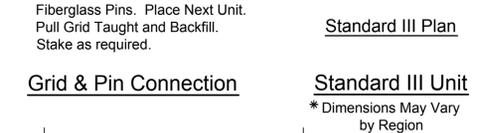
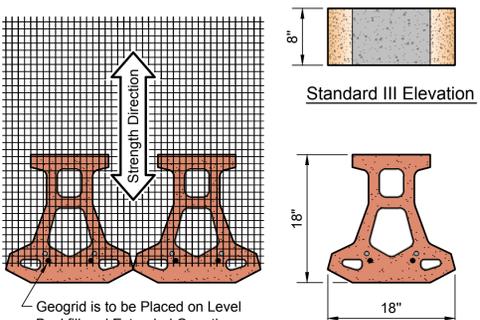
Top of Wall Steps



Elevation



Leveling Pad Detail



*Dimensions & Availability Will Vary by Region

Design is for internal stability of the KEYSTONE wall structure only. External stability, including but not limited to foundation and slope stability is the responsibility of the Owner. The design is based on the assumption that the materials within the retained mass, methods of construction, and quality of materials conform to KEYSTONE's specification for this project.

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No.	Date	Revision	By

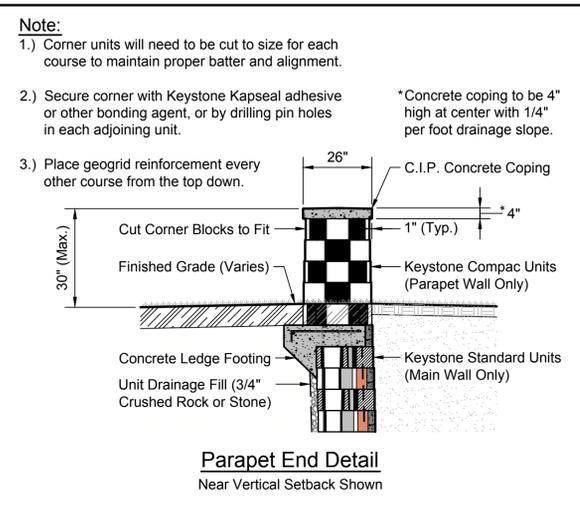
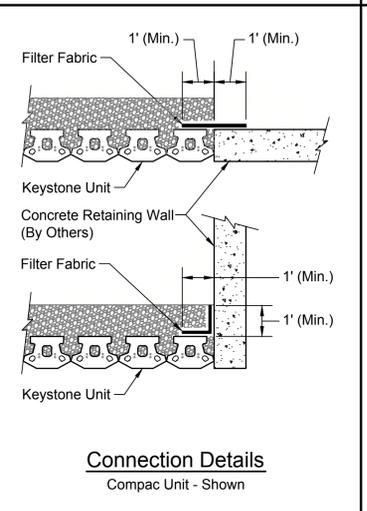
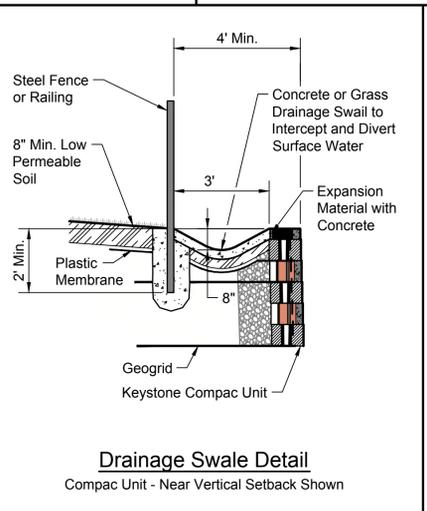
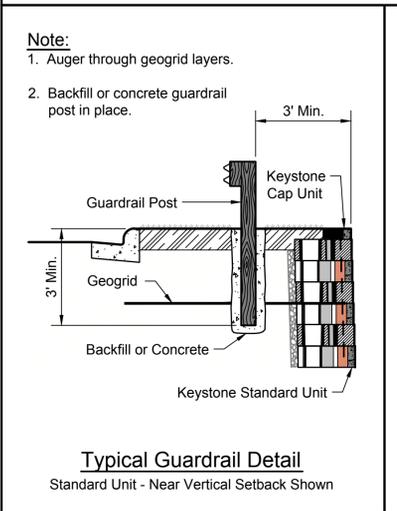
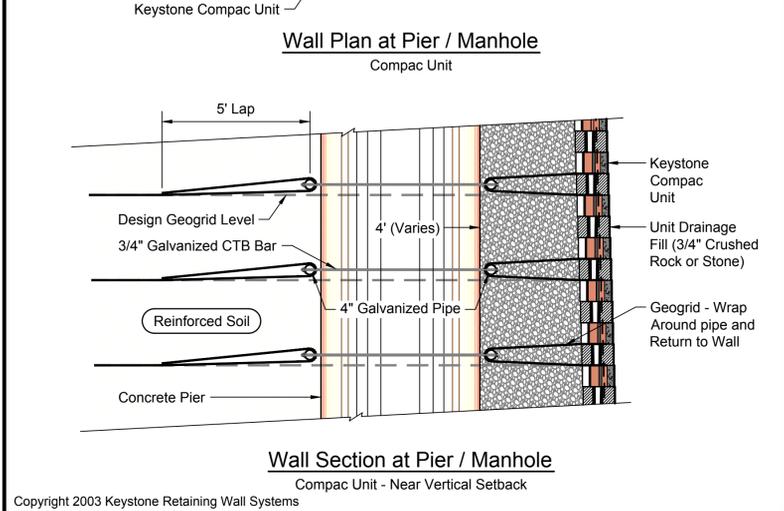
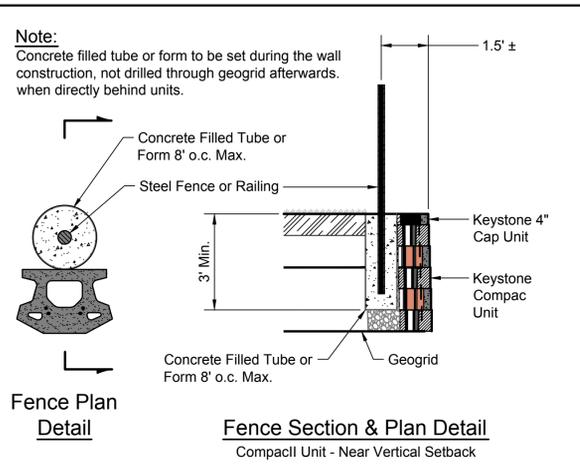
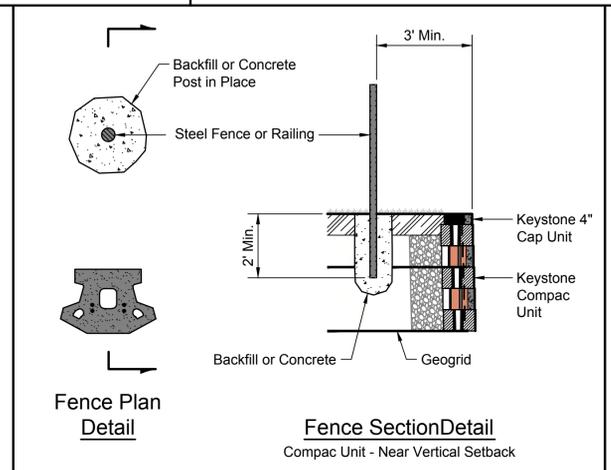
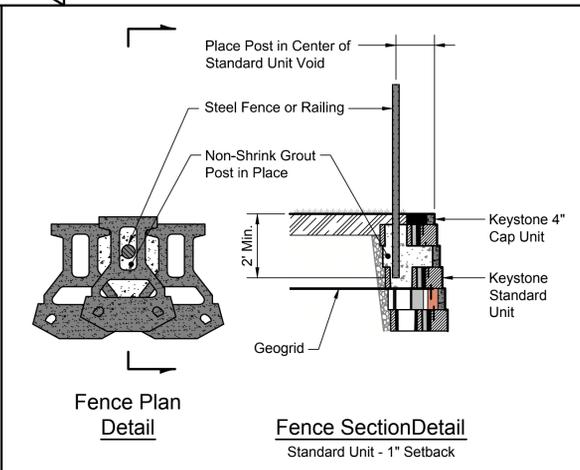
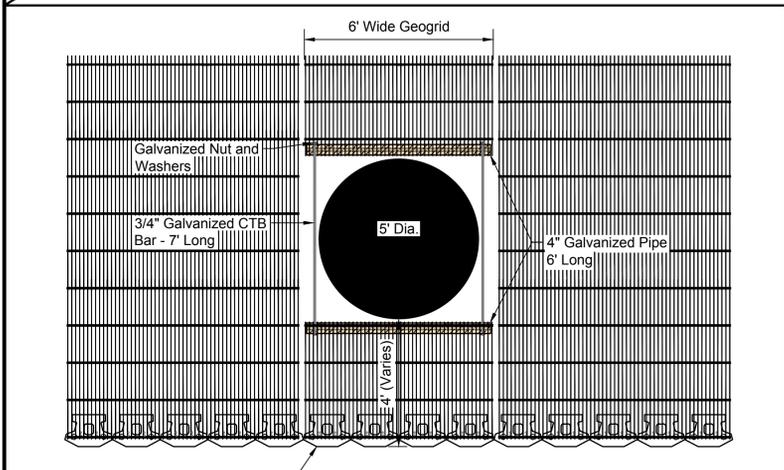
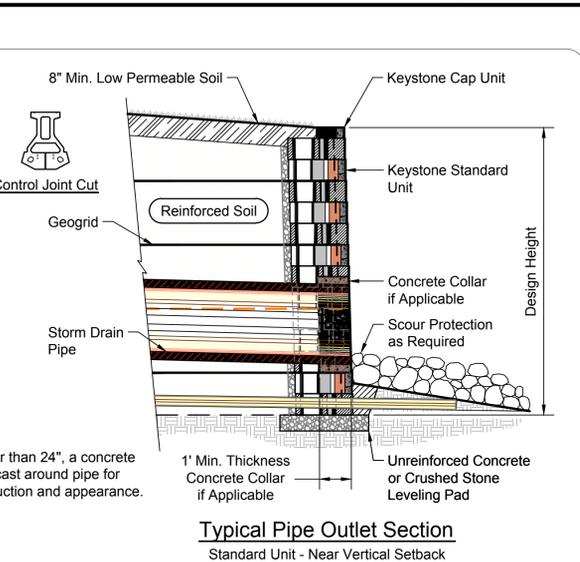
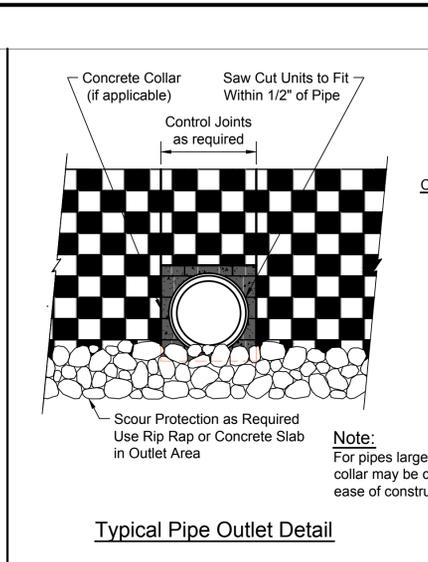
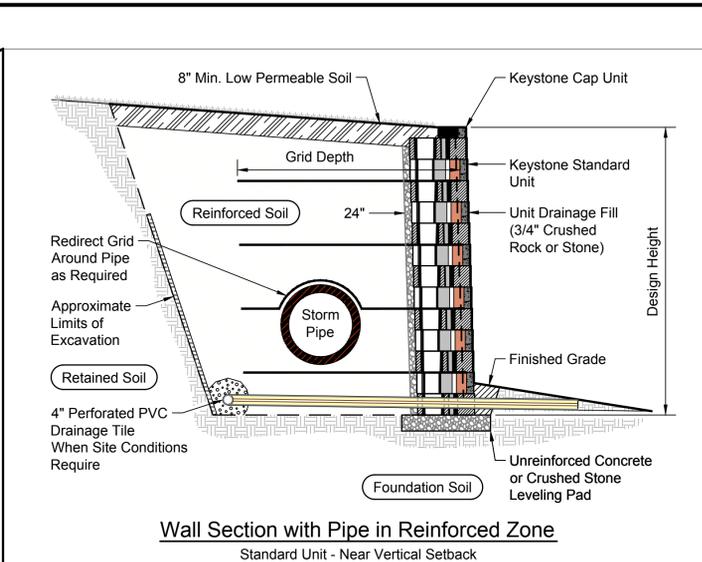
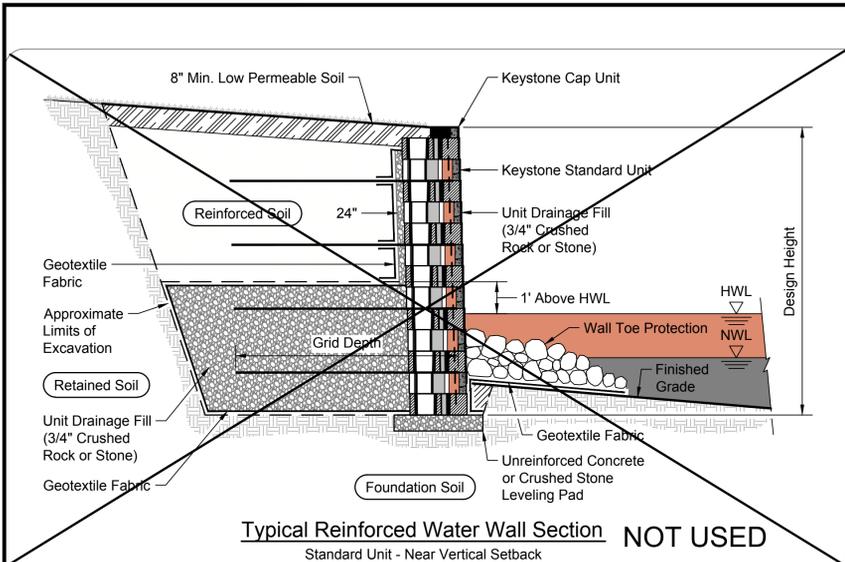


Designed By: RKM	Title: Standard III Unit 18 - Tri Plane Face Details	Date:
Checked By: CDM	Project: Keystone Retaining Wall Systems Typical Wall Details	Project No:
Scale: No Scale		Drawing No:

CHD
 Description
 Rev # Date
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 HOSPITAL TANK REPLACEMENT PROJECT
 STANDARD UNIT 18
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 Drawn: BE
 Checked: PGF
 Date: 2/19/2016
 Scale: Horiz: 1" = 10 FT
 Vert: N/A
 Project No: 9223842
 Sheet: D-2



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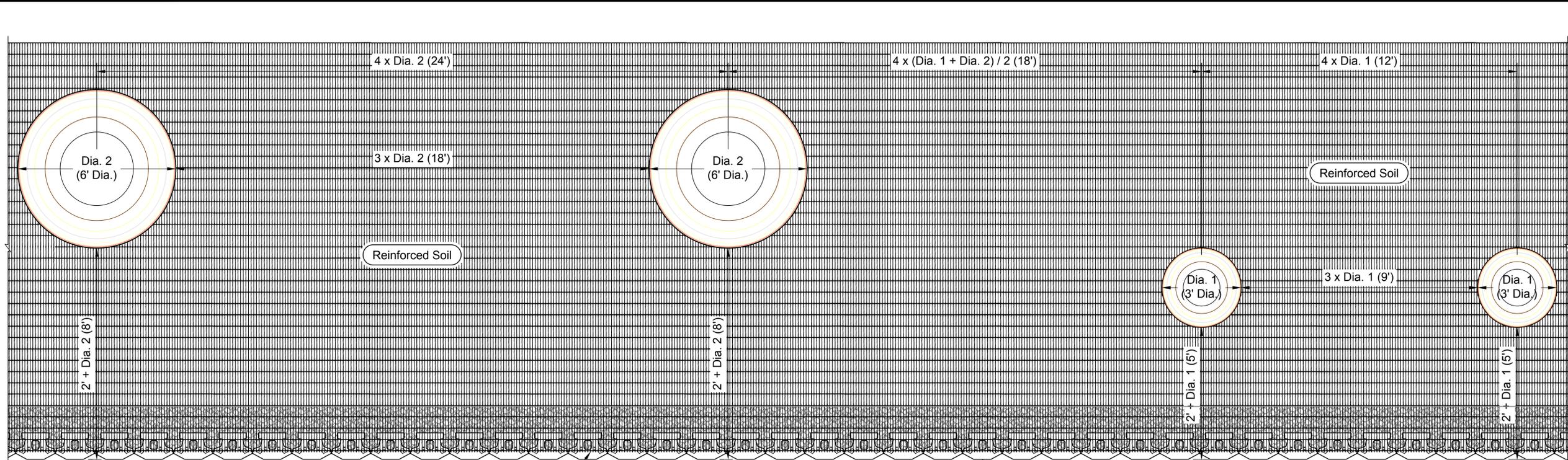
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KEYSTONE
 RETAINING WALL SYSTEMS
 A CONTECH COMPANY
 4444 W 78th Street
 Minneapolis, MN 55435
 952-897-1040

Designed By: RKM	Title: Conceptual Details	Date:
Checked By: CDM	Project: Keystone Retaining Wall Systems Typical Wall Details	Project No:
Scale: No Scale		Drawing No:

Designed By: RKM	Checked By: CDM	Scale: No Scale
Project: Keystone Retaining Wall Systems Typical Wall Details	Project No:	Drawing No:
Date: 2/19/2016	Scale: Horiz: 1" = 10 FT Vert: N/A	Project No: 9223842
Sheet: D-3		

CHG
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 Rev # Date
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 Vert: N/A
 Project No: 9223842
 Sheet: D-3



Typical Planting Limits Plan
Compac Unit - Near Vertical Setback Shown

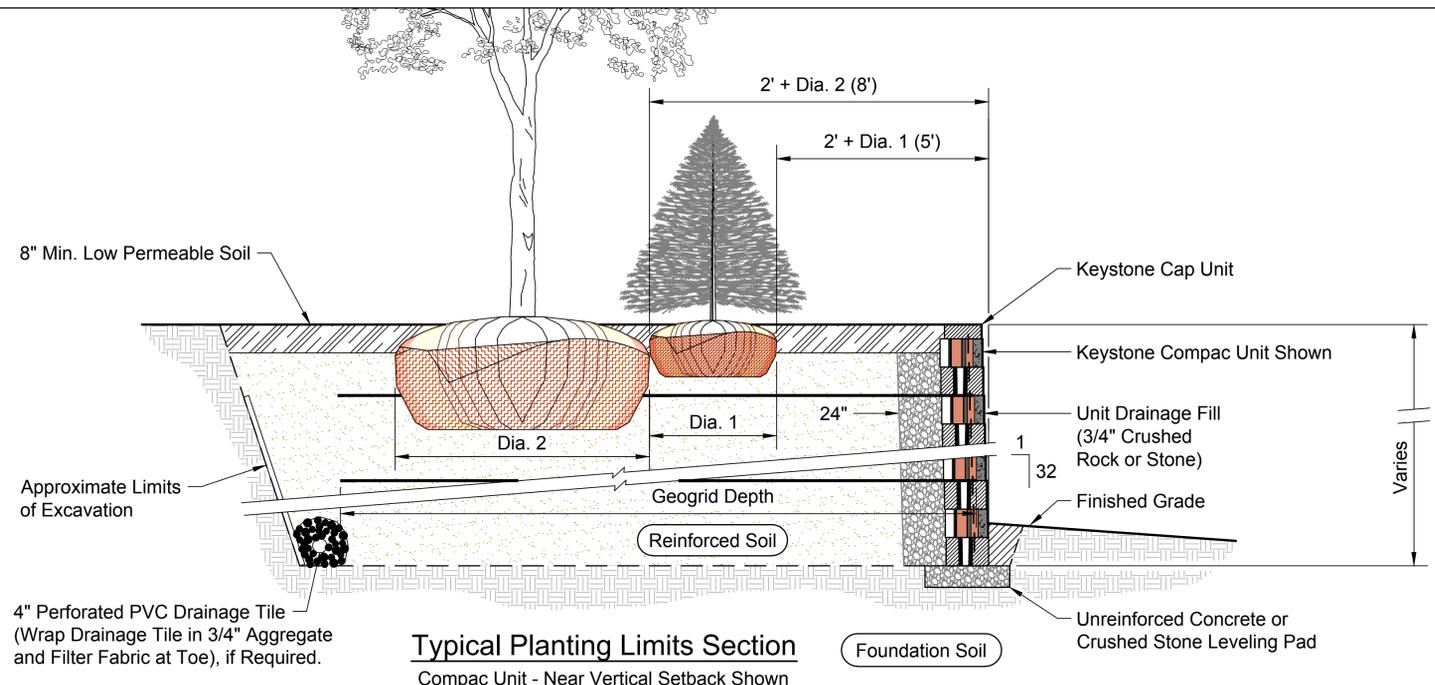
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 PLANTING DETAILS

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Date: 2/19/2016	Scale: Horiz: 1/2" = 1'-0"	
Project No: 9223842		Vert: N/A
Sheet: D-4		



Typical Planting Limits Section
Compac Unit - Near Vertical Setback Shown

- Note:**
1. All planting offsets shall be a minimum of 2' + the opening diameter as measured from face of the wall.
 2. Lateral spacing between openings shall be a minimum of 3 x opening diameter.
 3. Soil reinforcement shall be carefully cut to avoid disturbance of adjacent reinforcement.
 4. Only top two layers of reinforcement may be cut to allow planting of tree root ball.
 5. Extreme care shall be taken if installing irrigation systems to not damage soil reinforcement.
 6. Numbers in parenthesis are for example only.

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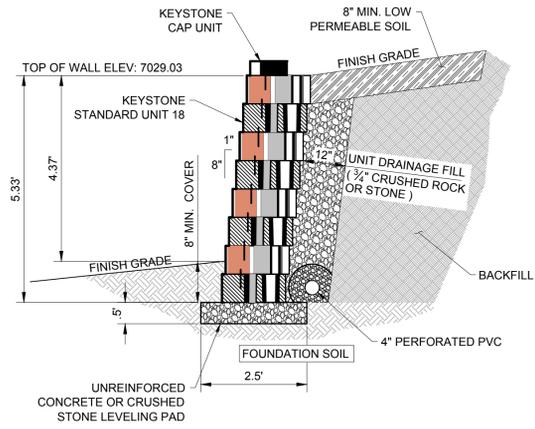
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Keystone Retaining Wall Systems
 Retaining Excellence
Details

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Scale:	No Scale

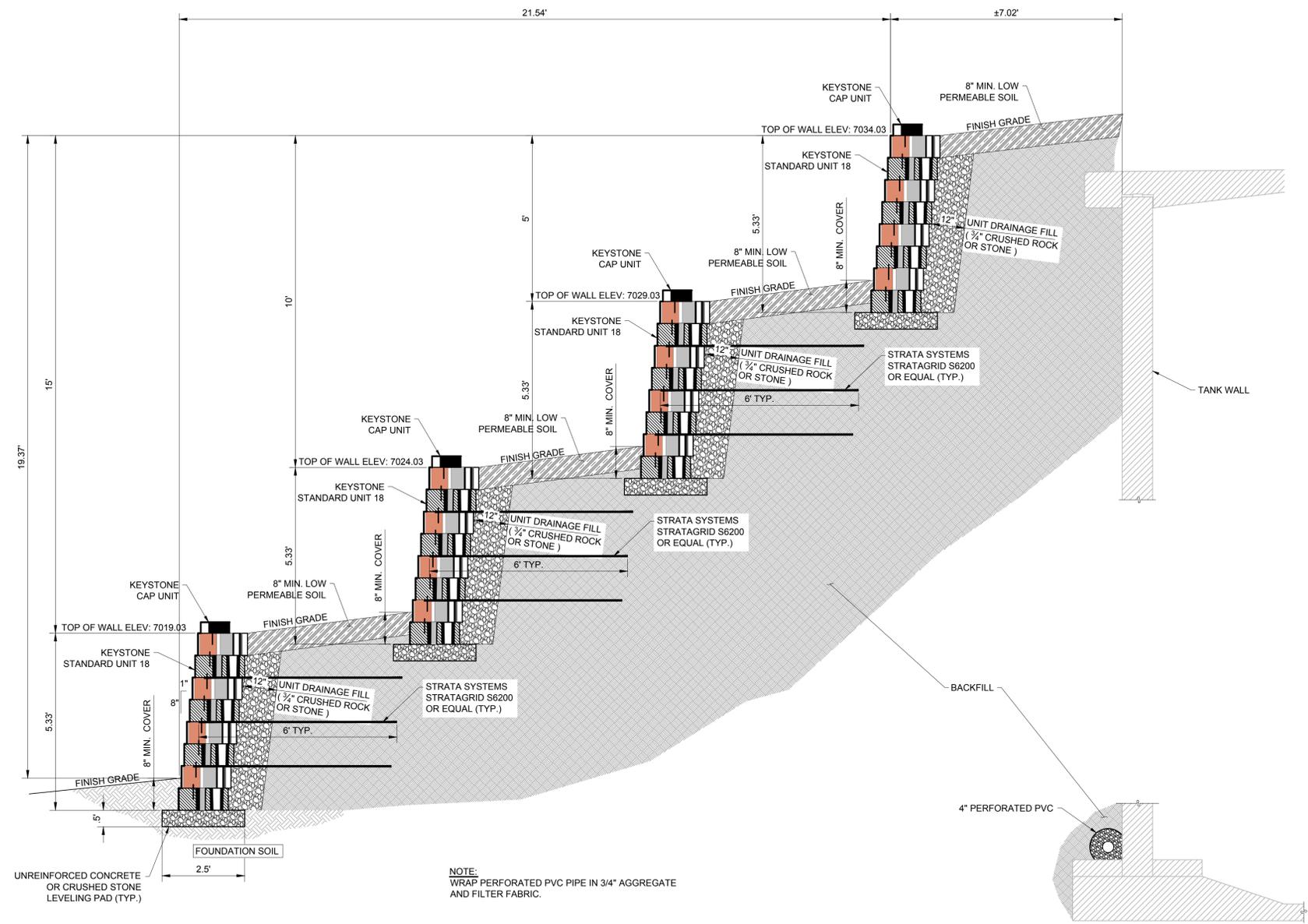
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NOTE:
WRAP PERFORATED PVC PIPE IN 3/4" AGGREGATE
AND FILTER FABRIC.

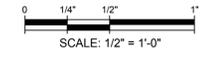
1 TYPICAL REINFORCED WALL SECTION
D-5
STANDARD UNIT 1" SETBACK
(WALL ALIGNMENT STA: 3+68.21 TO STA: 3+89.60)

GENERAL NOTES:
MATERIALS AND SPECIFICATIONS PER
MANUFACTURER'S DETAILS



NOTE:
WRAP PERFORATED PVC PIPE IN 3/4" AGGREGATE
AND FILTER FABRIC.

2 TYPICAL REINFORCED 4 TIERED WALL SECTION
D-5
STANDARD UNIT 1" SETBACK
(WALL ALIGNMENT STA: 0+60.86 TO STA: 1+31.10)



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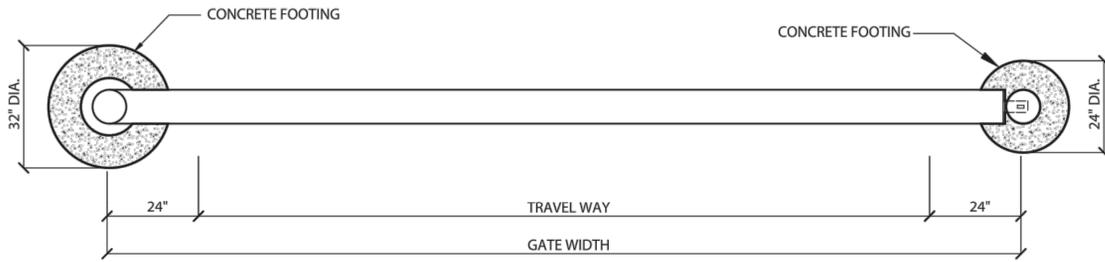
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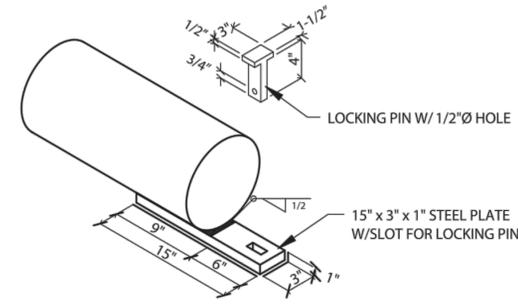
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GYQ	DJB	GYQ
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Vert: N/A		
Project No: 9223842		
Sheet: D-5		

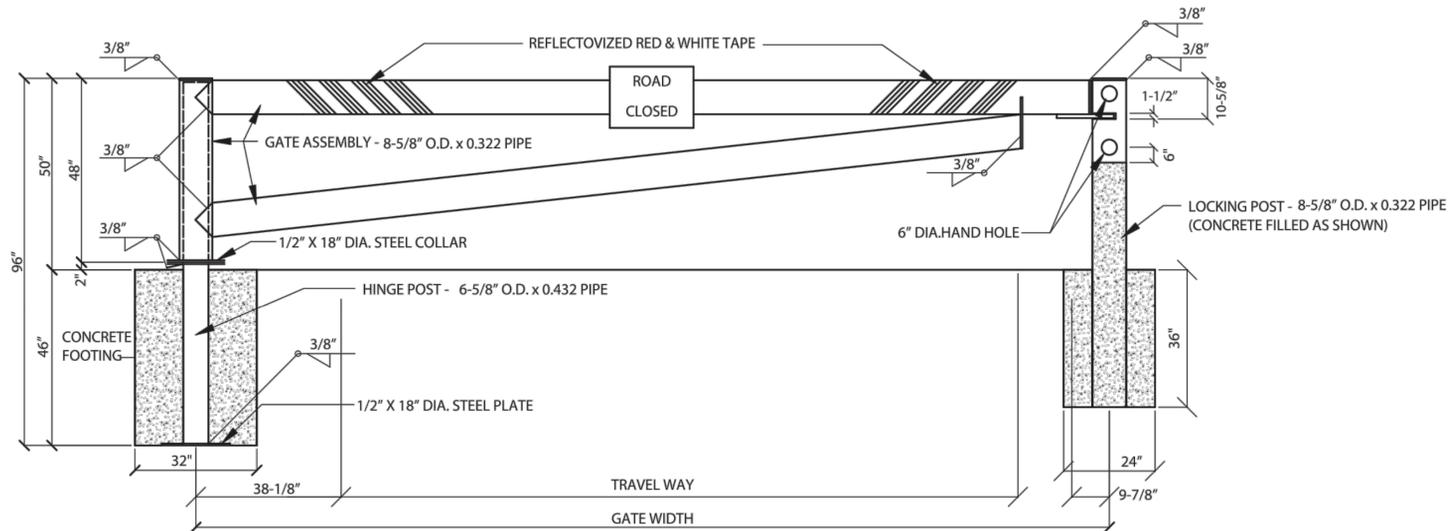
NOTE: LOCKING POSTS, ONE EACH, WILL BE REQUIRED AT THE OPEN AND CLOSED POSITIONS OF THE GATE



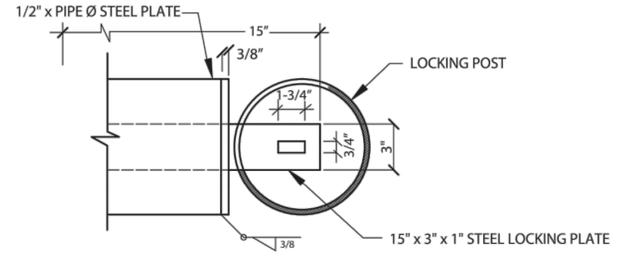
① PLAN VIEW
Not to Scale



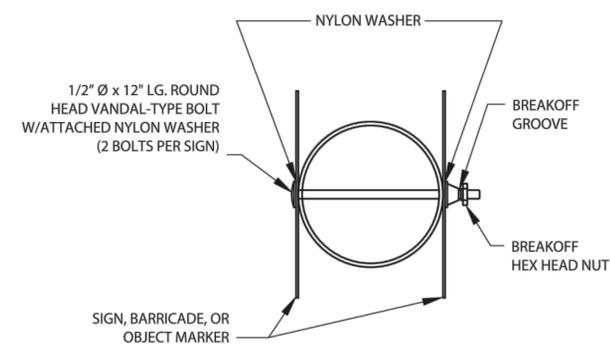
④ ISOMETRIC-LOCKING SYSTEM
Not to Scale



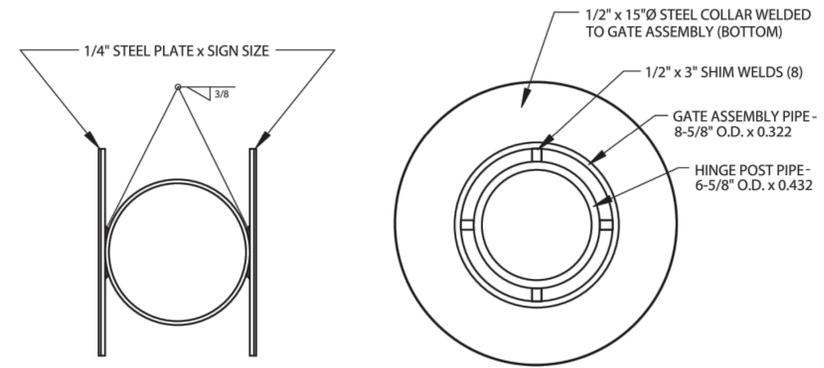
② ELEVATION
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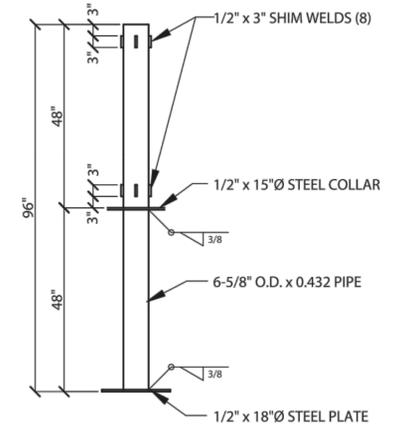
⑤ SECTION THRU LOCKING POST
Not to Scale



③ DETAILS-GATE ATTACHMENTS
Not to Scale



⑥ SECTION @ HINGE POST
Not to Scale



⑦ DETAIL-HINGE POST
Not to Scale

- NOTES:
- PIPE SHALL MEET THE REQUIREMENTS OF ASTM A 53, GRADE B. PIPE SIZE SHALL BE AS SHOWN ON THE DRAWINGS
 - CONCRETE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIFICATION SECTION 601.
 - GATE AND LOCKING POSTS SHALL BE PRIMED (1 COAT) AND PAINTED (2 COATS), COLOR WHITE, IN ACCORDANCE WITH SECTION 708-PAINT AFTER FABRICATION.

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SMA

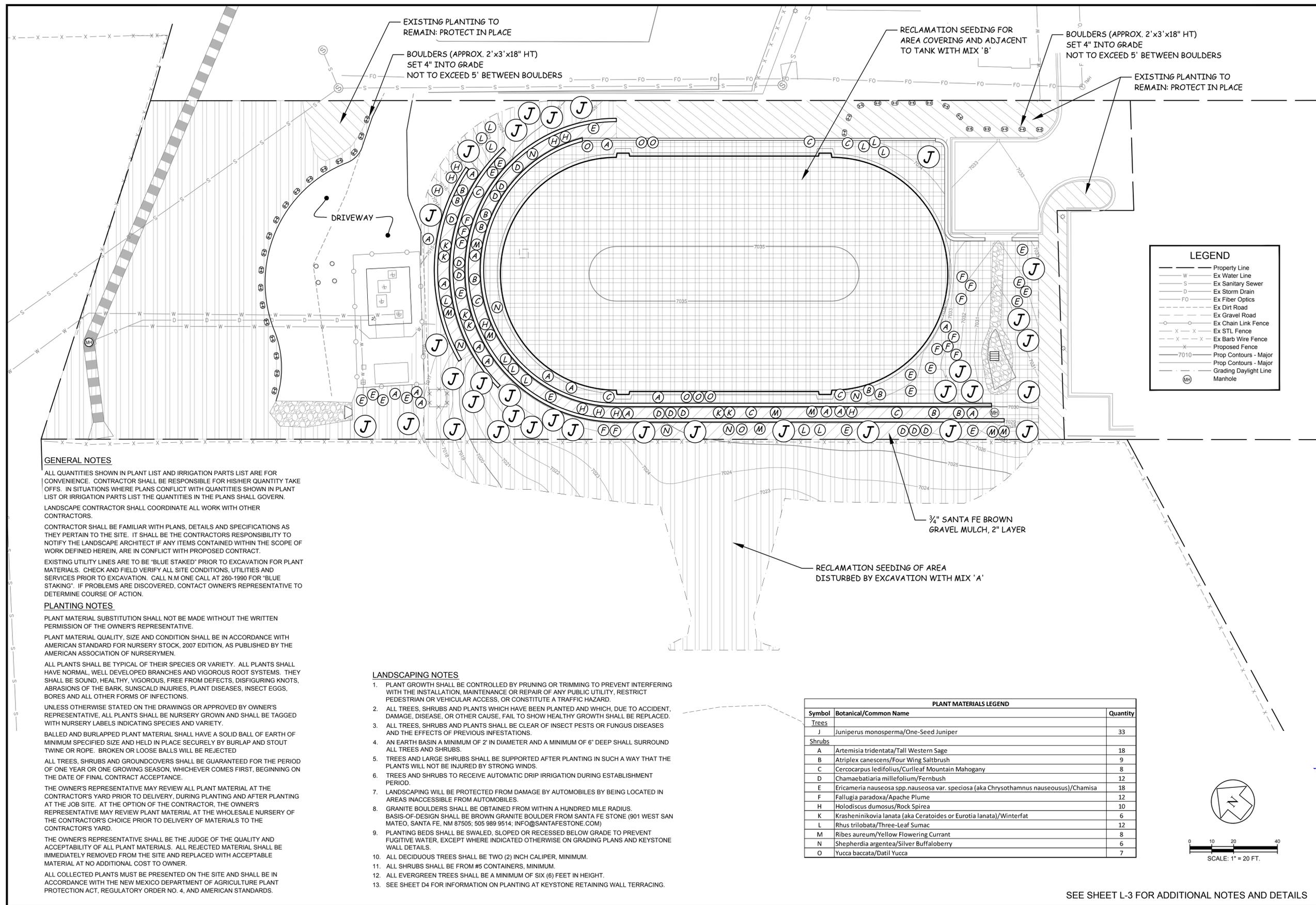
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CITY OF SANTA FE WATER DIVISION
HOSPITAL TANK REPLACEMENT PROJECT
ROAD CLOSURE GATE DETAILS

PETER G. FANT
NEW MEXICO
19203
PROFESSIONAL ENGINEER

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Date:	2/19/2016	
Scale:	Horiz: NTS Vert:	
Project No:	9223842	
Sheet:	D-8	



LEGEND

- Property Line
- Ex Water Line
- Ex Sanitary Sewer
- Ex Storm Drain
- FO Ex Fiber Optics
- Ex Dirt Road
- Ex Gravel Road
- Ex Chain Link Fence
- Ex STL Fence
- Ex Barb Wire Fence
- Proposed Fence
- 7010 Prop Contours - Major
- Prop Contours - Major
- Grading Daylight Line
- ⊕ Manhole

GENERAL NOTES

ALL QUANTITIES SHOWN IN PLANT LIST AND IRRIGATION PARTS LIST ARE FOR CONVENIENCE. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER QUANTITY TAKE OFFS. IN SITUATIONS WHERE PLANS CONFLICT WITH QUANTITIES SHOWN IN PLANT LIST OR IRRIGATION PARTS LIST THE QUANTITIES IN THE PLANS SHALL GOVERN.

LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS.

CONTRACTOR SHALL BE FAMILIAR WITH PLANS, DETAILS AND SPECIFICATIONS AS THEY PERTAIN TO THE SITE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE LANDSCAPE ARCHITECT IF ANY ITEMS CONTAINED WITHIN THE SCOPE OF WORK DEFINED HEREIN, ARE IN CONFLICT WITH PROPOSED CONTRACT.

EXISTING UTILITY LINES ARE TO BE 'BLUE STAKED' PRIOR TO EXCAVATION FOR PLANT MATERIALS. CHECK AND FIELD VERIFY ALL SITE CONDITIONS, UTILITIES AND SERVICES PRIOR TO EXCAVATION. CALL N.M ONE CALL AT 260-1990 FOR 'BLUE STAKING'. IF PROBLEMS ARE DISCOVERED, CONTACT OWNER'S REPRESENTATIVE TO DETERMINE COURSE OF ACTION.

PLANTING NOTES

PLANT MATERIAL SUBSTITUTION SHALL NOT BE MADE WITHOUT THE WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.

PLANT MATERIAL QUALITY, SIZE AND CONDITION SHALL BE IN ACCORDANCE WITH AMERICAN STANDARD FOR NURSERY STOCK, 2007 EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY. ALL PLANTS SHALL HAVE NORMAL, WELL DEVELOPED BRANCHES AND VIGOROUS ROOT SYSTEMS. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM DEFECTS, DISFIGURING KNOTS, ABRASIONS OF THE BARK, SUNSCALD INJURIES, PLANT DISEASES, INSECT EGGS, BORES AND ALL OTHER FORMS OF INFECTIONS.

UNLESS OTHERWISE STATED ON THE DRAWINGS OR APPROVED BY OWNER'S REPRESENTATIVE, ALL PLANTS SHALL BE NURSERY GROWN AND SHALL BE TAGGED WITH NURSERY LABELS INDICATING SPECIES AND VARIETY.

BALLED AND BURLAPPED PLANT MATERIAL SHALL HAVE A SOLID BALL OF EARTH OF MINIMUM SPECIFIED SIZE AND HELD IN PLACE SECURELY BY BURLAP AND STOUT TWINE OR ROPE. BROKEN OR LOOSE BALLS WILL BE REJECTED.

ALL TREES, SHRUBS AND GROUNDCOVERS SHALL BE GUARANTEED FOR THE PERIOD OF ONE YEAR OR ONE GROWING SEASON, WHICHEVER COMES FIRST, BEGINNING ON THE DATE OF FINAL CONTRACT ACCEPTANCE.

THE OWNER'S REPRESENTATIVE MAY REVIEW ALL PLANT MATERIAL AT THE CONTRACTOR'S YARD PRIOR TO DELIVERY, DURING PLANTING AND AFTER PLANTING AT THE JOB SITE. AT THE OPTION OF THE CONTRACTOR, THE OWNER'S REPRESENTATIVE MAY REVIEW PLANT MATERIAL AT THE WHOLESALE NURSERY OF THE CONTRACTOR'S CHOICE PRIOR TO DELIVERY OF MATERIALS TO THE CONTRACTOR'S YARD.

THE OWNER'S REPRESENTATIVE SHALL BE THE JUDGE OF THE QUALITY AND ACCEPTABILITY OF ALL PLANT MATERIALS. ALL REJECTED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND REPLACED WITH ACCEPTABLE MATERIAL AT NO ADDITIONAL COST TO OWNER.

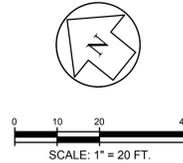
ALL COLLECTED PLANTS MUST BE PRESENTED ON THE SITE AND SHALL BE IN ACCORDANCE WITH THE NEW MEXICO DEPARTMENT OF AGRICULTURE PLANT PROTECTION ACT, REGULATORY ORDER NO. 4, AND AMERICAN STANDARDS.

LANDSCAPING NOTES

- PLANT GROWTH SHALL BE CONTROLLED BY PRUNING OR TRIMMING TO PREVENT INTERFERING WITH THE INSTALLATION, MAINTENANCE OR REPAIR OF ANY PUBLIC UTILITY, RESTRICT PEDESTRIAN OR VEHICULAR ACCESS, OR CONSTITUTE A TRAFFIC HAZARD.
- ALL TREES, SHRUBS AND PLANTS WHICH HAVE BEEN PLANTED AND WHICH, DUE TO ACCIDENT, DAMAGE, DISEASE, OR OTHER CAUSE, FAIL TO SHOW HEALTHY GROWTH SHALL BE REPLACED.
- ALL TREES, SHRUBS AND PLANTS SHALL BE CLEAR OF INSECT PESTS OR FUNGUS DISEASES AND THE EFFECTS OF PREVIOUS INFESTATIONS.
- AN EARTH BASIN A MINIMUM OF 2' IN DIAMETER AND A MINIMUM OF 6" DEEP SHALL SURROUND ALL TREES AND SHRUBS.
- TREES AND LARGE SHRUBS SHALL BE SUPPORTED AFTER PLANTING IN SUCH A WAY THAT THE PLANTS WILL NOT BE INJURED BY STRONG WINDS.
- TREES AND SHRUBS TO RECEIVE AUTOMATIC DRIP IRRIGATION DURING ESTABLISHMENT PERIOD.
- LANDSCAPING WILL BE PROTECTED FROM DAMAGE BY AUTOMOBILES BY BEING LOCATED IN AREAS INACCESSIBLE FROM AUTOMOBILES.
- GRANITE BOULDERS SHALL BE OBTAINED FROM WITHIN A HUNDRED MILE RADIUS. BASIS-OF-DESIGN SHALL BE BROWN GRANITE BOULDER FROM SANTA FE STONE (901 WEST SAN MATEO, SANTA FE, NM 87505; 505 989 9514; INFO@SANTAFESTONE.COM)
- PLANTING BEDS SHALL BE SWALED, SLOPED OR RECESSED BELOW GRADE TO PREVENT FUGITIVE WATER, EXCEPT WHERE INDICATED OTHERWISE ON GRADING PLANS AND KEYSTONE WALL DETAILS.
- ALL DECIDUOUS TREES SHALL BE TWO (2) INCH CALIPER, MINIMUM.
- ALL SHRUBS SHALL BE FROM #5 CONTAINERS, MINIMUM.
- ALL EVERGREEN TREES SHALL BE A MINIMUM OF SIX (6) FEET IN HEIGHT.
- SEE SHEET D4 FOR INFORMATION ON PLANTING AT KEYSTONE RETAINING WALL TERRACING.

PLANT MATERIALS LEGEND

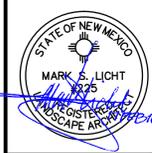
Symbol	Botanical/Common Name	Quantity
Trees		
J	Juniperus monosperma/One-Seed Juniper	33
Shrubs		
A	Artemisia tridentata/Tall Western Sage	18
B	Atriplex canescens/Four Wing Saltbrush	9
C	Cercocarpus ledifolius/Curlleaf Mountain Mahogany	8
D	Chamaebatiaria millefolium/Fernbush	12
E	Ericameria nauseosa spp. nauseosa var. speciosa (aka Chrysothamnus nauseosus)/Chamisa	18
F	Fallugia paradoxa/Apache Plume	12
H	Holodiscus dumosus/Rock Spirea	10
K	Krashenikovia lanata (aka Ceratoides or Eurotia lanata)/Winterfat	6
L	Rhus trilobata/Three-Leaf Sumac	12
M	Ribes aureum/Yellow Flowering Currant	8
N	Shepherdia argentea/Silver Buffaloberry	6
O	Yucca baccata/Datil Yucca	7



Rev #	Date	Description	By	CHKD

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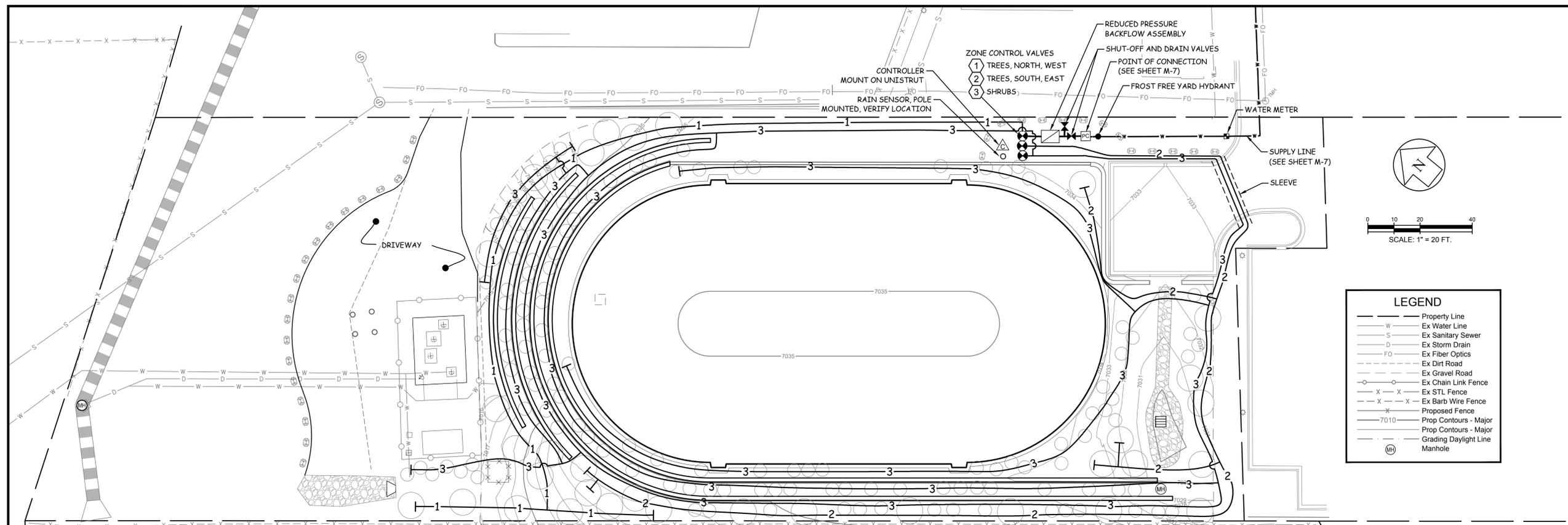
CITY OF SANTA FE
 SANTA FE, NM
CITY OF SANTA FE WATER DIVISION
HOSPITAL TANK REPLACEMENT PROJECT
LANDSCAPE PLAN



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Designed: MSL
 Drawn: BE
 Checked: MSL
 Date: 2/19/2016
 Scale: Horiz: 1" = 20 FT
 Vert: N/A
 Project No: 9223842
 Sheet: L-1

SEE SHEET L-3 FOR ADDITIONAL NOTES AND DETAILS



Rev #	Date	Description	By	CHKD

LEGEND

—	Property Line
— W —	Ex Water Line
— S —	Ex Sanitary Sewer
— D —	Ex Storm Drain
— FO —	Ex Fiber Optics
—	Ex Dirt Road
—	Ex Gravel Road
—	Ex Chain Link Fence
— X — X —	Ex STL Fence
— X — X —	Ex Barb Wire Fence
— X —	Proposed Fence
— 7010 —	Prop Contours - Major
—	Prop Contours - Minor
—	Grading Daylight Line
⊙	Manhole

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CITY OF SANTA FE
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CITY OF SANTA FE WATER DIVISION
HOSPITAL TANK REPLACEMENT PROJECT
LANDSCAPE IRRIGATION PLAN

STATE OF NEW MEXICO
 MARK S. LICHT
 2/19/2016
 LANDSCAPE ARCHITECT

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Designed	Drawn	Checked
MSL	BE	MSL
Date:	2/19/2016	
Scale:	Horiz: 1" = 20 FT Vert: N/A	
Project No:	9223842	
Sheet:	L-2	

IRRIGATION NOTES
 WORK CONSISTS OF INSTALLING AN UNDERGROUND IRRIGATION SYSTEM THAT UTILIZES ZONE VALVES, PIPING, AND EMITTERS AS SHOWN ON THESE PLANS, DETAILS AND SPECIFICATIONS. THE CONTRACTOR PERFORMING THIS WORK SHALL FURNISH ALL LABOR, EQUIPMENT, MATERIALS AND PERMITS NECESSARY FOR THE COMPLETION OF THE IRRIGATION SYSTEM, EXCEPT FOR THOSE COMPONENTS SPECIFIED TO BE FURNISHED BY OTHERS.
 ALL NEW PLANT MATERIALS SHALL BE IRRIGATED WITH AUTOMATIC IRRIGATION SYSTEMS AS PER PLANS, DETAILS AND SPECIFICATIONS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
 FLUSH ALL LINES AND VALVES PRIOR TO INSTALLING EMITTERS.
 PLANS ARE DIAGRAMMATIC AND APPROXIMATE DUE TO SCALE OF DRAWINGS. ALL VALVES SHALL BE LOCATED IN PLANTING AREAS WHERE SHOWN AND ALL PIPING SHALL BE INSTALLED PRIOR TO LANDSCAPING OR PAVING WORK. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER PAVING. TERMINATE ALL ENDS PRIOR TO BACKFILL.
 CONTRACTOR TO PROTECT EXISTING TREES AND SHRUBS ROOT ZONES WHEN TRENCHING. THERE SHALL BE NO TRENCHING WITHIN DRIP LINE OF TREES, ANY EXCEPTIONS WILL NEED TO BE SUBMITTED TO OWNER'S REPRESENTATIVE FOR APPROVAL.
 COMPLY WITH REQUIREMENTS OF THE UNIFORM PLUMBING CODE AND CITY OF SANTA FE ORDINANCES PERTAINING TO LANDSCAPE IRRIGATION, CITY OF SANTA FE LANDSCAPE IRRIGATION SYSTEMS STANDARDS AND ANY OTHER GOVERNMENTAL BODIES HAVING JURISDICTION.
 REFER TO IRRIGATION DETAILS, SPECIFICATIONS AND MANUFACTURERS RECOMMENDATIONS FOR ALL INSTALLATION PROCEDURES NOT FULLY DESCRIBED ON THE IRRIGATION PLANS.
 ALL BACKFILLING SHALL BE CLEAN MATERIAL FROM EXCAVATION. BACKFILLED TRENCH IS TO BE EVEN WITH EXISTING GRADES AFTER COMPACTION.
 TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO 85% PROCTOR DENSITY IN 6" LIFTS.
 AS-BUILT RECORD IRRIGATION DRAWINGS TO BE FURNISHED BY CONTRACTOR PRIOR TO FINAL ACCEPTANCE. CONTRACTOR TO REFERENCE CITY OF SANTA FE LANDSCAPE IRRIGATION STANDARDS FOR AS-BUILT RECORD DRAWING STANDARDS.

COMPONENTS AND PRODUCTS
 ALL COMPONENTS INSTALLED AS PART OF THE UNDERGROUND IRRIGATION SYSTEM ARE TO BE NEW AND IN GOOD WORKING ORDER AND WITHOUT FLAWS UNLESS OTHERWISE INDICATED ON THE PLANS, DETAILS AND SPECIFICATIONS.

WARRANTY AND MAINTENANCE
 CONTRACTOR SHALL FURNISH A CERTIFICATE OF WARRANTY AND A GUARANTEE OF WORK AND MATERIALS FOR A ONE-YEAR PERIOD FROM DATE OF FINAL ACCEPTANCE. FINAL PAYMENT FOR THE SYSTEM SHALL NOT BE MADE UNLESS THIS CERTIFICATE IS PRESENTED TO THE OWNER.
 CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM, IN SATISFACTORY WORKING ORDER, DURING THE TIME OF CONTRACT WORK.
 THE CONTRACTOR IS LIABLE FOR ANY LOSS OR DAMAGE TO ANY WORK OR MATERIALS, SUPPLIES AND EQUIPMENT ON THE JOB SITE CAUSED BY THE CONTRACTOR, ITS EMPLOYEES OR ANY OTHER UNFORESEEN CAUSE UNTIL FINAL ACCEPTANCE OF PROJECT WITH THE OWNER'S REPRESENTATIVE AND THE CITY OF SANTA FE.

RECOMMENDED MONTHLY AND SEASONAL IRRIGATION SCHEDULES:
 ACTIVATE IRRIGATION SYSTEM AFTER LAST ANTICIPATED 'HARD FREEZE' OF THE SEASON, GENERALLY IN THE LATTER HALF OF APRIL.
 SHUT DOWN IRRIGATION SYSTEM BEFORE FIRST 'HARD FREEZE' OF THE SEASON, GENERALLY IN THE LATTER HALF OF OCTOBER. WINTER WATERING BY HAND IS NOT RECOMMENDED FOR FIRST SEASON AND SUBSEQUENT YEARS IF THERE'S INSUFFICIENT PRECIPITATION.
 NEW PLANTINGS SHOULD BE IRRIGATED EVERY OTHER DAY FOR AN HOUR PER ZONE FOR THE FIRST MONTH, AND THEN CUT BACK TO 3 TIMES A WEEK. FREQUENCY AND DURATION MAY NEED TO BE ADJUSTED FOR SITE AND SEASONAL FACTORS.
 AS PLANTS MATURE, THE FREQUENCY OF IRRIGATION MAY BE REDUCED, BUT THE DURATION SHOULD BE MAINTAINED OR INCREASED.

WATER BUDGETS (ESTIMATE BASED ON AVERAGE YEAR PRECIPITATION)
 YEAR ONE- 76,626 GALLONS/0.24 AF (ASSUMING PLANTING STARTS AFTER THE FIRST QUARTER OF THE CALENDAR YEAR)
 YEAR THREE- 51,084 GALLONS/0.16 AF

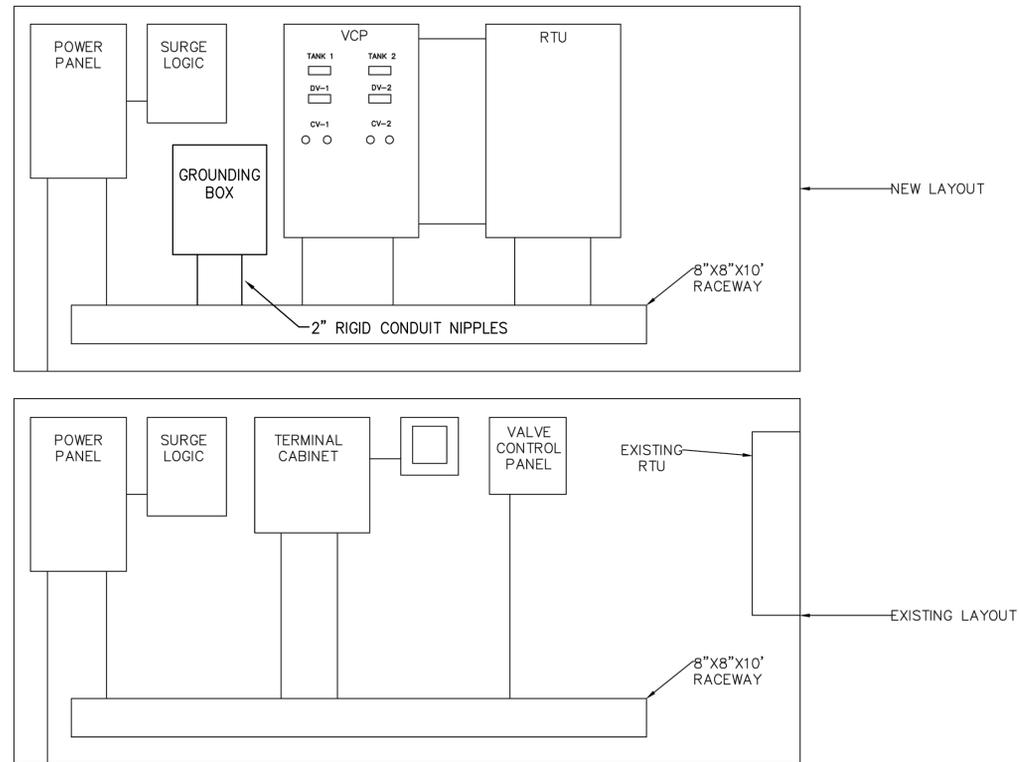
IRRIGATION LEGEND

— 2 —	NON-PRESSURE LATERAL, 3/4" PE TUBING
—	PRESSURE MAIN LINE, 1" PVC SCH 40 PIPE
⊙	CONTROL VALVE, RAINBIRD XCZ-100-PRF CONTROL ZONE VALVE & PRESSURE REGULATING FILTER KIT
⊙	CONTROLLER, RAINBIRD ESP-4M OUTDOOR CONTROLLER AND RSD RAIN SENSOR
⊙	SHUT-OFF VALVE, BRASS, LINE-SIZED
⊙	FEBCO 860U 3/4" REDUCED PRESSURE ZONE ASSEMBLY WITH UNION END BALL VALVES
—	SLEEVE, PVC SCH 40, SIZED TWICE THE COMBINED DIAMETERS OF TUBING WITHIN, MINIMUM
②	CONTROLLER STATION NUMBER
⊙	FROST FREE YARD HYDRANT
⊙	WATER METER
⊙	POINT OF CONNECTION (POC)
⊙	PROTECTIVE BOULDER

IRRIGATION NOTES

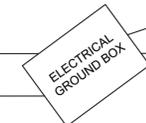
- THE IRRIGATION SYSTEM DESIGN IS BASED ON A MAXIMUM FLOW RATE OF 8 GPM AND AN ESTIMATED STATIC WATER PRESSURE OF 93 PSI AT THE POINT-OF-CONNECTION (POC). THE IRRIGATION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ARCHITECT IF CONDITIONS ARE LESS.
- EMITTER SCHEDULE:
 SHRUB = (2) RAINBIRD XB-10C XERI-BUG 1 GPH PRESSURE COMPENSATING EMITTERS WITH TS025-1/4" STAKE AND DBC025 DIFFUSER BUG CAP
 TREE = (3) RAINBIRD PC-05 5 GPH PRESSURE COMPENSATING EMITTER WITH TS025-1/4" STAKE AND DBC025 DIFFUSER BUG CAP FOR 2 OF THE EMITTERS AND IN A 14" DEEP DRIP WATERING STAKE FOR ONE OF THE EMITTERS. SEE ALSO DETAIL.
- TO COMPLY WITH CITY CODE, THE IRRIGATION SYSTEM SHALL BE REMOVED AFTER THE VEGETATION IS ESTABLISHED. SALVAGEABLE COMPONENTS TO BE RETAINED BY THE CITY.

SEE SHEET L-3 FOR ADDITIONAL NOTES AND DETAILS



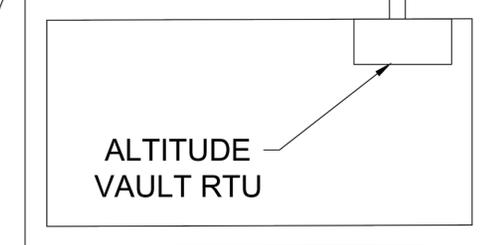
EXISTING 2\"/>

EXISTING 1\"/>



NEW FIBER OPTIC LINE FROM HOSPITAL TANK TO ALTITUDE VAULT

ELECTRICAL PEDESTAL



1
SCADA-1
EXISTING/PROPOSED SCADA BUILDING LAYOUT SCHEMATIC
NTS

2
SCADA-1
EXISTING ALTITUDE VALVE SCHEMATIC
NTS

Rev #	Date	Description	By	CHKD

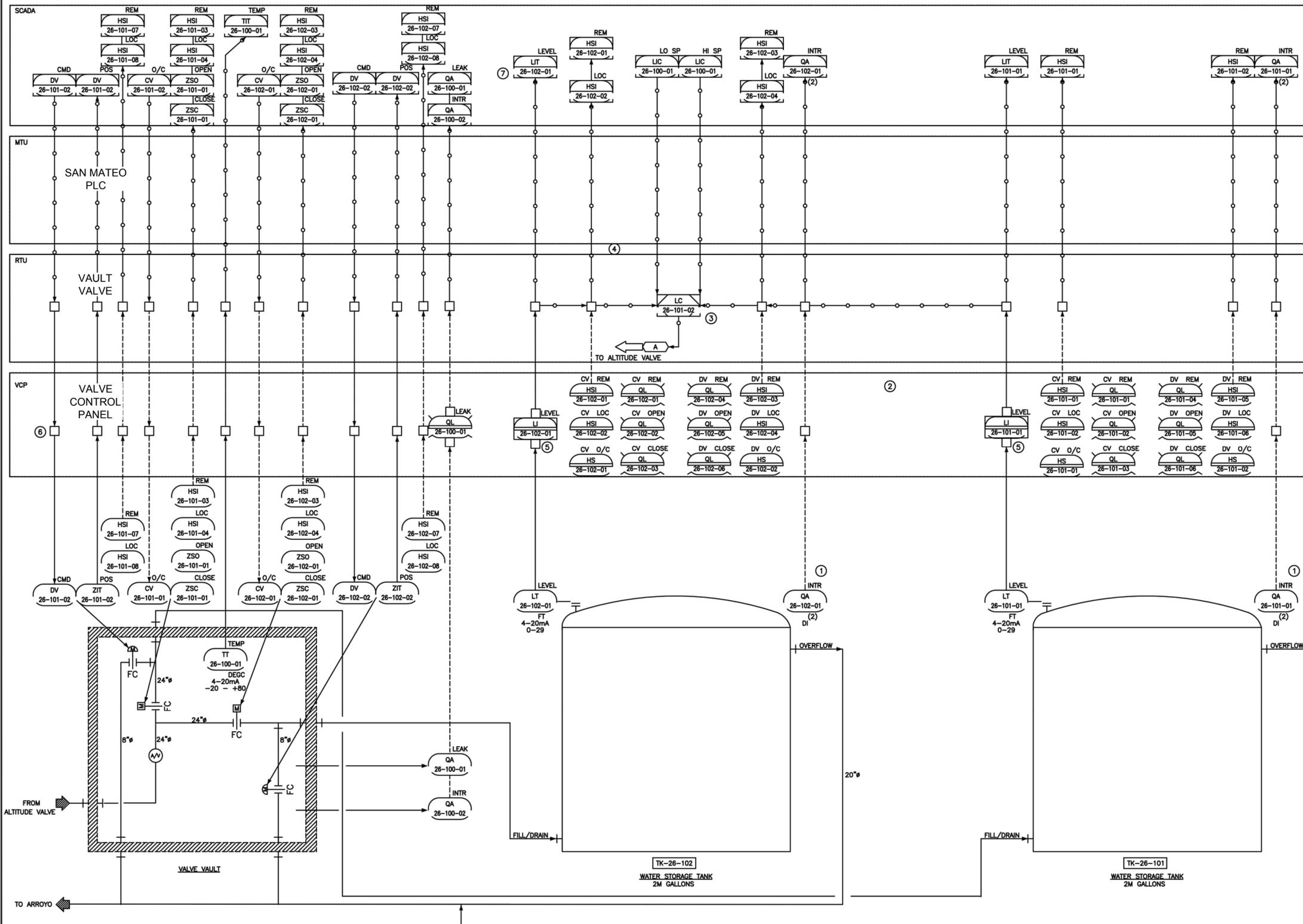
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HOSPITAL TANK REPLACEMENT PROJECT
ALTITUDE VALVE VAULT & SCADA BUILDING SCHEMATIC

PROVIDED FOR CONTRACTOR INFORMATION ONLY

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Designed ECY	Drawn BE	Checked PGF
Date: 2/19/2016		
Scale: Horiz: NTS Vert: NTS		
Project No: 9223842		
Sheet SCADA-1		



- KEYED NOTES:**
- EACH TANK HAS TWO HATCHES MONITORED BY INTRUSION SWITCHES
 - ALL LIGHTS AND SWITCHES MOUNTED ON VCP TO BE HARDWIRED AND REMAIN FULLY FUNCTIONAL IN THE EVENT THE PLC IS FAILED
 - THE LEVEL CONTROLLER WILL OPERATE AS FOLLOWS:
 - IF BOTH TANK CONTROL VALVES ARE OPEN USE THE AVG OF BOTH LEVELS FOR LEVEL CONTROL
 - IF ONE OF THE TANK CONTROL VALVES IS CLOSED USE THE LEVEL OF THE TANK WITH THE OPEN VALVE FOR LEVEL CONTROL
 - IF BOTH TANK CONTROL VALVES ARE CLOSED DISABLE LEVEL CONTROL
 - COMMUNICATIONS BETWEEN RTU AND MTU IS VIA 900MHZ UNLICENSED RADIO COMPATIBLE WITH THE RADIO EQUIPMENT INSTALLED AT THE SAN MATEO OFFICE
 - LOCAL LEVEL INDICATOR TO BE MOUNTED ON VALVE CONTROL PANEL
 - ALL I/O TERMINATED FIRST IN VCP THEN HARDWIRED TO RTU
 - HOSPITAL TANK IS SITE# 26

- LEGEND**
- SCADA – SUPERVISORY AND DATA ACQUISITION SYSTEM (CITECT)
 MTU – MASTER TERMINAL UNIT
 RTU – REMOTE TERMINAL UNIT
 VCP – VALVE CONTROL PANEL
- ANALOG I/O SIGNAL
 - - - DIGITAL I/O SIGNAL
 - - - SOFTWARE SIGNAL
- TAGNAME CONVENTION
 XXX-XX-XXX-XX
 FUNCTION SITE# MAJOR EQ# MINOR EQ#



REV	DATE	ISSUE FOR CONSTRUCTION	REASON DESCRIPTION	APPROVED	DATE	REVISION
1						

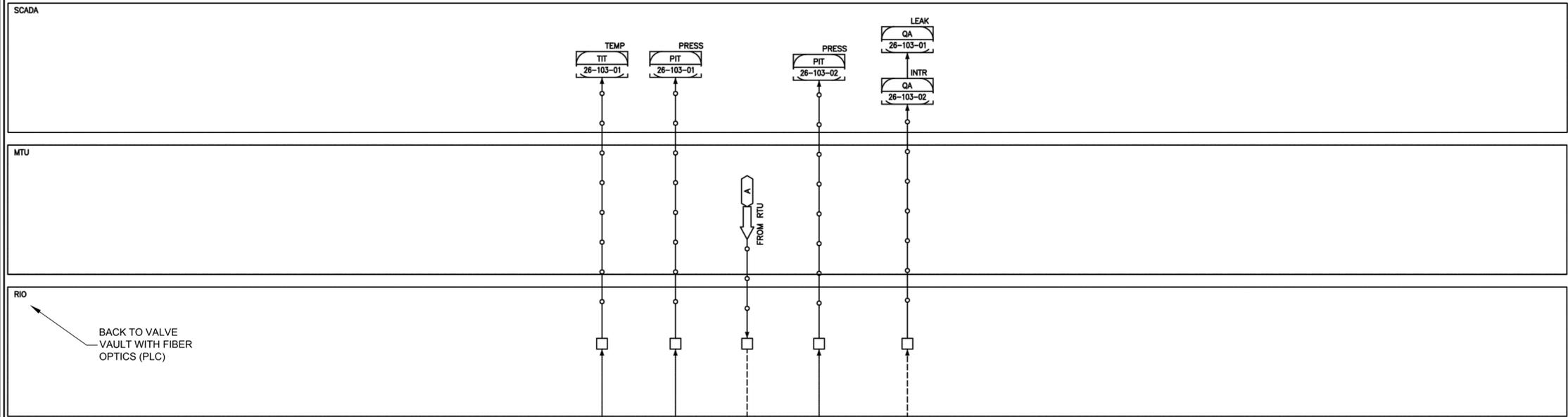
CITY OF SANTA FE HOSPITAL TANK	
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APPROVALS DATE	HOSPITAL TANK PIPING AND INSTRUMENTATION DIAGRAM
DESIGNED: ECY	DRAWN: BE
CHECKED: PGF	DATE: 2/19/2016
SCALE: Horiz: NTS	VERT: 2" = 6'
PROJECT NO: 9223842	SHEET: SCADA-2

CHG
 Description
 Rev # Date
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 CITY OF SANTA FE WATER DIVISION
 HOSPITAL TANK REPLACEMENT PROJECT
 TANK PIPING & INSTRUMENTATION DIAGRAM

PROVIDED FOR CONTRACTOR INFORMATION ONLY

PRELIMINARY



KEYED NOTES:
 1. COMMUNICATIONS BETWEEN THE REMOTE I/O PANEL AT THE ALTITUDE VALVE AND THE RTU AT THE HOSPITAL TANK IS VIA MUTLI-MODE FIBER

LEGEND
 SCADA - SUPERVISORY AND DATA ACQUISITION SYSTEM (CITECT)
 MTU - MASTER TERMINAL UNIT
 RTU - REMOTE TERMINAL UNIT
 VCP - VALVE CONTROL PANEL

— ANALOG I/O SIGNAL
 - - - DIGITAL I/O SIGNAL
 ← → SOFTWARE SIGNAL

TAGNAME CONVENTION
 XXX-XX-XXX-XX
 FUNCTION SITE# MAJOR EQ# MINOR EQ#

WM Wunderlich-Malec
 Engineering | Systems | Services
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ISSUE FOR CONSTRUCTION	APPROVED	DATE	ISSUE NUMBER
	SPR	2/3/16	

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APPROVALS DATE
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 DRAWN: 2/3/16
 CHECKED: 2/3/16

HOSPITAL TANK ALTITUDE VALVE PIPING AND INSTRUMENTATION DIAGRAM

8115502 8115528-102
 NONE 2' 6"

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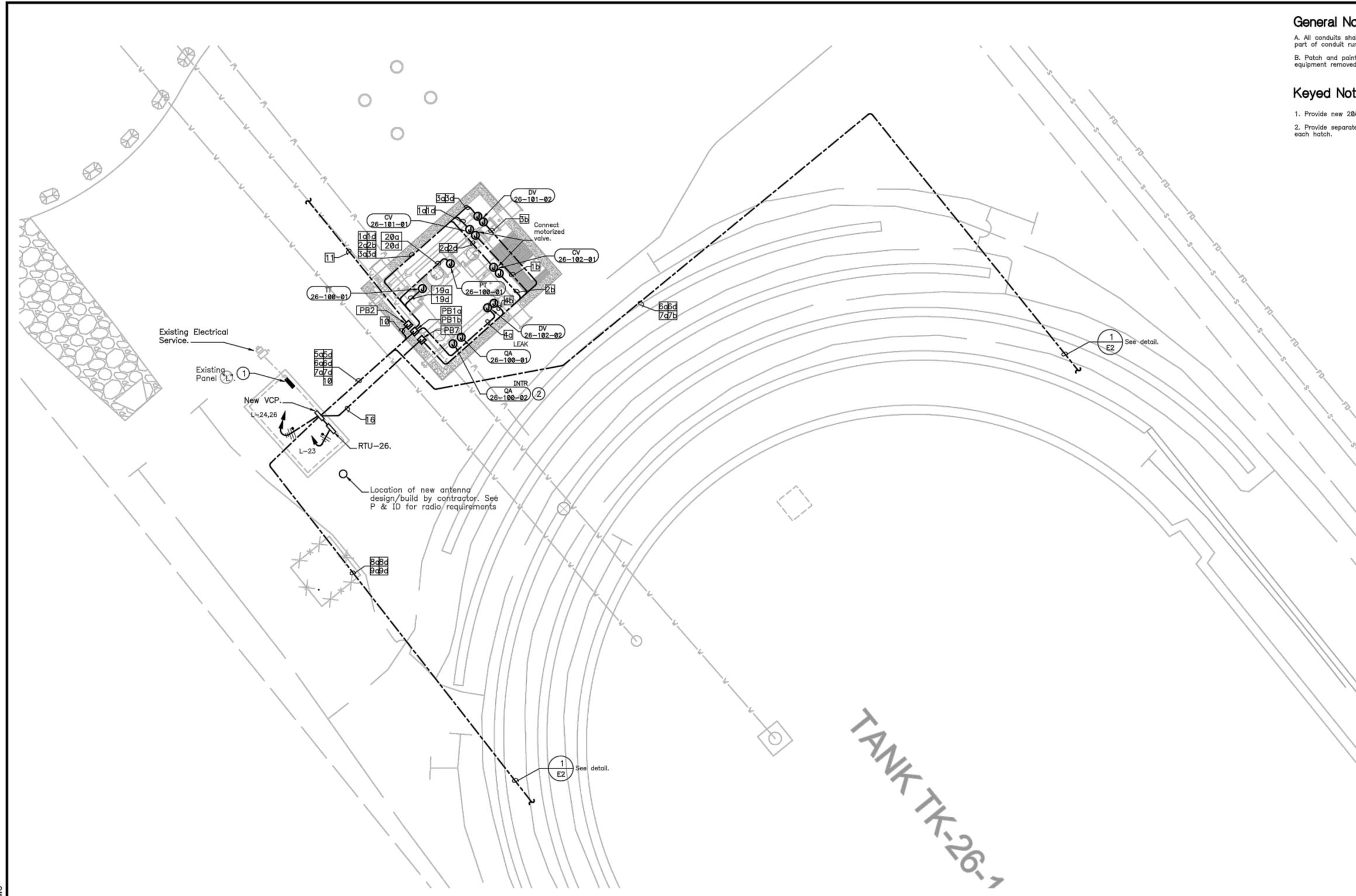
CITY OF SANTA FE
 CITY OF SANTA FE WATER DIVISION
 HOSPITAL TANK REPLACEMENT PROJECT
 ALTITUDE VALVE PIPING & INSTRUMENTATION DIAGRAM

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 Date: 2/19/2016
 Scale: Horiz: NTS Vert:
 Project No: 9223842
 Sheet: SCADA-3

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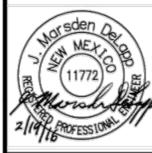
General Notes
A. All conduits shall have low point drain installed at lowest part of conduit run.
B. Patch and paint holes in SCADA building from existing equipment removed including existing antenna.

Keyed Notes #
1. Provide new 20A 1P circuit breakers for new circuits.
2. Provide separate intrusion alarm switch and cable for each hatch.

Rev #	Date	Description

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CITY OF SANTA FE WATER DIVISION
HOSPITAL TANK REPLACEMENT PROJECT
ELECTRICAL - EQUIPMENT ENCLOSURE
& VALVE VAULT PLAN



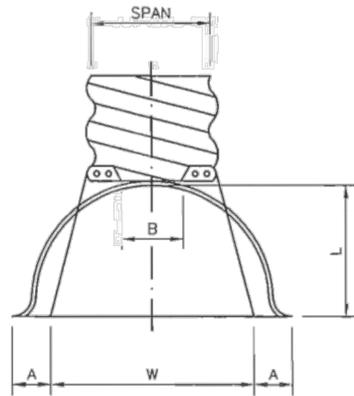
Equipment Enclosure and Valve Vault Electrical Plan
North
Scale: 1/8" = 1'-0"

DelApp & Associates, Inc. dba
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(505) 983-5557
jmdelapp@DeLapp.com
http://DeLapp.com

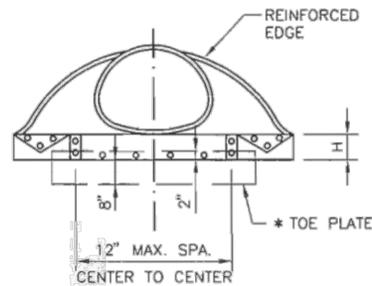
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Designed	Drawn	Checked
JMD	AMR	JMD

Date: 2/19/2016
Scale: 1:1
Project No: 9223842
Sheet: E-1

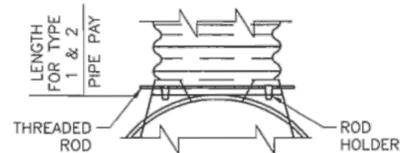


PLAN



ELEVATION

NOTE: SIZES EQUIVALENT TO THE ABOVE, USING 3" x 1" CORRUGATIONS, MAY BE USED PROVIDING THAT THEY MEET THE SIZES SHOWN UNDER TABLE 6 OF SERIAL 206-04-1/3 THRU 206-04-3/3.



TYPE 2

FOR 17" x 13" THRU 57" x 38"

STANDARD CONNECTION

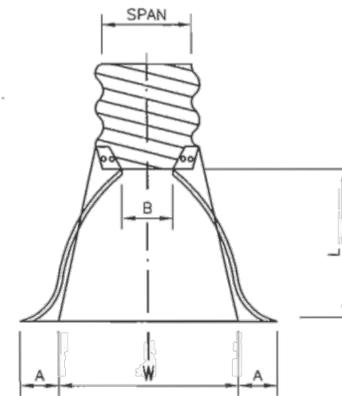
STANDARD END SECTIONS FOR PIPE-ARCH STEEL PIPE

PIPE ARCH DIMENSIONS		GALVANIZED THICKNESS GA.	DIMENSIONS					APPROX. SLOPE	BODY
SPAN (IN.)	RISE (IN.)		A (IN.) (± 1")	B (IN.) (MAX.)	H (IN.) (± 1")	L (IN.) (± 1 1/2")	W (IN.) (± 2")		
17	13	16	7	9	6	19	30	2 1/2:1	1 PC.
21	15	16	7	10	6	23	36	2 1/2:1	1 PC.
24	18	16	8	12	6	28	42	2 1/2:1	1 PC.
28	20	16	9	14	6	32	48	2 1/2:1	1 PC.
35	24	14	10	16	6	39	60	2 1/2:1	1 PC.
42	29	14	12	18	6	46	75	2 1/2:1	1 PC.
49	33	12	13	21	9	53	85	2 1/2:1	2 PC.
57	38	12	18	26	12	63	90	2 1/2:1	2 PC.
64	43	12	18	30	12	70	102	2 1/4:1	2 PC.
71	47	12	18	33	12	77	114	2 1/4:1	3 PC.
77	52	12	18	36	12	77	126	2:1	3 PC.
83	57	12	18	39	12	77	138	2:1	3 PC.

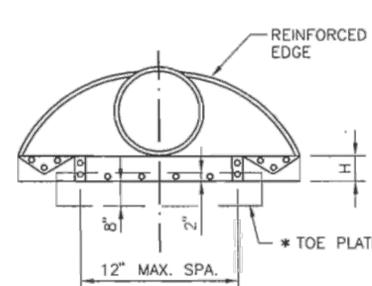
* THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CURRENT INDUSTRY SIZES.

NOTE:

- ALL 3 PIECE BODIES TO HAVE 12 GAUGE THICK SIDES AND 10 GAUGE THICK CENTER PANELS. WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE PERIPHERY. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED RIVETS OR BOLTS.
- FOR 77" x 52" AND 83" x 57" SIZES, REINFORCED EDGE TO BE SUPPLEMENTED BY L 2" x 2" x 1/4" GALVANIZED ANGLES. THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.
- ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON THE 77" x 52" AND 83" x 57" SIZES.
- TOE PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS.



PLAN



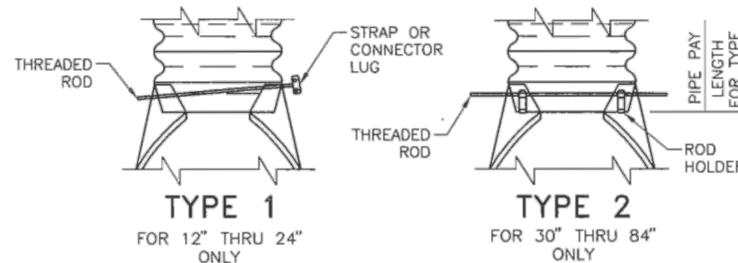
ELEVATION

ROUND PIPE DIMENSIONS		GALVANIZED THICKNESS GAUGE.	DIMENSIONS					APPROX. SLOPE	BODY
PIPE DIA. (IN.)			A (IN.) (± 1")	B (IN.) (MAX.)	H (IN.) (± 1")	L (IN.) (± 1 1/8")	W (IN.) (± 2")		
12		16	6	6	6	21	24	2 1/2:1	1 PC.
15		16	7	8	6	26	30	2 1/2:1	1 PC.
18		16	8	10	6	31	36	2 1/2:1	1 PC.
21		16	9	12	6	36	42	2 1/2:1	1 PC.
24		16	10	13	6	41	48	2 1/2:1	1 PC.
30		14	12	16	8	51	60	2 1/2:1	1 PC.
36		14	14	19	9	60	72	2 1/2:1	2 PC.
42		12	16	22	11	69	84	2 1/2:1	2 PC.
48		12	18	27	12	78	90	2 1/4:1	2 PC.
54		12	18	30	12	84	102	2:1	2 PC.
60		12	18	33	12	87	114	1 3/4:1	3 PC.
66		12	18	36	12	87	120	1 1/2:1	3 PC.
72		12	18	39	12	87	126	1 1/3:1	3 PC.
78		12	18	42	12	87	132	1 1/4:1	3 PC.
84		12	18	45	12	87	138	1 1/16:1	3 PC.

* THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CURRENT INDUSTRY SIZES.

NOTE:

- ALL 3 PIECE BODIES TO HAVE 12 GAUGE THICK SIDES AND 10 GAUGE THICK CENTER PANELS. WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE PERIPHERY. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED RIVETS OR BOLTS.
- FOR 60" THRU 84" SIZES, REINFORCED EDGES TO BE SUPPLEMENTED WITH GALVANIZED STIFFENER ANGLES. THE ANGLES WILL BE L 2" x 2" x 1/4" FOR 60" THRU 78" DIAMETER AND L 2 1/2" x 2 1/2" x 1/4" FOR 78" AND 84" DIAMETER. THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.
- TOE PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS.

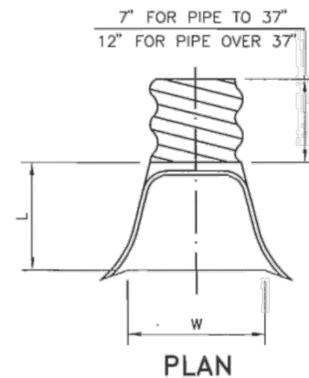


STANDARD CONNECTIONS

STANDARD END SECTIONS FOR ROUND STEEL PIPE

GENERAL NOTES

- FOR MULTIPLE INSTALLATION OF ALL TYPES, A MIN. OF A 2'-0" SPACING MEASURED ALONG THE HORIZONTAL BETWEEN FLARED END SECTIONS AT THEIR WIDEST CROSS SECTION SHALL BE USED.
- WELDING WILL NOT BE PERMITTED IN CONNECTING END SECTIONS TO CONNECTOR SECTIONS OR CONNECTOR SECTIONS TO PIPE.
- TYPE 1 AND TYPE 2 MAY BE USED WITH WELDED SEAM OR LOCKSEAM CONNECTIONS HELICALLY CORRUGATED PIPE WITH REROLLED ENDS. REROLLED ENDS SHALL INCLUDE A MINIMUM OF TWO ANNULAR CORRUGATIONS OF THE SAME SIZE AS THE PIPE CORRUGATIONS.



PLAN

CORRUGATED ALUMINUM PIPE END SECTION

PIPE DIAM. (IN.)	APRONS	
	L (IN.)	W (IN.)
18	19	30
21	23	36
24	28	42
30	31.5	48
36	38.5	60
42	47	75
48	54	85
60	63	96
66	70	112
72	77	128



NO.	DATE	REV. BY	DESCRIPTION
△	2/10/09	YML	CORRECTED 0.6 GA. TO 3/8" #
△	2/10/09	YML	MADE GENERAL REVISIONS
△	2/10/09	YML	CORRECTED 83" x 35" TO 83" x 57"

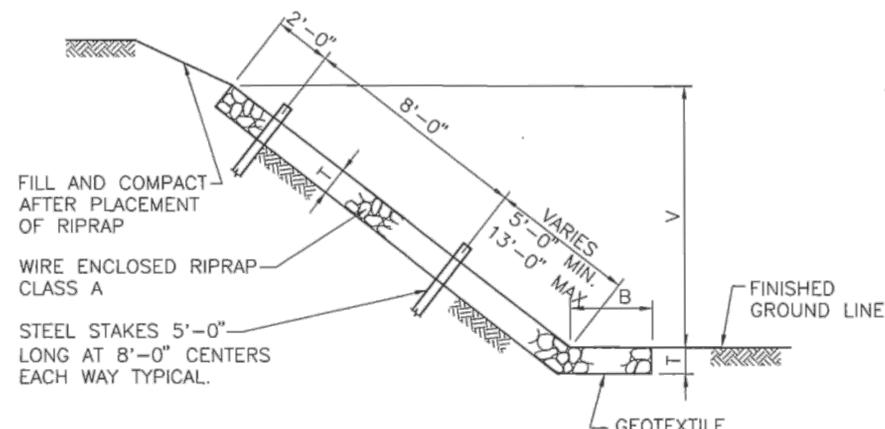
REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

CULVERT PIPE END SECTIONS (METAL)

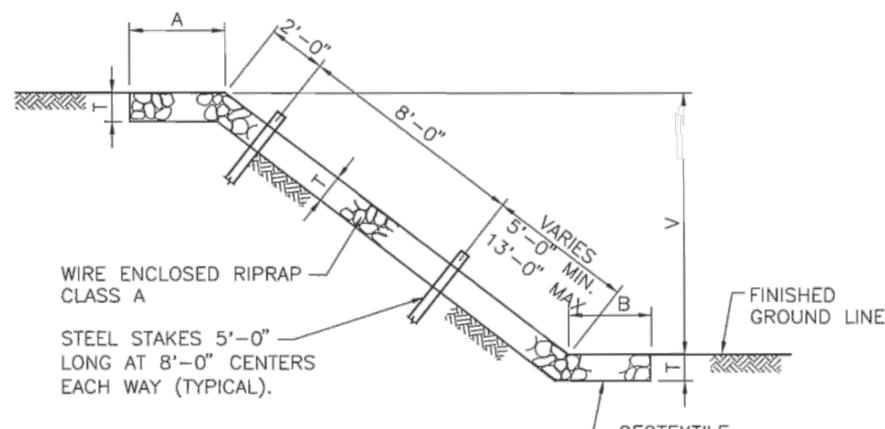
DESIGNED BY _____ DRAWN BY SKL CHECKED BY TM/YML

570-02-1/2



SECTION TYPE I

QUANTITIES PER LINEAR FOOT	
SLOPE	RIPRAP (CU. YDS.)
1.5 : 1	$\frac{T}{27} (B + 1.803 V + 0.303 T)$
1.75 : 1	$\frac{T}{27} (B + 2.016 V + 0.266 T)$
2 : 1	$\frac{T}{27} (B + 2.236 V + 0.236 T)$
3 : 1	$\frac{T}{27} (B + 3.162 V + 0.162 T)$
4 : 1	$\frac{T}{27} (B + 4.123 V + 0.123 T)$

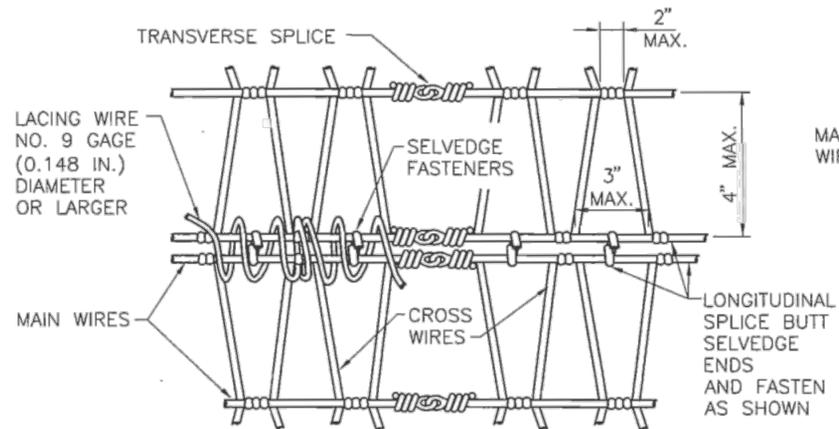


SECTION TYPE II

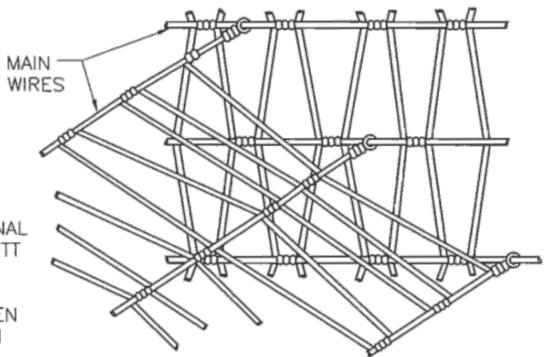
QUANTITIES PER LINEAR FOOT	
SLOPE	RIPRAP (CU. YDS.)
1 : 1	$\frac{T}{27} (A + B + 1.414V)$
1.5 : 1	$\frac{T}{27} (A + B + 1.803V)$
1.75 : 1	$\frac{T}{27} (A + B + 2.016V)$
2 : 1	$\frac{T}{27} (A + B + 2.236V)$
3 : 1	$\frac{T}{27} (A + B + 3.162V)$
4 : 1	$\frac{T}{27} (A + B + 4.123V)$

GENERAL NOTES

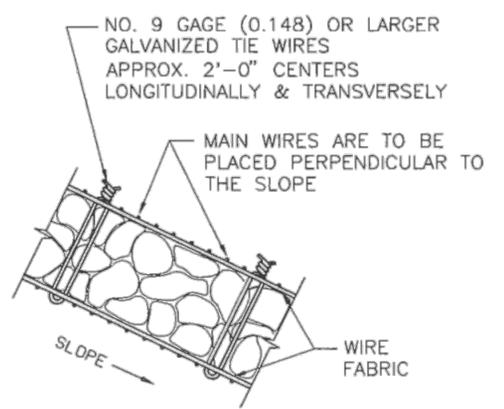
1. WIRE FABRIC FOR RIP RAP SHALL BE "W" OR HEXAGONAL MESH AND MEET THE REQUIREMENTS LISTED IN SECTION 602 OF THE NMDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION.
2. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS. PER YARD, 4" NOMINAL DIAMETER STANDARD STRENGTH GALVANIZED STEEL PIPE, OR L 4" x 4" x 3/8" STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
3. IF LENGTH OF SLOPE IS 15 FEET OR LESS, ONLY ONE ROW OF STEEL STAKES 2 FEET FROM THE TOP EDGE OF RIPRAP WILL BE REQUIRED UNLESS OTHERWISE NOTED ON PLANS.
4. FOR DIMENSIONS A, B, V, & T. SEE BRIDGE OR ROADWAY PLANS.
5. T=12" UNLESS OTHERWISE SHOWN ON PLANS; T=18" AT BRIDGES.
6. FASTENERS FOR SPLICES AND/OR SELVEDGE END CONNECTORS MAY BE WIRE TIES, INTERLOCKING WIRE CLIPS, HOG RINGS, OR LACING WIRE. ONLY FASTENERS WHICH APPEAR ON THE DEPARTMENT'S "APPROVED PRODUCTS LIST" MAY BE USED.
7. LACING SHALL BE CONTINUOUS AS FAR AS IS PRACTICAL AND SHALL PASS THROUGH EACH MESH OPENING.
8. WHERE SPLICING IS NECESSARY, AN OVERLAP OF LACING OF AT LEAST 1 FOOT SHALL BE PROVIDED.



NORMAL INTERSECTION SPLICES

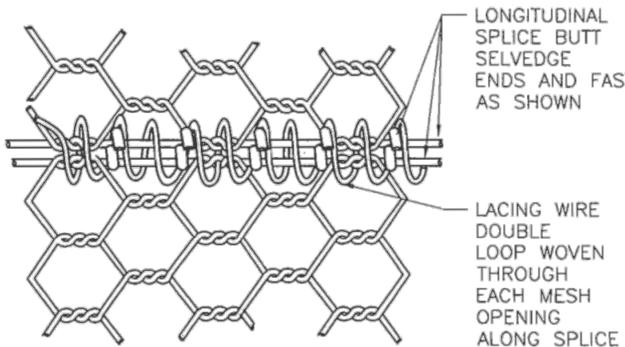


SKEWED INTERSECTION SPLICE

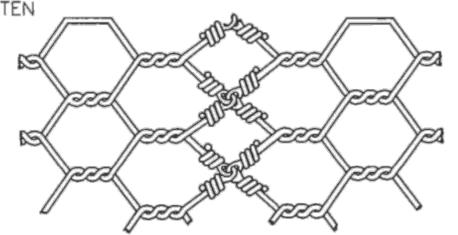


TYPICAL SECTION

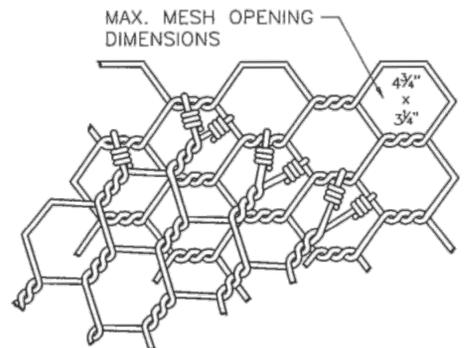
"W" MESH



NORMAL INTERSECTION SPLICE



TRANSVERSE SPLICE



SKEWED INTERSECTION SPLICE

HEXAGONAL MESH

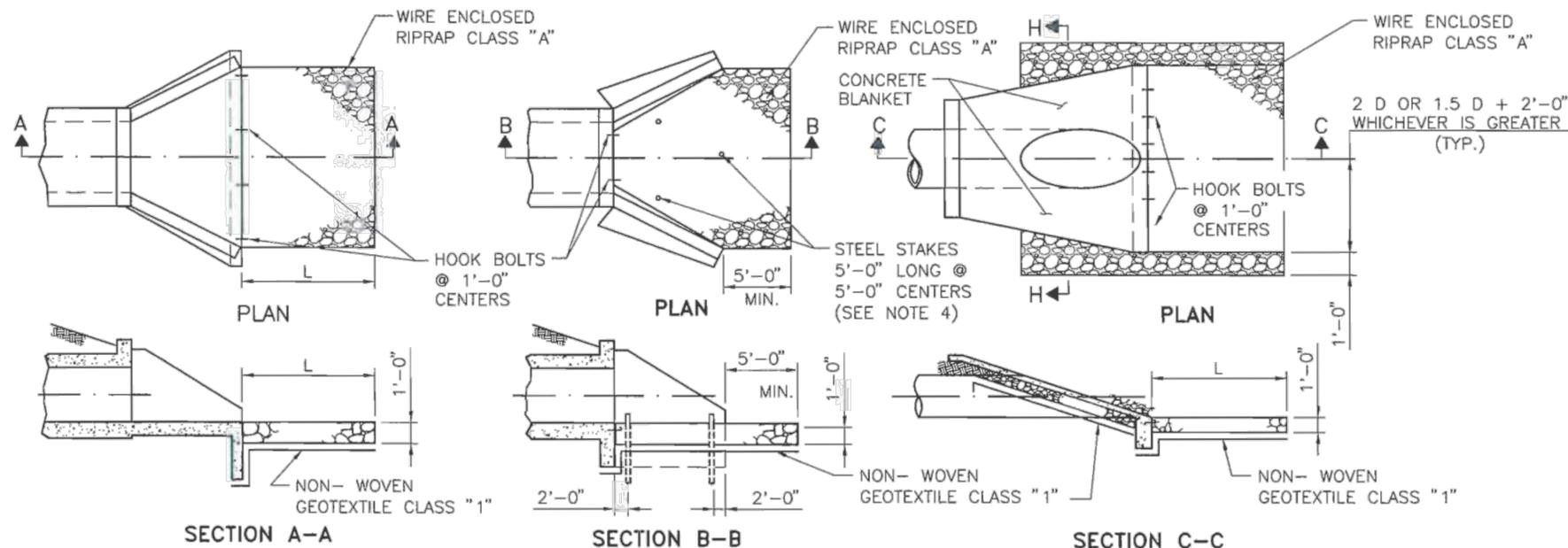


NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

WIRE ENCLOSE RIPRAP CLASS "A"

DESIGNED BY _____ DRAWN BY SKL CHECKED BY YML



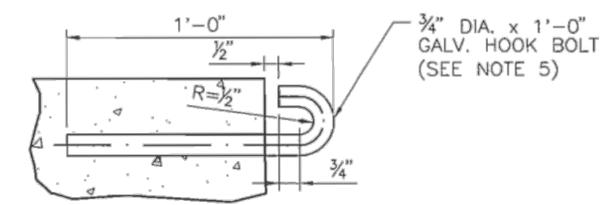
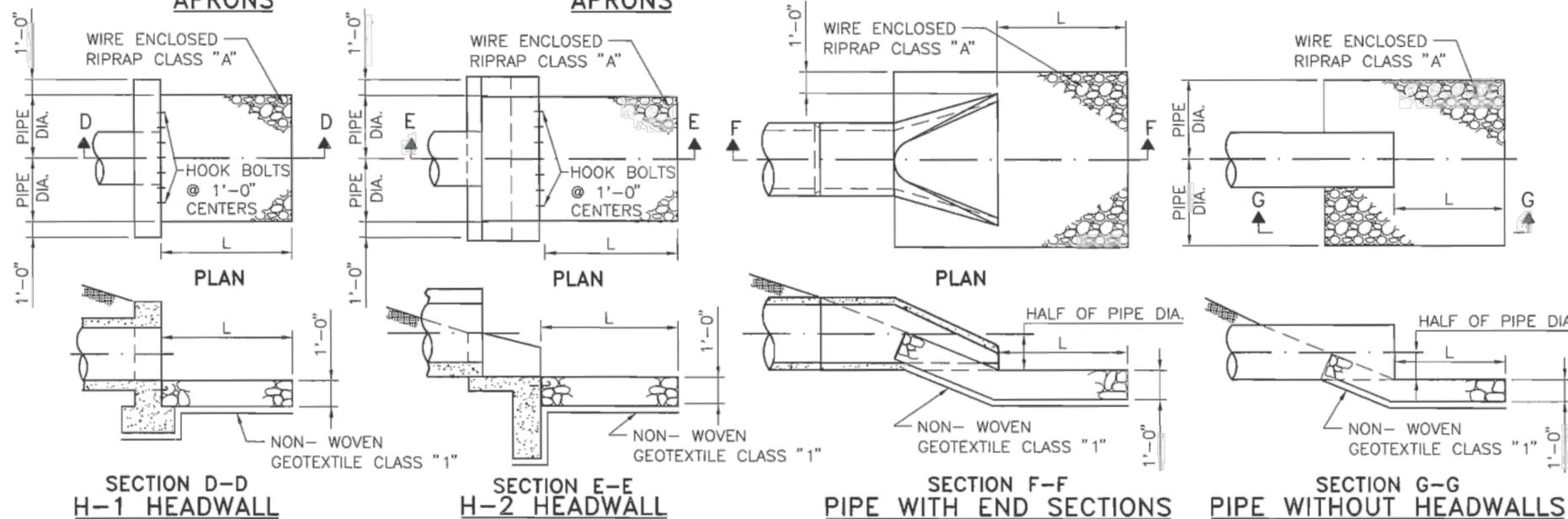
GENERAL NOTES

1. ALL RIPRAP SHALL BE CLASS "A" UNLESS SPECIFIED OTHERWISE IN THE PLANS. DIMENSIONS OF RIPRAP CLASS "A" SHALL BE VERIFIED IN FIELD.
2. RIPRAP ON THIS STANDARD IS SHOWN FOR SINGLE PIPES AND CULVERTS ONLY. FOR MULTIPLE PIPE AND CULVERT INSTALLATIONS, EXTEND RIPRAP BEYOND OUTLET OPENING AS SHOWN IN PLAN DETAILS AND PLACE RIPRAP BETWEEN OUTLET OPENINGS AS SHOWN IN ELEVATION DETAILS.
3. SERIAL 602-02-1/1 MAY BE REFERENCED FOR DESCRIPTIONS OF WIRE MESH AND ALTERNATE PATTERNS.
4. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS. PER YARD, 4" NOMINAL DIAMETER STANDARD STRENGTH GALVANIZED STEEL PIPE, OR L 4" X 4" X 3/8" STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
5. CONTRACTOR MAY SUBSTITUTE CONCRETE CHEMICAL ANCHORS WITH HOOK GEOMETRY SHOWN, WHICH MEET REQUIREMENTS OF SECTION 522.
6. TOE-IN OR PLACE EROSION CONTROL GEOTEXTILE UNDER FOOTINGS OR CUT-OFF WALL.
7. L (MIN.) = 10'-0" OR 1.5 x DIAMETER OR RISE, WHICHEVER IS GREATER.

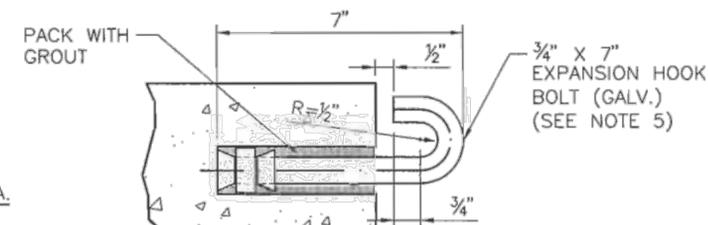
BOX CULVERTS WITH APRONS

BOX CULVERTS WITHOUT APRONS

CONCRETE BLANKETS



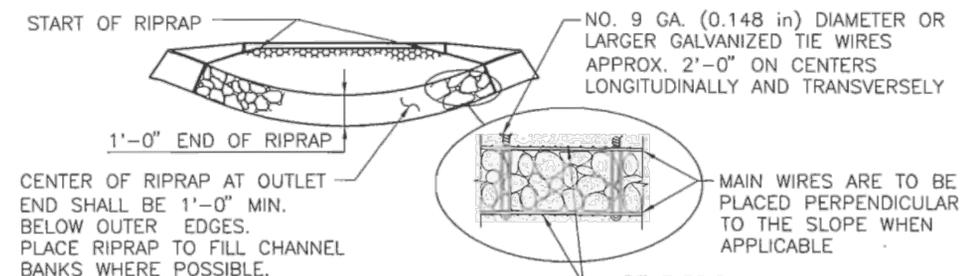
ANCHOR TO NEW STRUCTURE



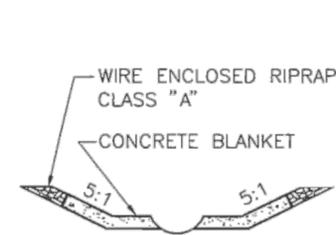
ANCHOR TO EXISTING STRUCTURE

HOOK BOLT DETAILS

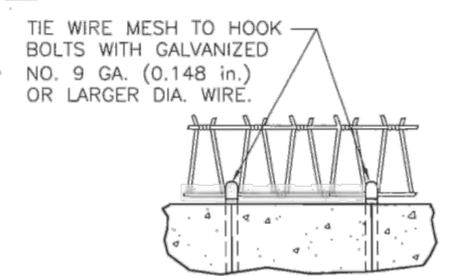
COST OF HOOK BOLT IN PLACE TO BE INCLUDED IN UNIT BID PRICE FOR RIPRAP.



TYPICAL SECTION AT END OF RIPRAP



SECTION H-H



WIRE MESH ANCHOR

NOTE: SEE SHEET 602-01-1/1 FOR WIRE MESH SPLICE DETAILS.



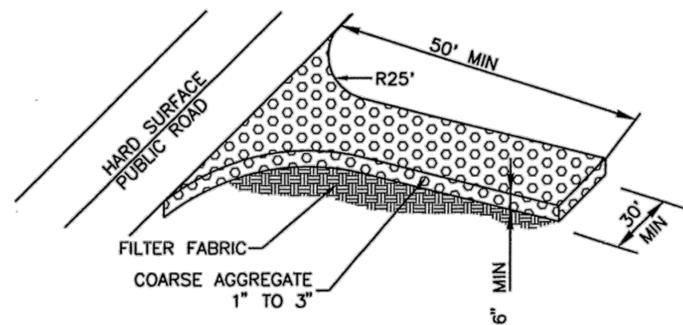
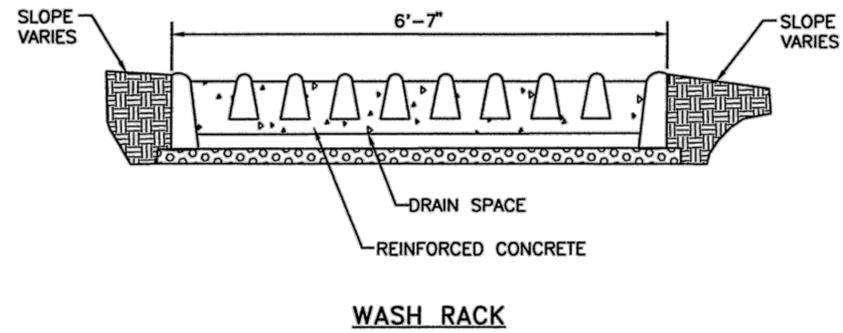
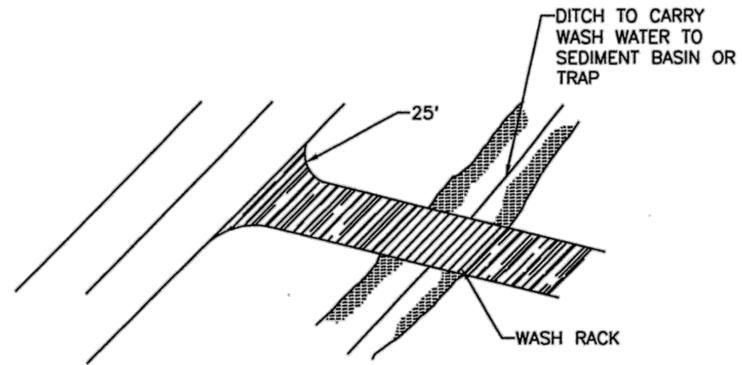
REVISIONS (OR CHANGE NOTICES)			
NO.	DATE	REV. BY	DESCRIPTION
1	8/09/09	YML	GENERAL REVISIONS

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

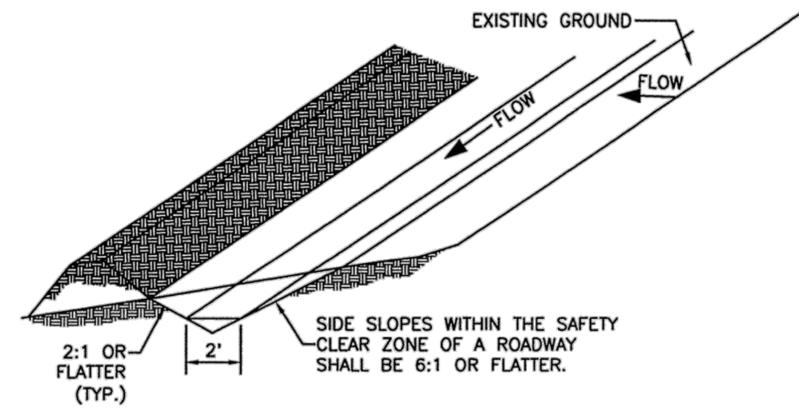
EROSION CONTROL AT CULVERT OUTLETS

DESIGNED BY TM DRAWN BY SKL CHECKED BY YML

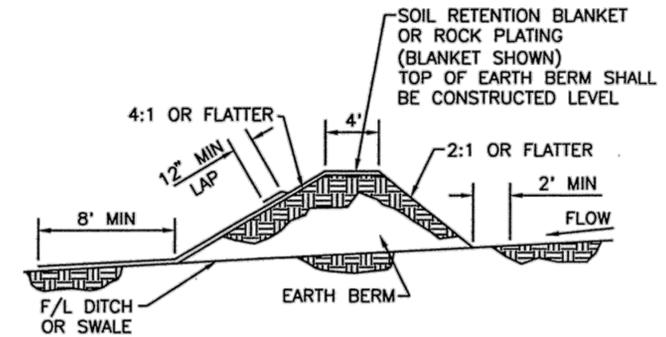
602-02-1/1 1 of 1



OFFSITE TRACKING PREVENTION



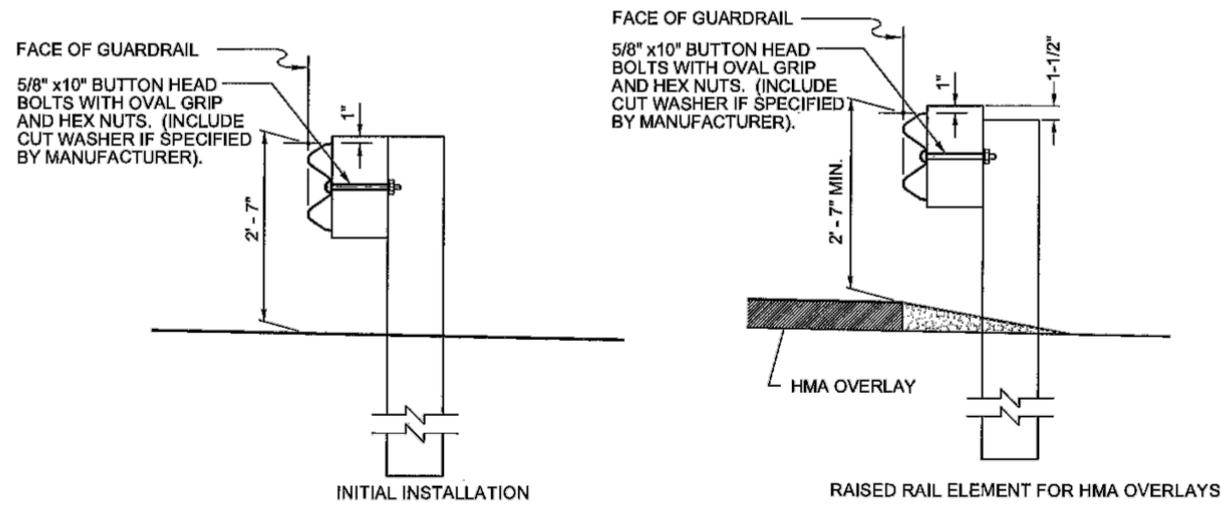
TYPICAL SWALE CONFIGURATION



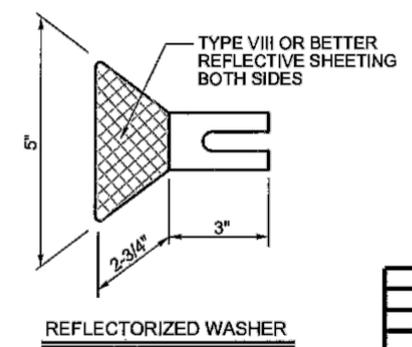
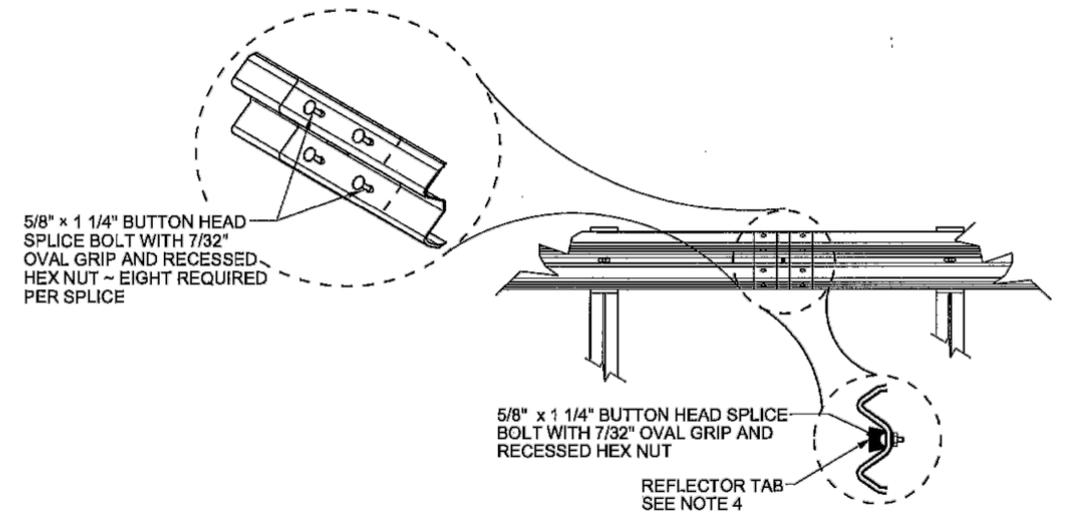
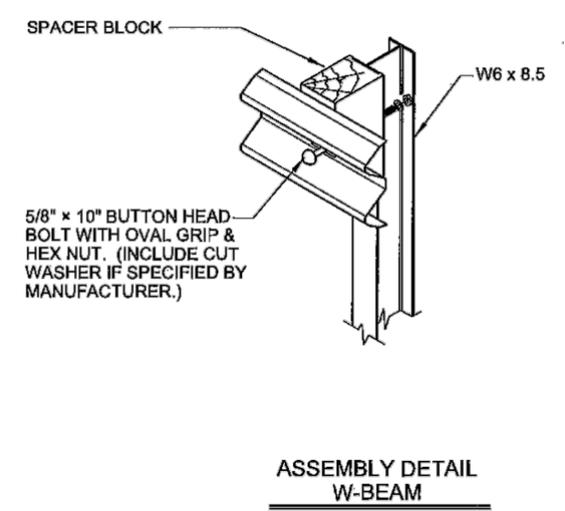
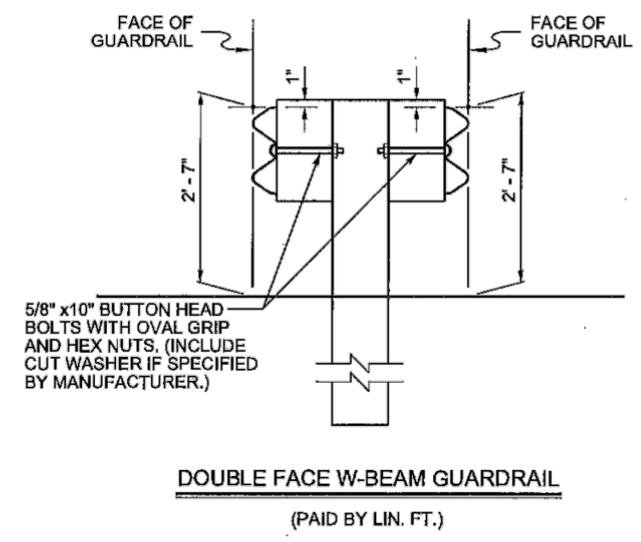
FILTER FABRIC DIVERSION DIKE

DIVERSION DIKE

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
T.E.S.C.M. OFFSITE TRACKING PREVENTION & DIVERSION DIKE			
APPROVED <i>Raymond A. Van Hoven</i>			DATE
DESIGNED BY			DRAWN BY
			CHECKED BY
603-01-7/7			SHEET 7 OF 7



SINGLE FACE W-BEAM GUARDRAIL
(PAID BY LIN. FT.)

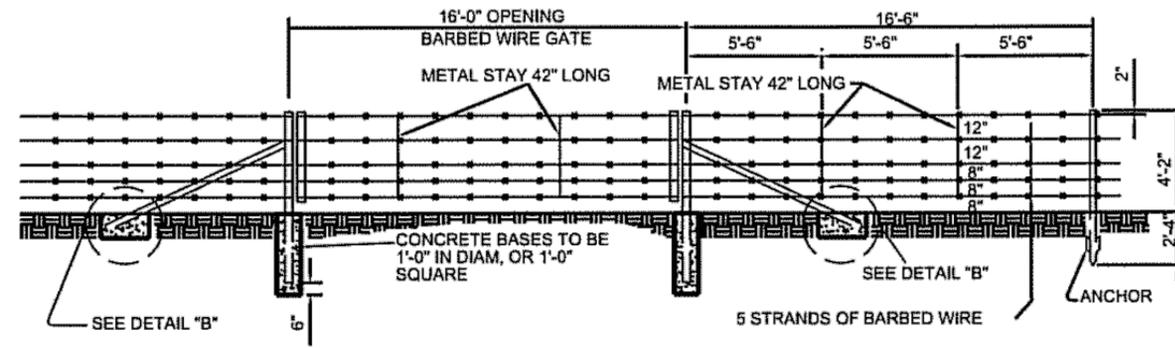


- NOTES**
1. SINGLE AND DOUBLE FACE W-BEAM GUARDRAIL POST SPACING SHALL BE 6'-3" ON CENTER.
 2. SINGLE AND DOUBLE FACE W-BEAM GUARDRAIL SHALL USE W6 x 8.5 STEEL POSTS FOR SPACER BLOCK DETAILS, SEE SHEET 606-GR31-4/20.
 3. EXISTING POSTS SHALL NOT BE RAISED. REPLACE POSTS AS NECESSARY TO ACHIEVE REQUIRED GUARDRAIL HEIGHT.
 4. REFLECTOR TABS SHALL BE PLACED AT 25' INTERVALS (EVERY 25' AT SPLICE) ON ALL GUARDRAIL INSTALLATIONS (12'-6" ON 2 LANE HIGHWAY). THE COLOR OF THE REFLECTIVE SHEETING ON THE REFLECTOR TABS SHALL BE THE SAME AS THE COLOR OF THE SHOULDER LINE PAVEMENT MARKING IN FRONT OF THE BARRIER. TABS SHALL HAVE A MINIMUM OF 8.75 SQ. IN. OF TYPE VIII OR BETTER REFLECTIVE SHEETING ON BOTH SIDES AND SHALL ATTACH SECURELY UNDER HEAD OF 5/8" BUTTON HEAD BOLT.
 5. SPLICES SHALL BE LAPPED SO THE FREE END DOES NOT FACE TRAFFIC FLOW.
 6. CONSTRUCTION TOLERANCE SHALL BE ± 1/2" FOR GUARDRAIL HEIGHT.
 7. GUARDRAIL FACE MAY BE PLACED AT EDGE OF SHOULDER ONLY WHEN SLOPES BEHIND GUARDRAIL WILL NOT ALLOW FOR 2' TYPICAL SETBACK, SEE SHEET 606-GR31-6/20.
 8. POST LEAVE OUT SHALL BE OBSERVED WHEN POSTS ARE RESTRAINED BY ROCK, ASPHALT, OR CONCRETE OR ARE PLACED IN THE SURFACING TAPER. SEE SHEET 606-GR31-5/20 FOR POST LEAVEOUT.
 9. DOUBLE FACE W-BEAM GUARDRAIL SHALL BE PAID AS MEASURED ALONG CENTERLINE OF POST OF INSTALLATION. EACH RAIL ELEMENT WILL NOT BE MEASURED AND PAID SEPARATELY.
 10. SEE SHEET 606-GR31-6/20 FOR TYPICAL GUARDRAIL INSTALLATIONS.

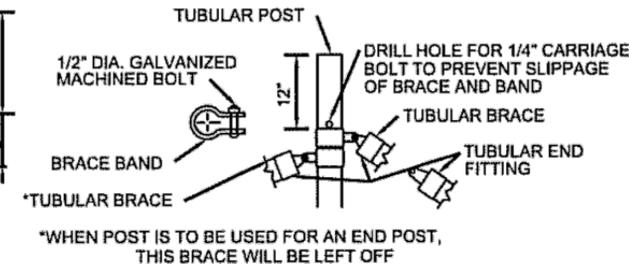


NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
W-BEAM GUARDRAIL			
APPROVED _____		DESIGN ENGINEER	DATE _____
606-GR31-1/20			

DRAWING SCALE = NOT TO SCALE



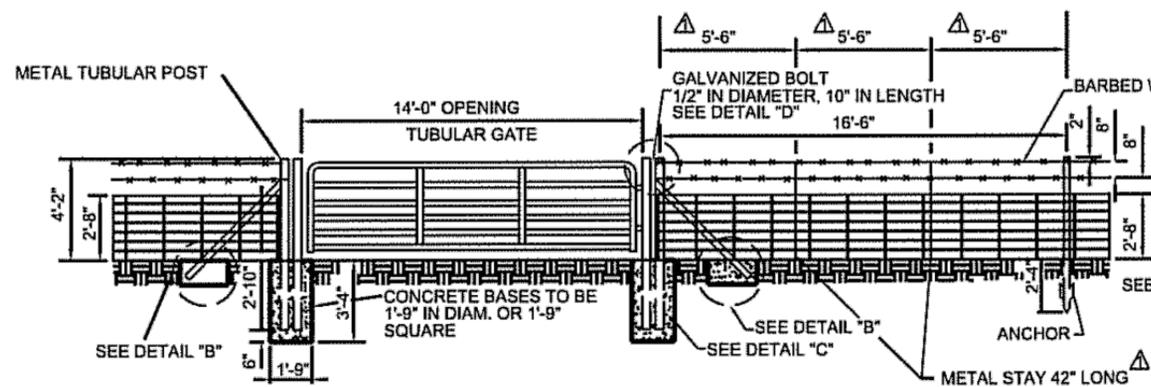
BARBED WIRE FENCE WITH METAL POSTS



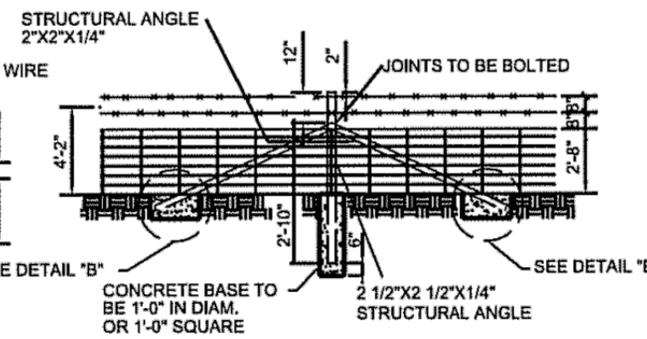
TUBULAR POST FITTINGS FOR END, CORNER OR LINE BRACE POSTS

GENERAL NOTES

1. DRAWINGS APPLY TO EITHER STRUCTURAL ANGLES OR TUBULAR POSTS.
2. SEE TABLE FOR METAL TUBULAR POST DIMENSIONS.



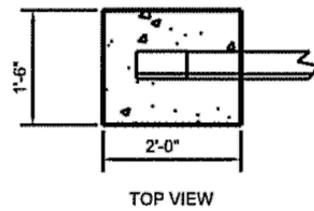
WOVEN WIRE FENCE WITH METAL POSTS



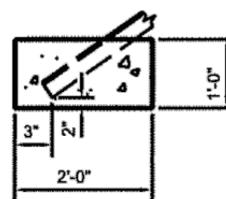
INTERMEDIATE METAL POST BRACE

TABLE FOR METAL TUBULAR POSTS

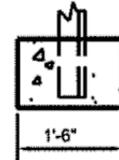
TYPE	O.D. INCHES	WT. LBS/LIN. FT.
BRACE POSTS	1.66	2.27
INTERMEDIATE POSTS	2.875	5.79
CORNER POSTS	4.00	9.11
GATE POSTS, UP TO 18 FEET	4.00	9.11



TOP VIEW

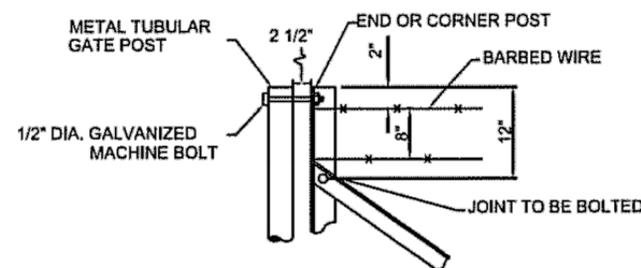


SIDE VIEW

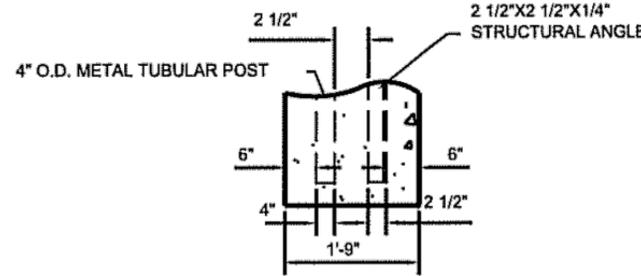


END VIEW

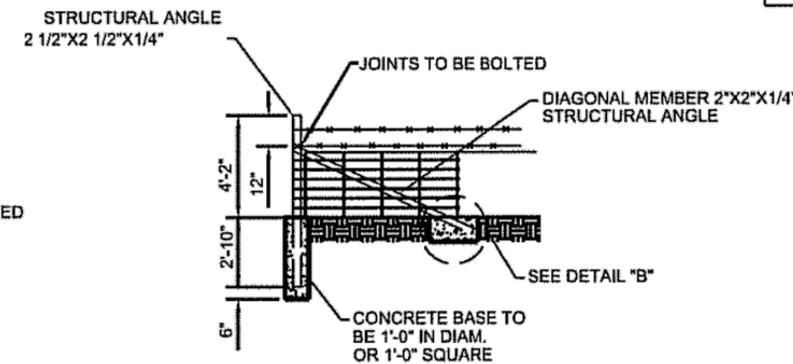
**DETAIL "B"
ANCHOR DETAIL OF DIAGONAL
METAL POST MEMBER**



DETAIL "D"



DETAIL "C"



CORNER OR END METAL POST BRACE

NO.	DATE	REV. BY	DESCRIPTION
08-16-13		M. FAHEY	ADD METAL STAYS @ W.W. FENCE

REVISIONS (OR CHANGE NOTICES)

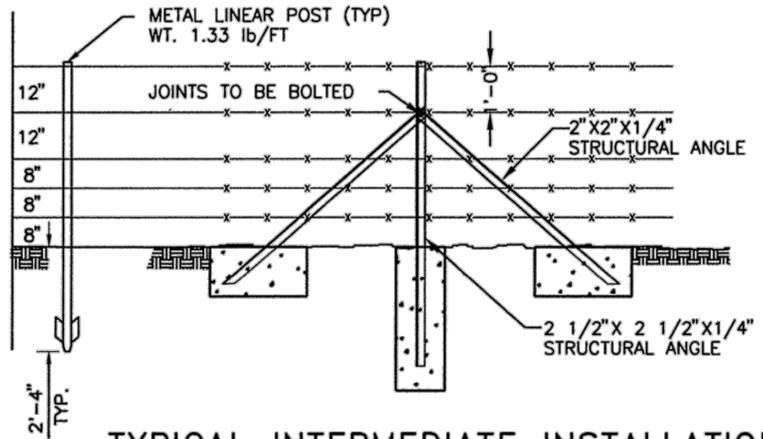
**NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING**

**BARBED WIRE
AND WOVEN WIRE
FENCE PLACEMENT**

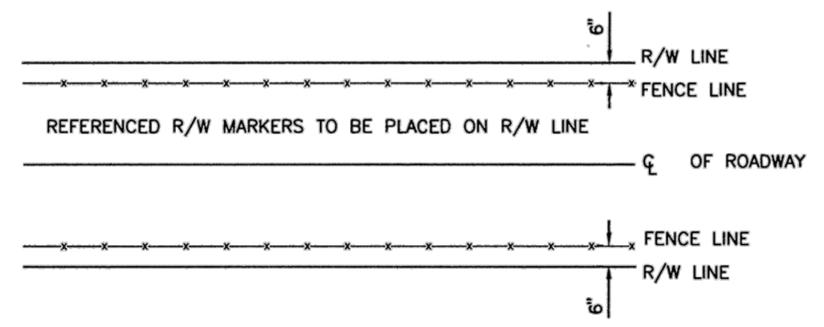
APPROVED _____ DATE 8/14/13
DESIGN ENGINEER

DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

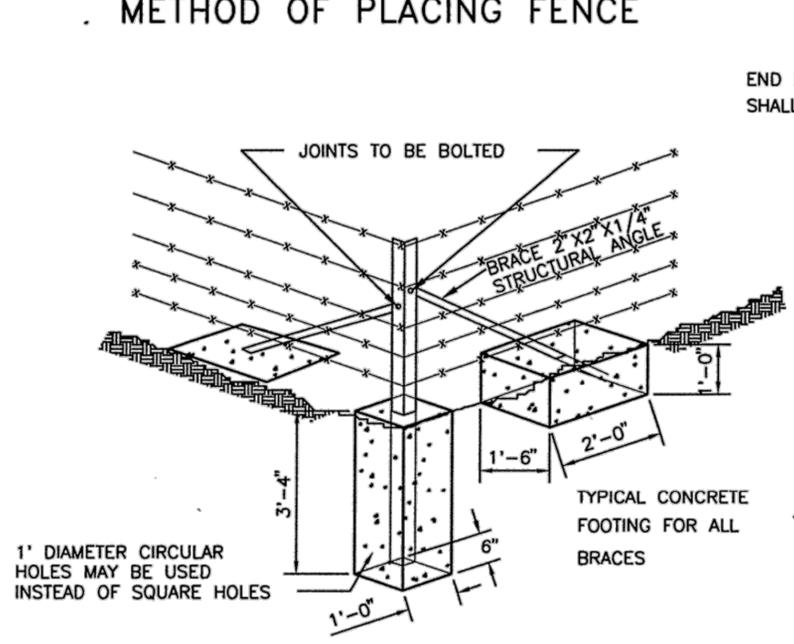
607-01-1/4 SHEET 1 OF 4



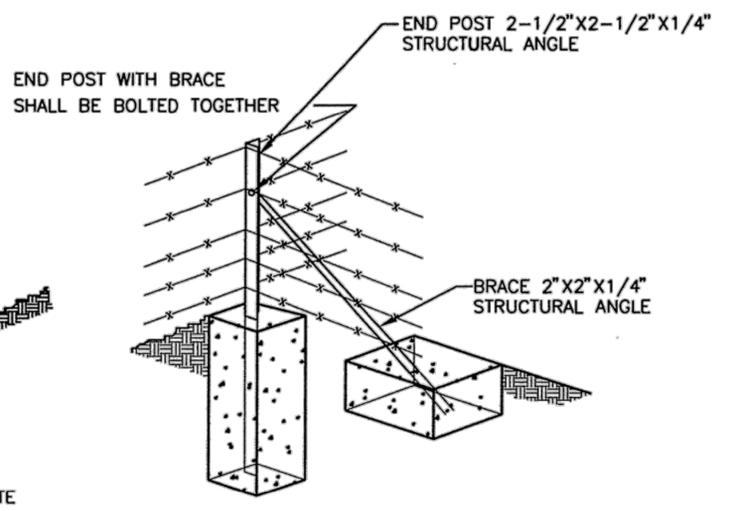
TYPICAL INTERMEDIATE INSTALLATION



TYPICAL PLAN VIEW ILLUSTRATING METHOD OF PLACING FENCE

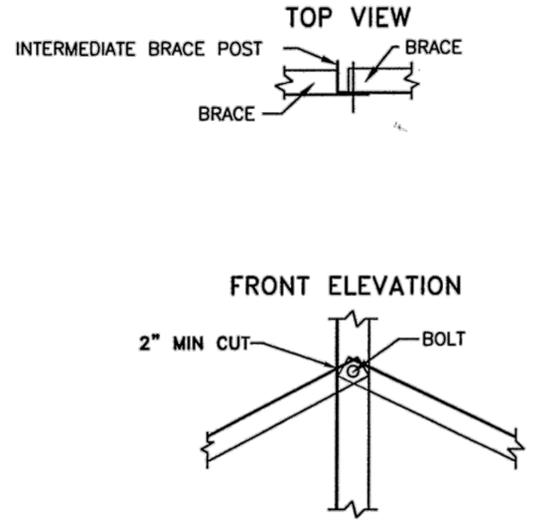


TYPICAL CORNER BRACE INSTALLATION

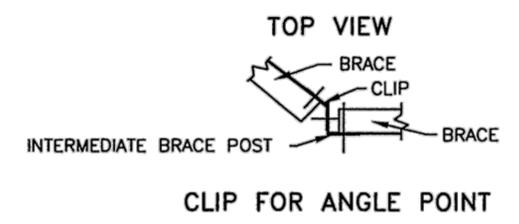
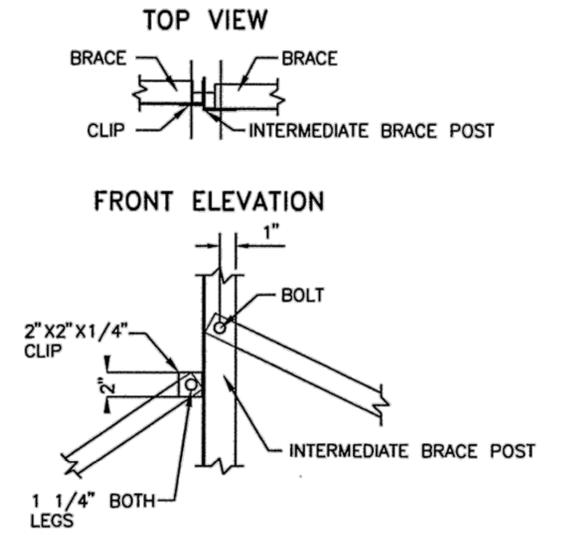


TYPICAL FENCE INTERSECTION INSTALLATION

BRACE ATTACHMENT DETAIL



ALTERNATE BRACE ATTACHMENT DETAIL



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
BARBED WIRE AND WOVEN WIRE FENCE PLACEMENT			
APPROVED	DESIGN ENGINEER		DATE
	DESIGNED BY		DRAWN BY
	CHECKED BY		
607-01-2/4			SHEET 2 OF 4

GENERAL NOTES:

- NMDOT IS RECOGNIZED AS A TITLE II PUBLIC ENTITY UNDER THE AMERICANS WITH DISABILITIES ACT (ADA), OF 1990 (PUBLIC LAW 101-336). A TITLE II ENTITY IS DEFINED AS ANY STATE OR LOCAL GOVERNMENT ENTITY AND PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY. THE ADA EXTENDS THE PRINCIPLES OF SECTION 504 OF THE REHABILITATION ACT, OF 1973, AS AMENDED, TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRESPECTIVE OF THE FUNDING SOURCE.
- THESE DRAWINGS PROVIDE GUIDANCE FOR COMPLIANCE WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROWAG), JULY 26, 2011, OR LATEST EDITION. THESE GUIDELINES SHALL APPLY TO ALL NEW AND ALTERED PEDESTRIAN ACCESS ROUTES (PAR).
- REFER TO CONSTRUCTION PLANS FOR THE DETAILED LAYOUTS AND DETAILS.
- PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE FIRM, STABLE, AND SLIP RESISTANT. PROVIDE SLIP RESISTANT TEXTURE ON SIDEWALKS AND CURB RAMPS BY BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP AND /OR PERPENDICULAR TO PEDESTRIAN TRAVEL. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES. DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATIONS ONLY.
- VERTICAL SURFACE DISCONTINUITIES SHALL BE 0.5 INCHES MAXIMUM. VERTICAL DISCONTINUITIES BETWEEN 0.25 INCHES AND 0.5 INCHES SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 50 PERCENT. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE VERTICAL SURFACE DISCONTINUITY.
- HORIZONTAL OPENINGS IN GRATINGS AND JOINTS SHALL NOT PERMIT PASSAGE OF A SPHERE MORE THAN 0.5 INCHES IN DIAMETER. ELONGATED OPENINGS IN GRATINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.
- PROVIDE EXPANSION JOINT MATERIAL 0.5 INCHES THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- SEAL ALL JOINTS WITH AN APPROVED SEALING MATERIAL.
- INSTALL JOINTS WHERE CURB RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT. ALL JOINTS AND TRANSITIONS SHALL BE FLUSH.
- VERTICAL WALLS OR HEADER CURBS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY CURB RAMP FLARES OR GRADING. GRADE NON-WALK AREAS AT 3:1 OR FLATTER.
- CONSTRUCTION TOP / BOTTOM OF CURB TO BE FLUSH WITH ADJACENT SURFACES (CURB RAMPS, SIDEWALKS, AND FLARES). VERTICAL LIPS NOT PERMITTED AT THE BOTTOM OF CURB RAMP WHERE THE RAMP MEETS STREET LEVEL.

SIDEWALKS

- SIDEWALK, AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SERIAL 609-01-1/1.
- SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1.5% TYPICAL, BUT SHALL NOT EXCEED 2.0% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).
- SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT, EXCLUSIVE OF THE WIDTH OF THE CURB RETURN.
EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.0 FT, PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT MAXIMUM. PASSING SPACES SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM.
- ANY SIGNS POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.
- THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5.0 FT MINIMUM.

CURB RAMPS

- FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE FEASIBLE. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMP STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMP STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REMOVED AND RECONSTRUCTED.
- RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
- CONSTRUCT THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES AS TYPICAL 5.0 FT X 5.0 FT AND MINIMUM 4.0 FT X 4.0 FT CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
- CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
- THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.3%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP RUNS, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.0%.
- CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.
- GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
- ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMP IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.0 FT FOR AN 8.3% SLOPE).

CROSSWALKS

- PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED CROSSWALK. CURB RAMP LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.

DETECTABLE WARNING

- DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE UTILIZED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACE PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CROSSES A STREET, ALLEY, TRAFFIC ISLAND, MEDIAN, OR RAILROAD. DETECTABLE WARNING SURFACES (DWS) WILL NOT BE INSTALLED AT RESIDENTIAL DRIVEWAYS. DETECTABLE WARNING SURFACE MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP OR YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.
- DETAILS OF DETECTABLE WARNING SURFACE ARE SHOWN IN CONTRACT PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.

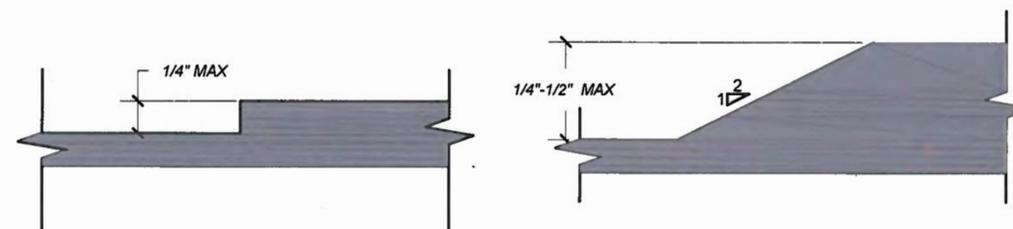
ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS

- FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT PRACTICABLE. INSTALL PEDESTRIAN STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS. REFER TO THE MUTCD FOR FURTHER GUIDANCE.
- PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCATED WITHIN A HORIZONTAL REACH OF 0" TO 10" AND SHALL BE WITHIN 36" TO 46" ABOVE THE SIDEWALK SURFACE.
- PEDESTRIAN SIGNAL SHALL HAVE 4FTx4FT MIN TURNING SPACE TO PROVIDE ACCESS TO PUSH BUTTONS.

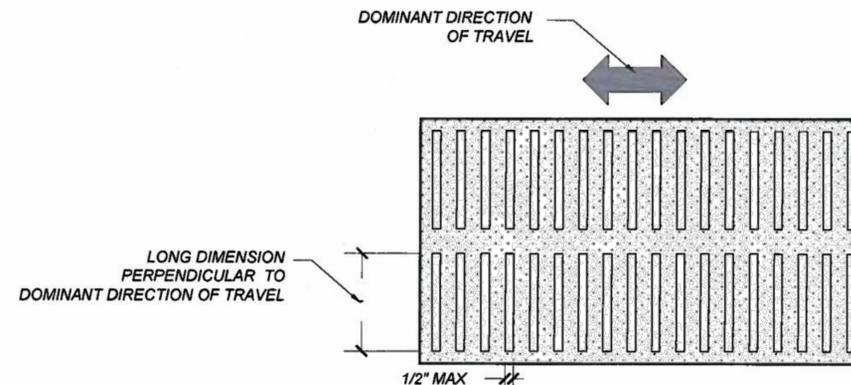
ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES:

ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE NMDOT PEDESTRIAN ACCESS STANDARDS AND PROWAG 2011 OR LATEST EDITION. ANY DESIGN / CONSTRUCTION DEVIATION THAT IS DEEMED AN VARIANCE OR TECHNICALLY INFEASIBLE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITTAL AND APPROVAL OF ADA DESIGN VARIANCE PROCEDURES.

- EXCEPTION: IN ALTERATION WORK, IF COMPLIANCE IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT PRACTICABLE. ANY ELEMENTS OR FEATURES OF THE BUILDING OR FACILITY THAT IS BEING ALTERED AND CAN BE MADE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SCOPE OF THE ALTERATION.
- TECHNICAL INFEASIBILITY: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE LIKELIHOOD OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WOULD REQUIRE REMOVING OR ALTERING A LOAD-BEARING MEMBER WHICH IS AN ESSENTIAL PART OF THE STRUCTURAL FRAME; OR BECAUSE OTHER EXISTING PHYSICAL OR SITE CONSTRAINTS PROHIBIT.
- IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.



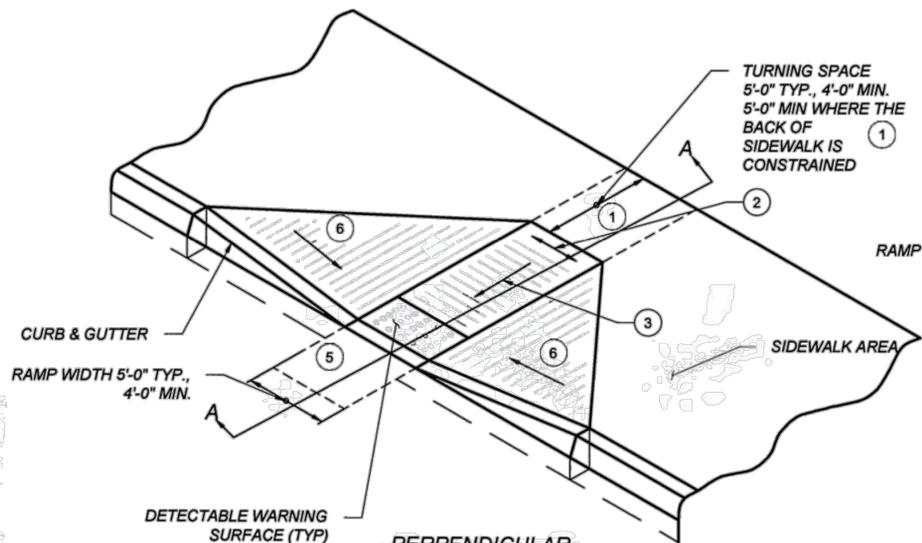
VERTICAL SURFACE DISCONTINUITIES
SCALE: NONE REFER TO NOTE 5



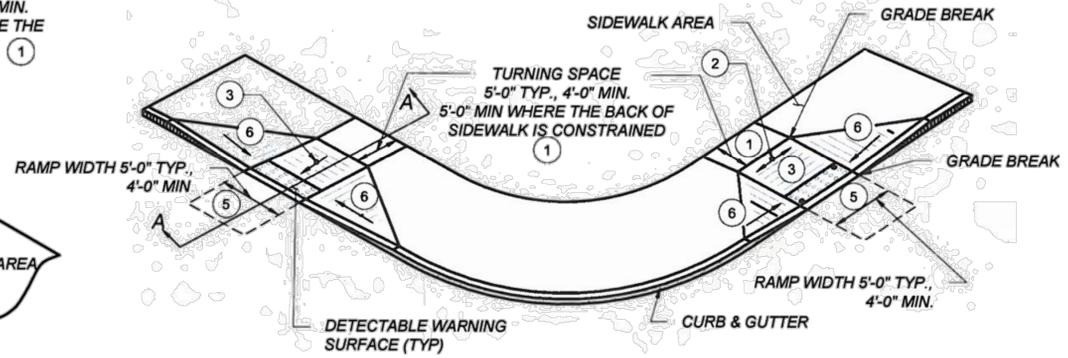
HORIZONTAL OPENINGS
SCALE: NONE REFER TO NOTE 6



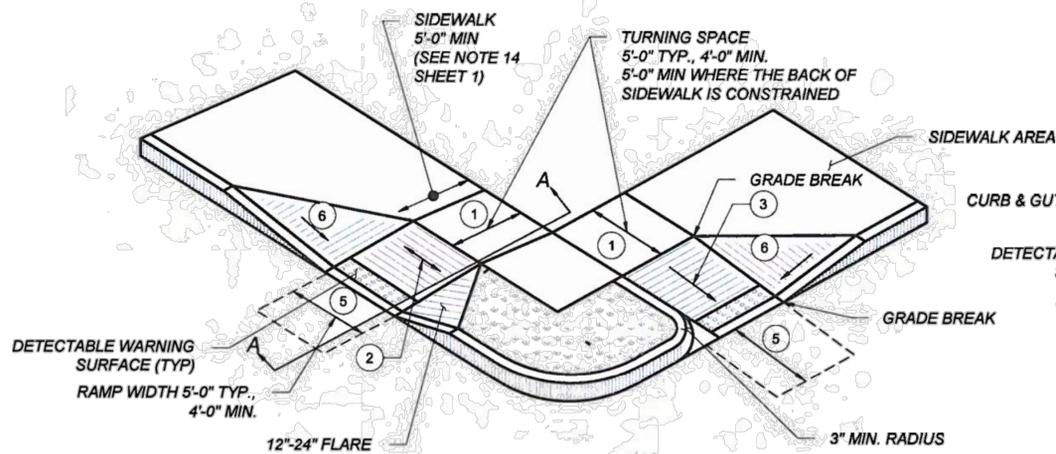
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN ACCESS ROUTE GENERAL NOTES			
APPROVED	<i>Michael J. Smelker</i>		1-13-15
	DESIGN ENGINEER		DATE
608-001-1		608-1 of 12	



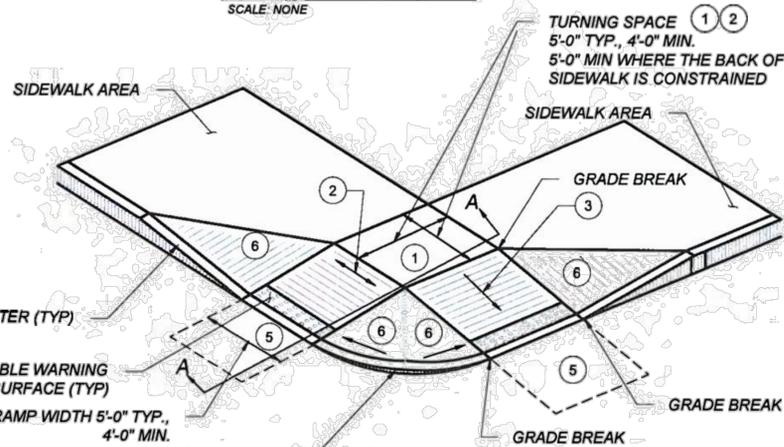
**PERPENDICULAR
CURB RAMP**
SCALE: NONE



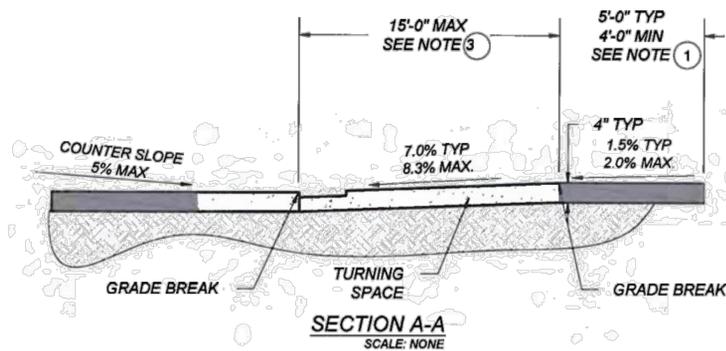
**DUAL PERPENDICULAR
CURB RAMP**
(PREFERRED INSTALLATION)
SCALE: NONE



**DUAL PERPENDICULAR
CURB RAMP**
(ALTERNATE INSTALLATION)
SCALE: NONE



**PERPENDICULAR
CURB RAMPS
WITH SHARED TURNING SPACE**
SCALE: NONE



SECTION A-A
SCALE: NONE

KEYED NOTES

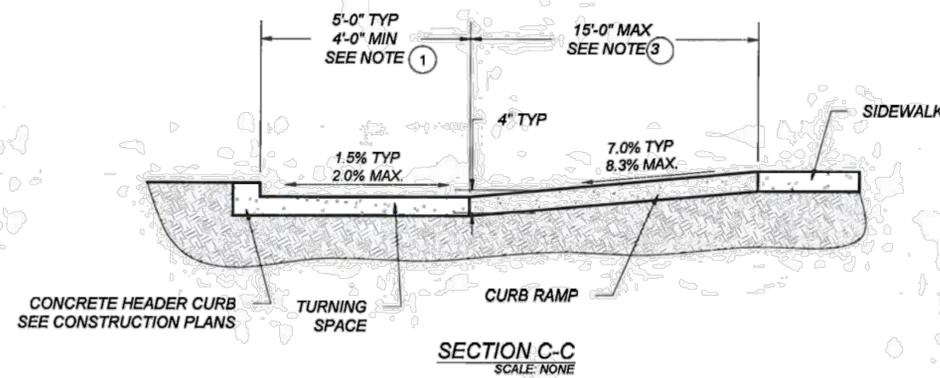
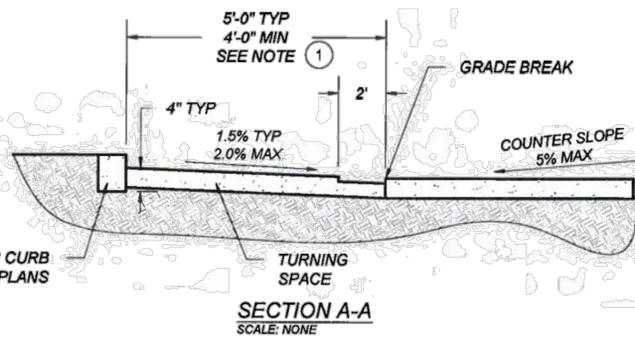
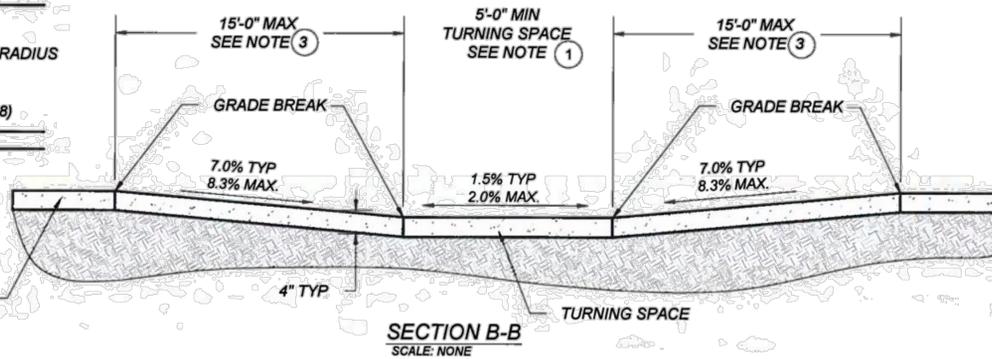
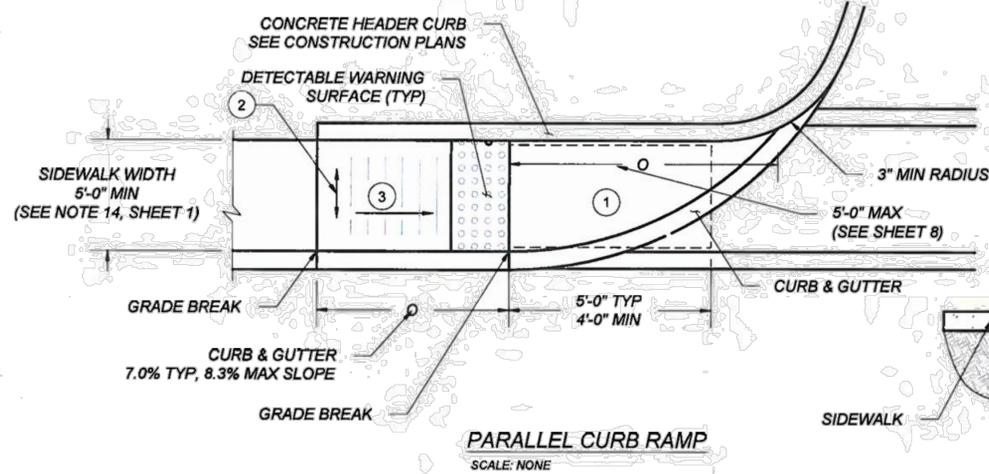
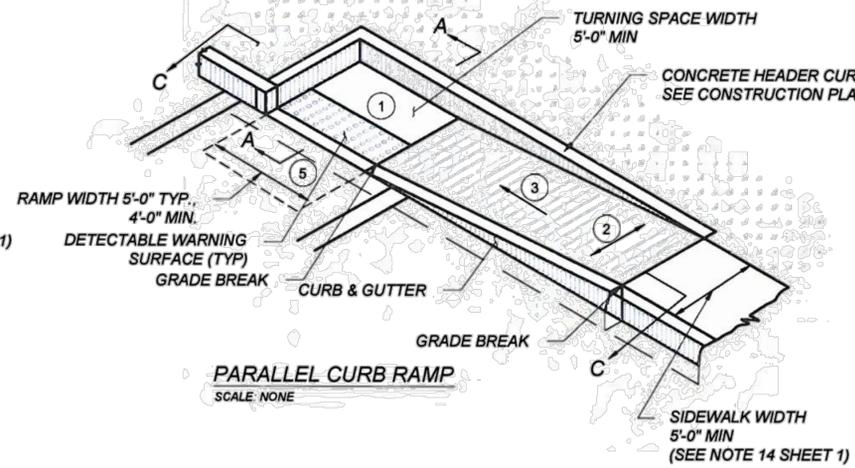
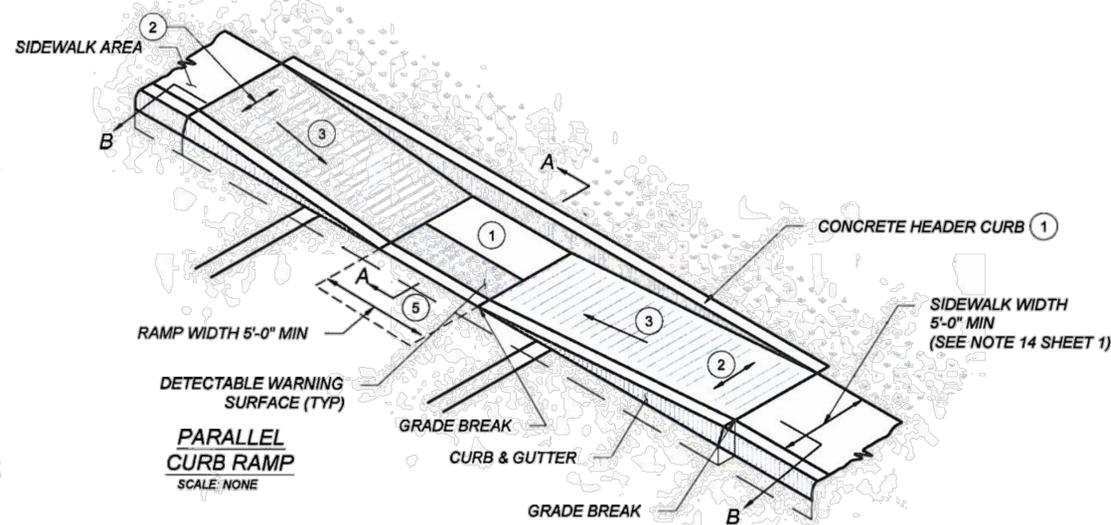
- 1 TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
- 2 CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.
- 3 RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
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- 5 COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
- 6 FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

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- D CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PERPENDICULAR CURB RAMPS			
APPROVED	<i>[Signature]</i>		1-13-15 DATE
			DESIGN ENGINEER
608-001-2			608-2 of 12



KEYED NOTES

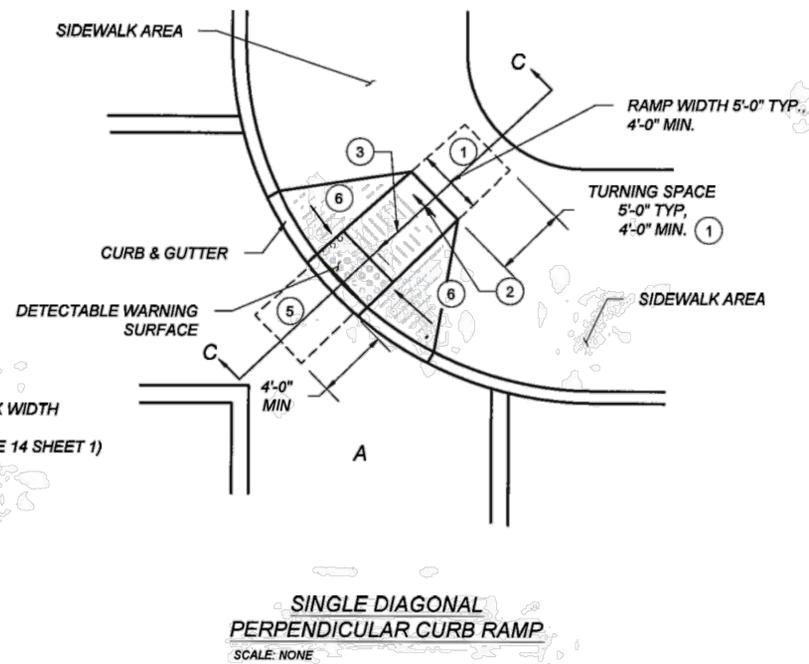
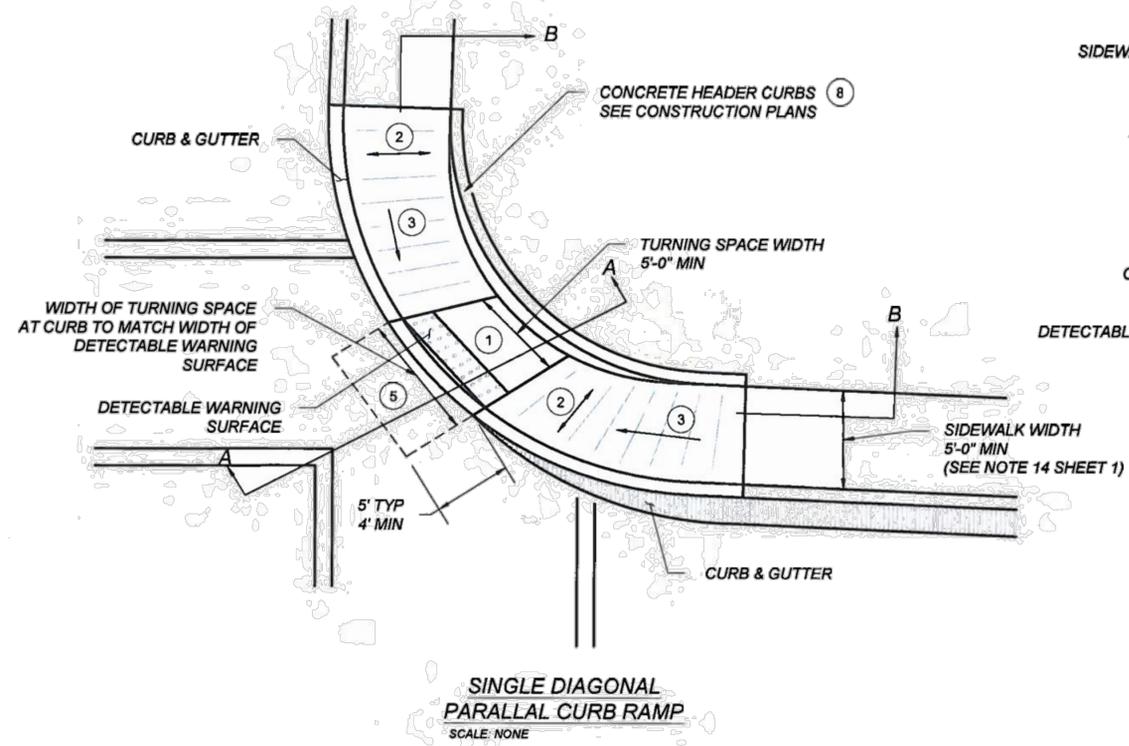
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NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PARALLEL CURB RAMPS			
APPROVED			1-13-15 DATE
			DESIGN ENGINEER
608-001-3			608- 3 of 12

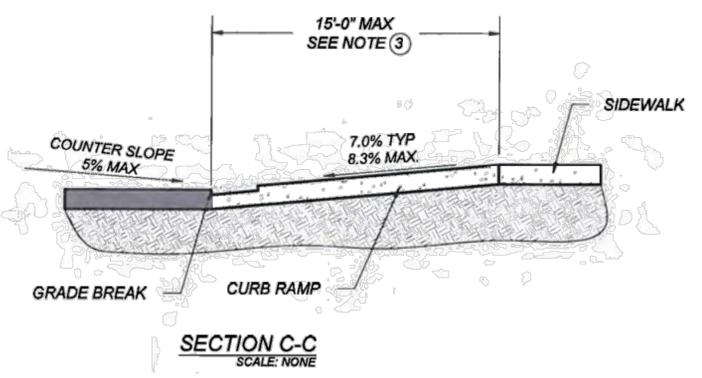
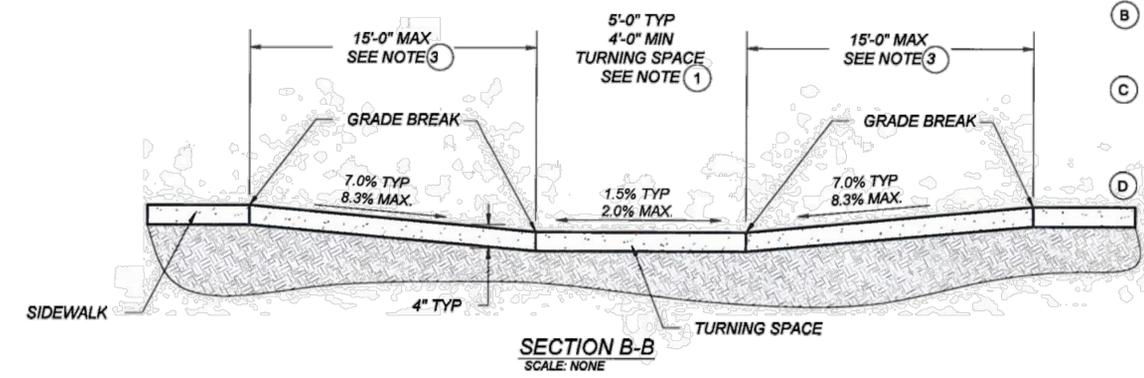
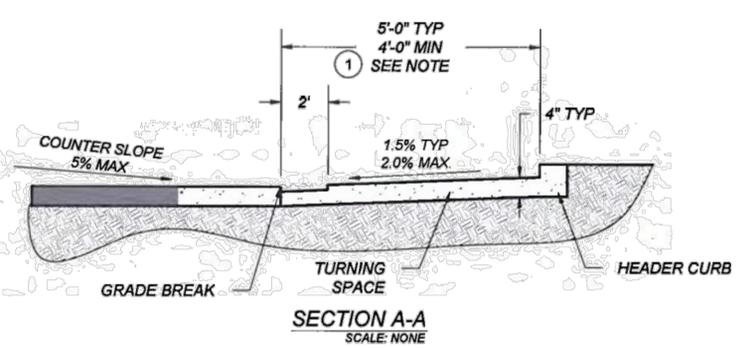


KEYED NOTES

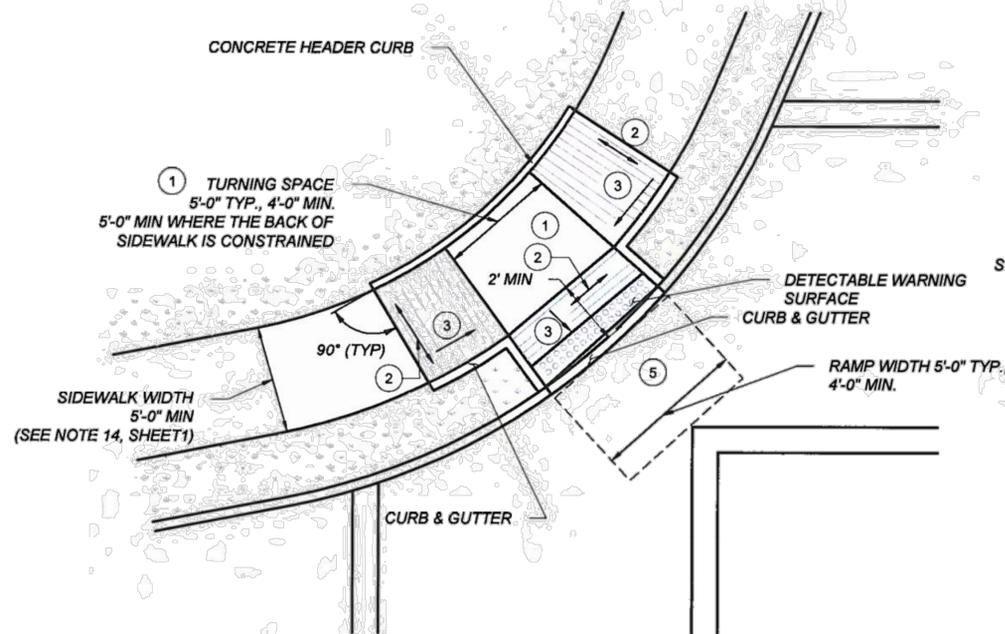
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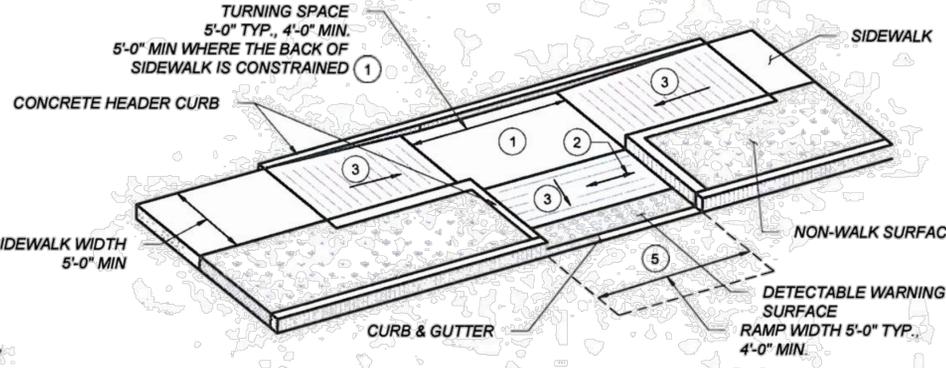


NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DIAGONAL CURB RAMPS			
APPROVED	<i>Michael J. Smelker</i>		1-13-15 DATE
		DESIGN ENGINEER	
608-001-4		608-4 of 12	



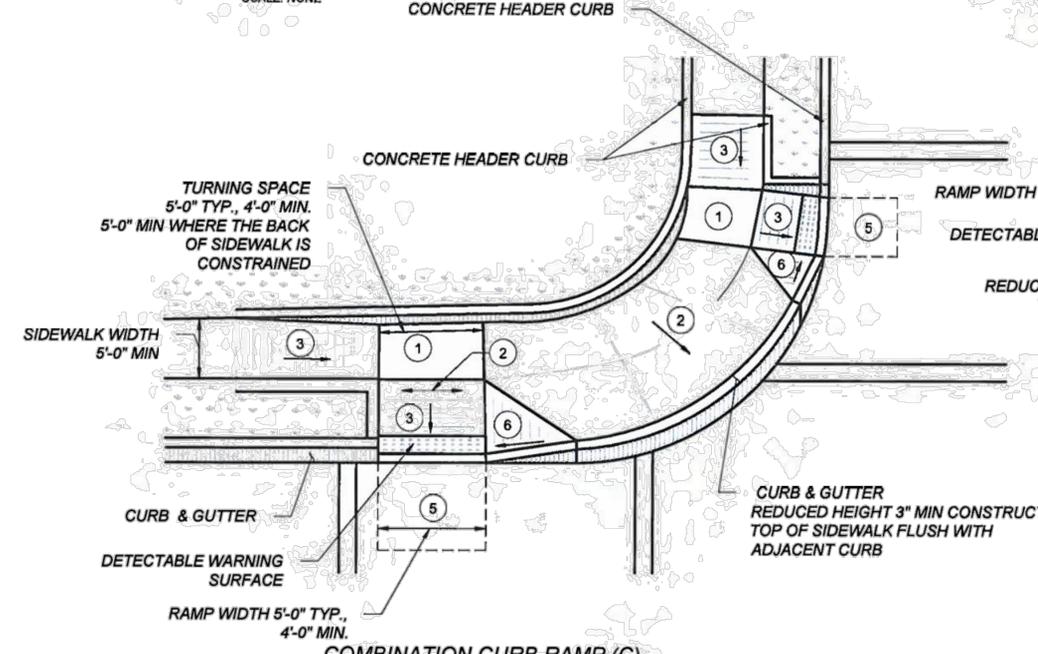
COMBINATION CURB RAMP (A)

DIAGONAL
SCALE: NONE



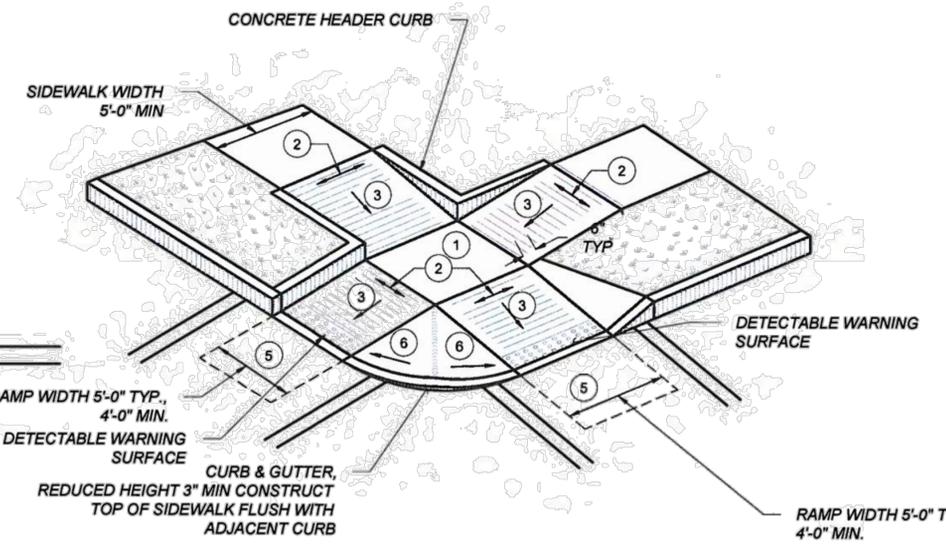
COMBINATION CURB RAMP (B)

SCALE: NONE



COMBINATION CURB RAMP (C)

SCALE: NONE



COMBINATION CURB RAMP (D)

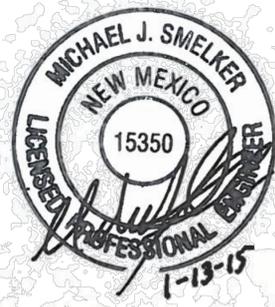
WITH SHARED TURNING SPACE
SCALE: NONE

KEYED NOTES

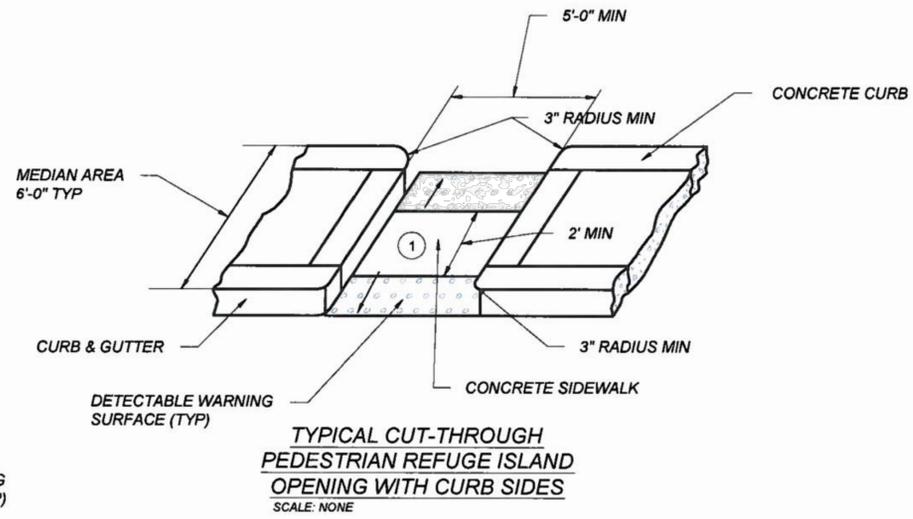
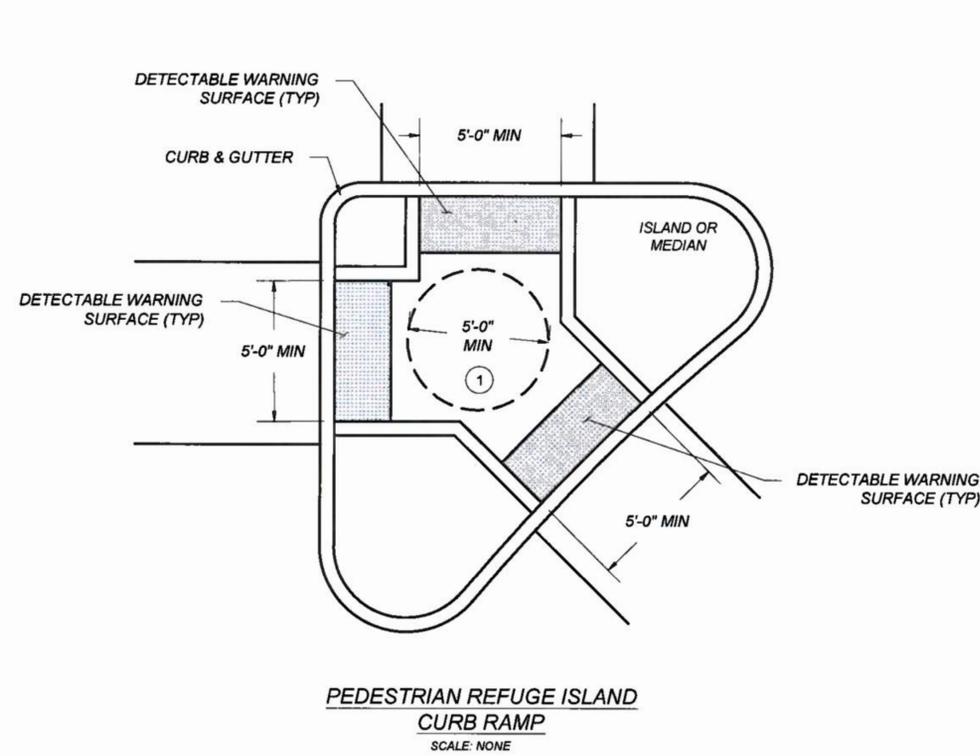
- 1 TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
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- 3 RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
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- 5 COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.
- 6 FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

NOTES:

- A DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.
- B DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.
- C IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
- D CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
COMBINATION CURB RAMPS			
APPROVED:	<i>Michael J. Smelker</i>		1-13-15
	DESIGN ENGINEER		DATE
608-001-5			608-5 of 12



KEYED NOTES

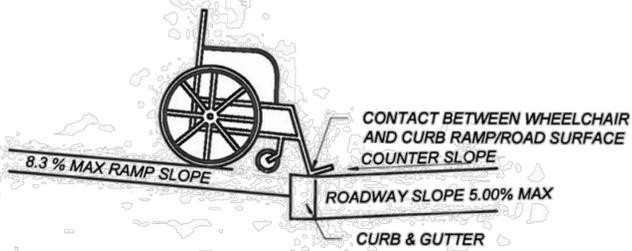
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- ③ RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3% MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.
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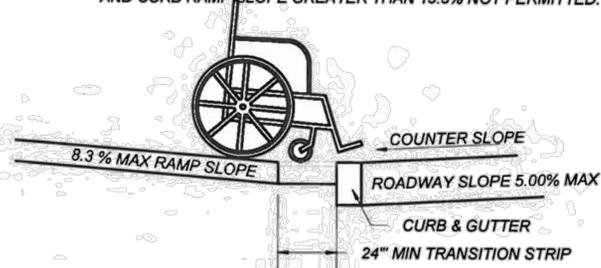
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NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN REFUGE ISLAND			
APPROVED	<i>Michael J. Smelker</i>		1-13-15
	DESIGN ENGINEER		DATE



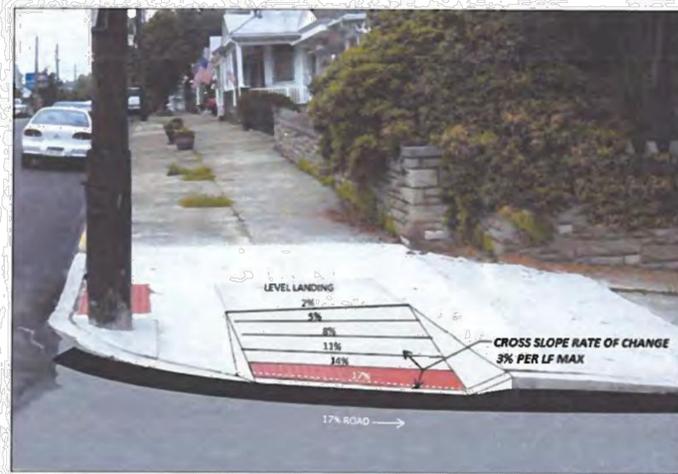
ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE GREATER THAN 13.33% NOT PERMITTED.



PROVIDE A 24" MIN TRANSITION STRIP IF ALGEBRAIC DIFFERENCES BETWEEN ROADWAY SLOPE AND CURB RAMP SLOPE ARE GREATER THAN 13.33%
TRANSITION STRIP SLOPE NOT TO EXCEED 5.00%

CHANGE OF GRADE

LIMITATIONS
SCALE: NONE

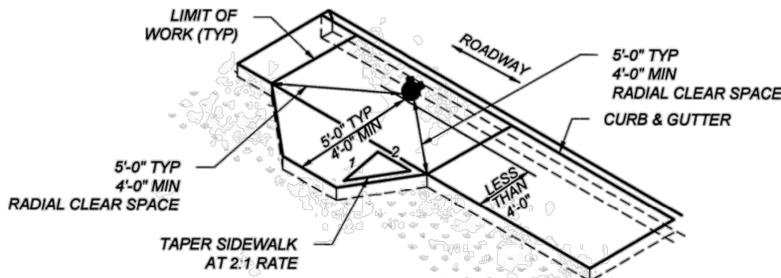


RAMP CROSS SLOPE TRANSITION TO MATCH ROADWAY PROFILE SLOPE

* SLOPES SHOWN ARE FOR ILLUSTRATION ONLY.

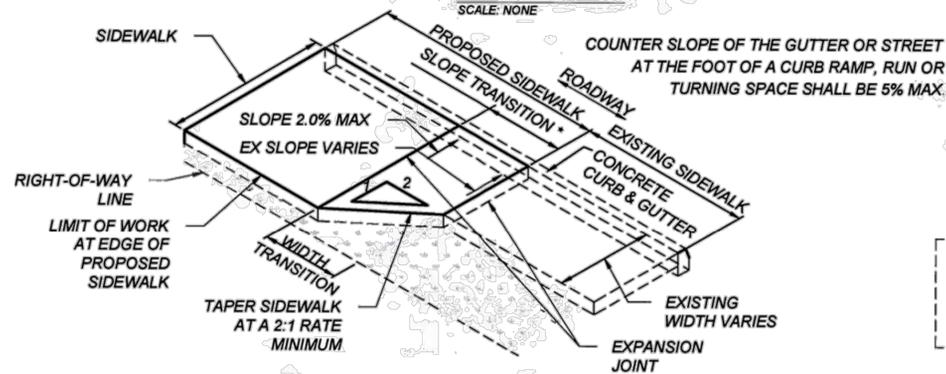
NOTE:

- CROSS SLOPE OF CURB RAMP AT PEDESTRIAN STREET CROSSING WITHOUT YIELD ON STOP CONTROL, AND AT MID BLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE ARE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
- CROSS SLOPE IF CURB RAMP IS AT YIELD OR STOP CONTROL REQUIRES 2% MAX CROSS SLOPE AT CURB LINE



SIDEWALK ADDITION DUE TO OBSTRUCTIONS

SCALE: NONE



TRANSITION TO EXISTING SIDEWALK DETAIL

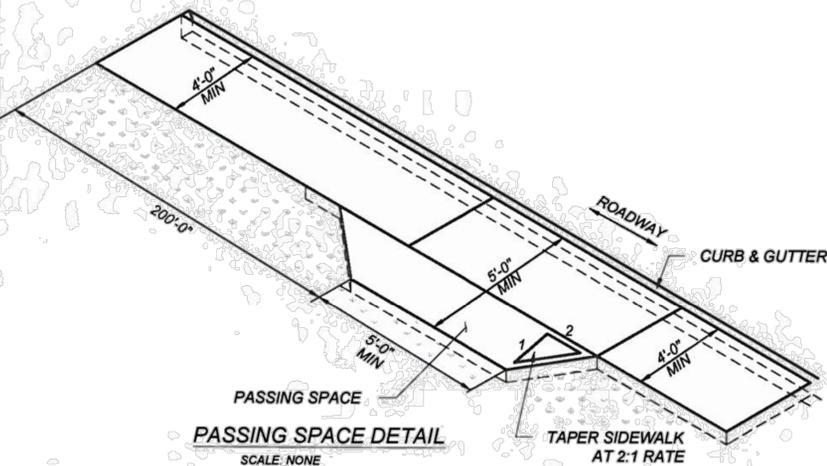
SCALE: NONE

MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN. THIS MINIMUM LENGTH TO BE DETERMINED BY THE FOLLOWING FORMULA: $\Delta\% \text{ SLOPE} \times 0.5'$ OR MIN WIDTH OF 1 FT.

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA: $\text{CHANGE IN WIDTH} \times 2$.

DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL CONTROL THE LENGTH OF SIDEWALK TRANSITION.

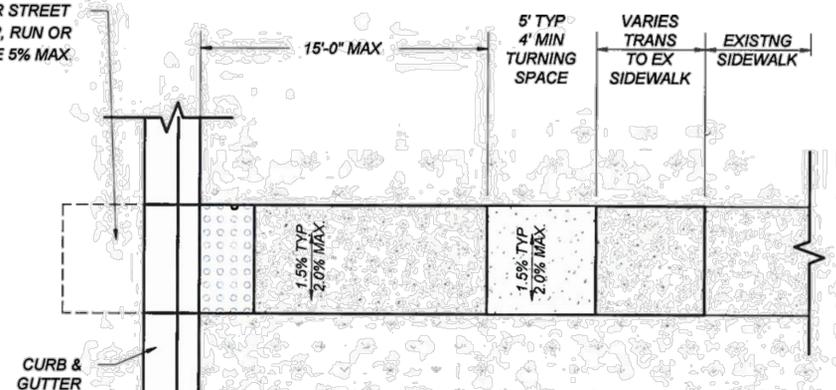
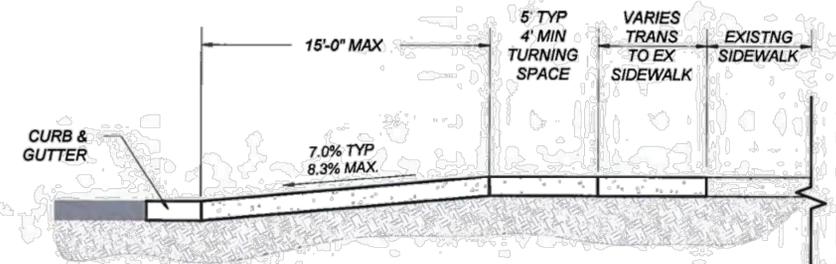
TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE. FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.



PASSING SPACE DETAIL

SCALE: NONE

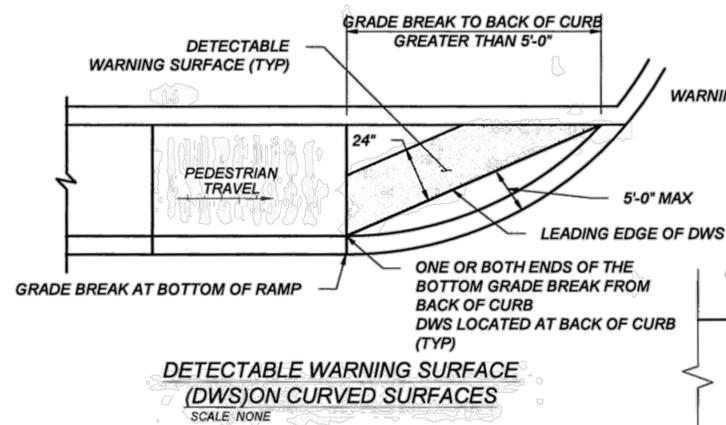
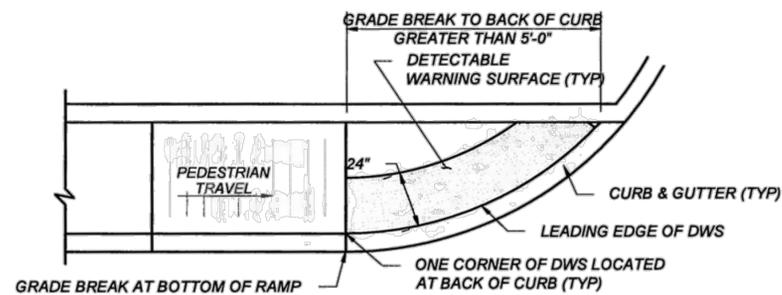
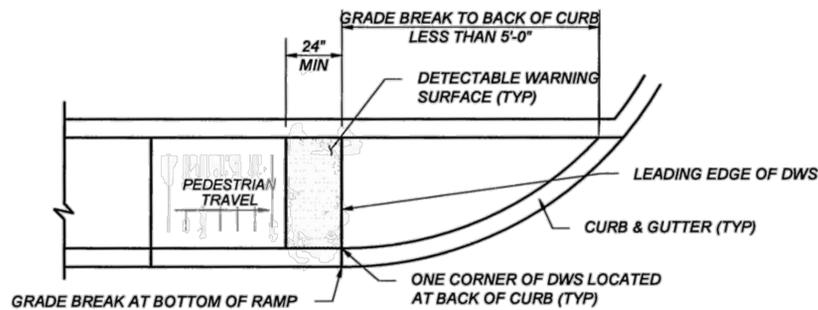
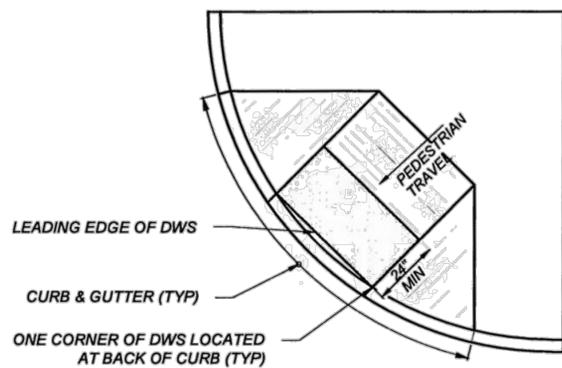
- WHERE THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES IS GREATER THAN 4ft AND LESS THAN 5ft, PASSING SPACES SHALL BE PROVIDED AT INTERVALS 200ft MAXIMUM.
- PASSING SPACES ARE PERMITTED TO OVERLAP PEDESTRIAN ACCESS ROUTES.



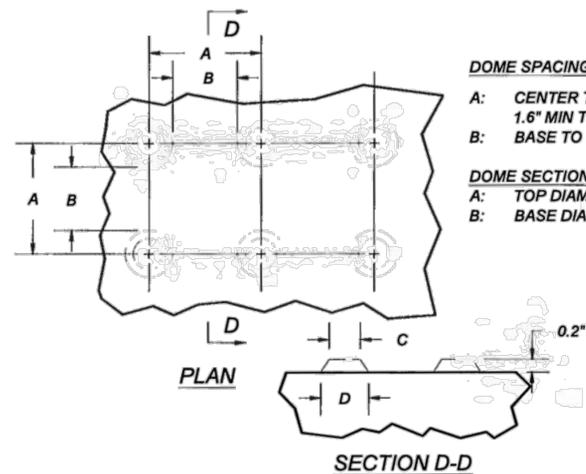
CURB RAMP TRANSITION TO EXISTING SIDEWALK DETAIL



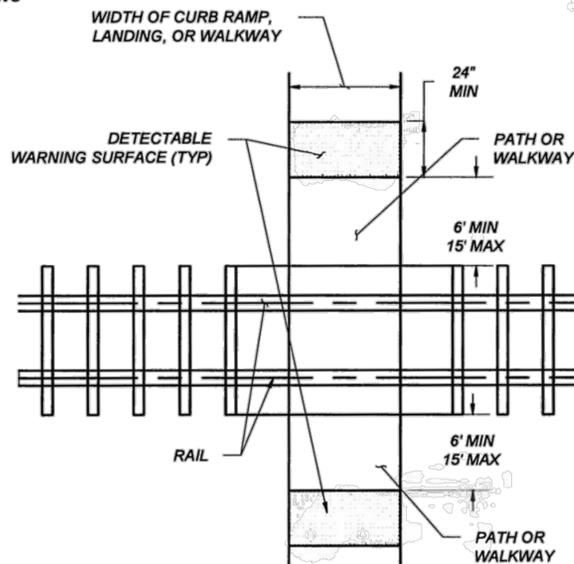
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
CURB RAMP AND SIDEWALK TRANSITION DETAILS			
APPROVED	DESIGN ENGINEER		DATE
		1-13-15	
608-001-7			608-7 of 12



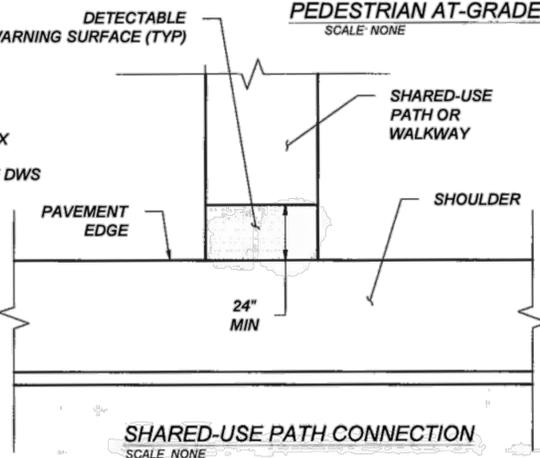
DETECTABLE WARNING SURFACE (DWS) ON CURVED SURFACES
SCALE: NONE



DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAILS
SCALE: NONE



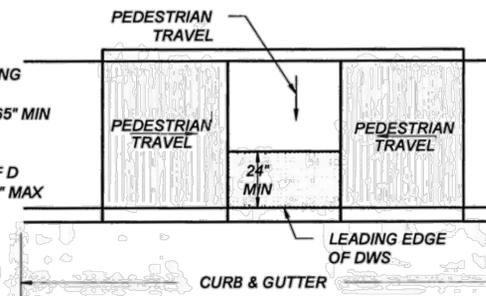
PEDESTRIAN AT-GRADE RAIL CROSSINGS
SCALE: NONE



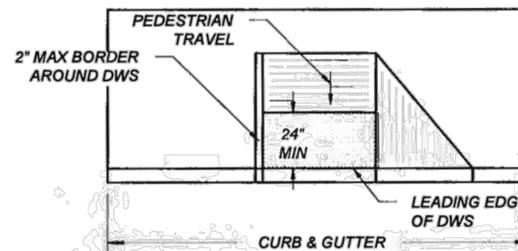
SHARED-USE PATH CONNECTION
SCALE: NONE

DOMES SPACING
A: CENTER TO CENTER SPACING 1.6" MIN TO 2.4" MAX
B: BASE TO BASE SPACING 0.65" MIN

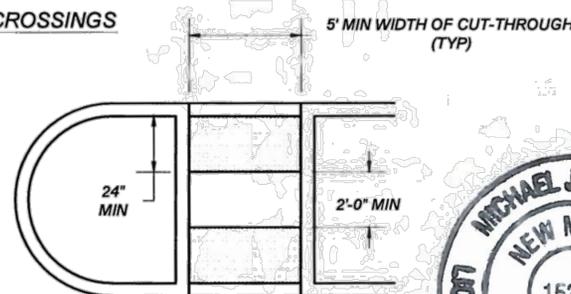
DOMES SECTION
A: TOP DIAMETER 50%-65% OF D
B: BASE DIAMETER 0.9" TO 1.4" MAX



DETECTABLE WARNING SURFACE
SCALE: NONE

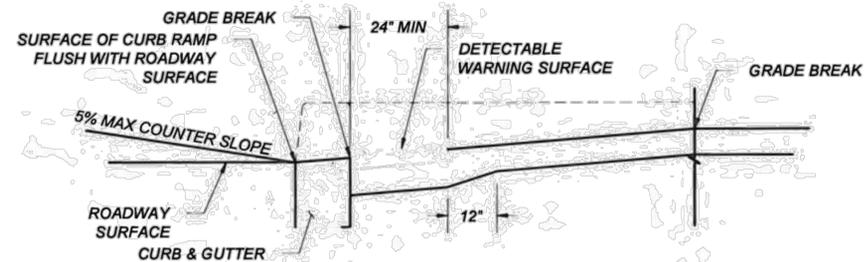


DETECTABLE WARNING SURFACE
SCALE: NONE



MEDIAN CUT-THROUGH
SCALE: NONE

EXCEPTION: IF THE LENGTH BETWEEN TWO DWS SURFACE IS LESS THAN 2' THEN DETECTABLE WARNING SURFACE WILL NOT BE INSTALLED



DETECTABLE WARNING SURFACE
SCALE: NONE

DETECTABLE WARNING SURFACE (DWS):

A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE DETECTABLE WARNING SURFACE (DWS): A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE PEDESTRIANS WILL ENCOUNTER THE PRESENCE OF HAZARDS IN THE LINE OF TRAVEL, SUCH AS THE EDGE OF ROADWAY AND AT-GRADE RAIL CROSSINGS, INDICATING THEY SHOULD STOP AND DETERMINE THE NATURE OF THE HAZARD BEFORE PROCEEDING.

LOCATION:

1. THE DETECTABLE WARNING SURFACE (DWS) SHALL BE 2.0 FT MINIMUM WIDTH AND EXTENDED THE FULL WIDTH OF THE CURB RAMP RUN, TURNING SPACE, BLENDED TRANSITION, AN EXCLUDING ANY THE FLARED SIDES
2. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PERPENDICULAR TO THE GRADE BREAK AT THE BACK OF THE CURB.
3. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PARALLEL TO THE DIRECTION OF TRAVEL.
4. IF CURB AND GUTTER ARE NOT PRESENT, SUCH AS A SHARED-USE PATH CONNECTION, THE DETECTABLE WARNING SURFACE SHALL BE PLACED AT THE PAVEMENT EDGE.
5. PEDESTRIAN REFUGE ISLANDS SHALL HAVE DETECTABLE WARNINGS. DETECTABLE WARNINGS AT CUT THROUGH ISLANDS SHALL BE SEPARATED BY A 24 INCH MINIMUM LENGTH OF THE WALKWAY WITHOUT MARKINGS.

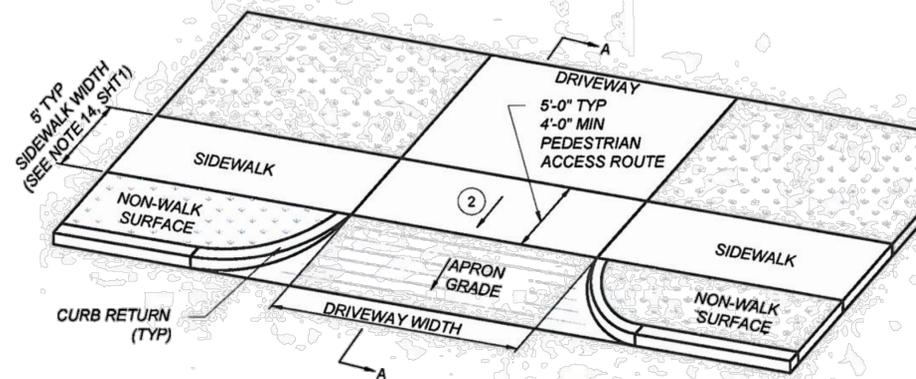
EXCEPTION: DETECTABLE WARNINGS SHALL NOT BE REQUIRED ON CUT THROUGH ISLANDS WHERE THE CROSSING IS LESS THAN 6 FT IN THE DIRECTION OF PEDESTRIAN TRAVEL.

NOTES:

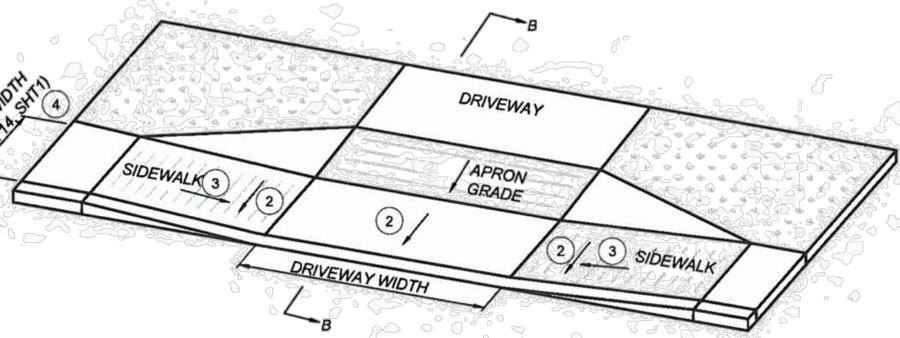
1. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS BY ALL PUBLIC AGENCIES AND BY ALL PRIVATE ORGANIZATIONS CONSTRUCTING FACILITIES FOR PUBLIC USE
2. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
3. ALL PRODUCTS USED FOR DETECTABLE WARNING SURFACES SHALL BE ON THE DEPARTMENT'S APPROVED PRODUCT LIST.



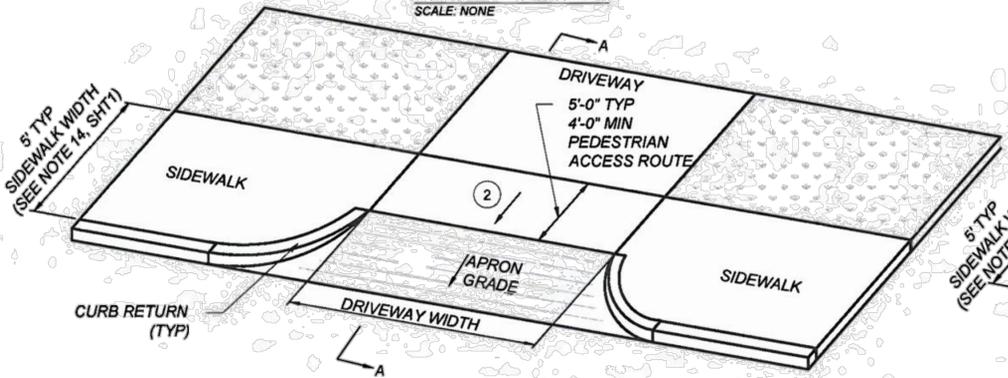
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DETECTABLE WARNING SURFACE			
APPROVED <i>[Signature]</i>			1-13-15 DATE
			DESIGN ENGINEER
608-001-8			608-8 of 12



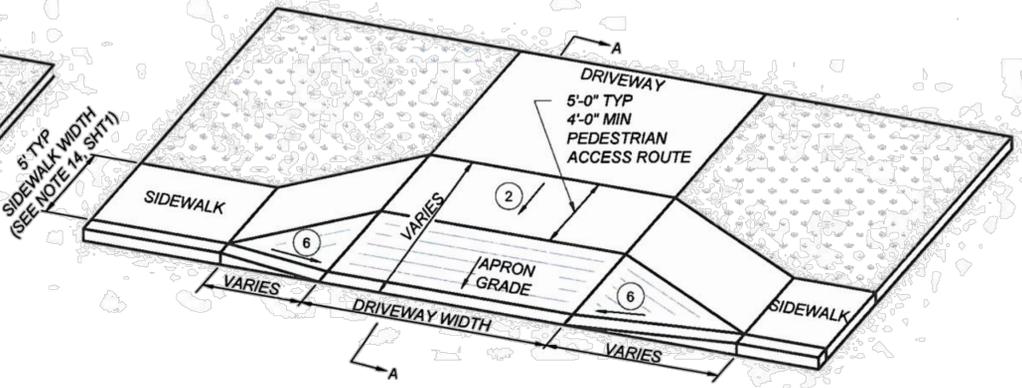
**TYPE 2
DRIVEWAY APRON**
SCALE: NONE



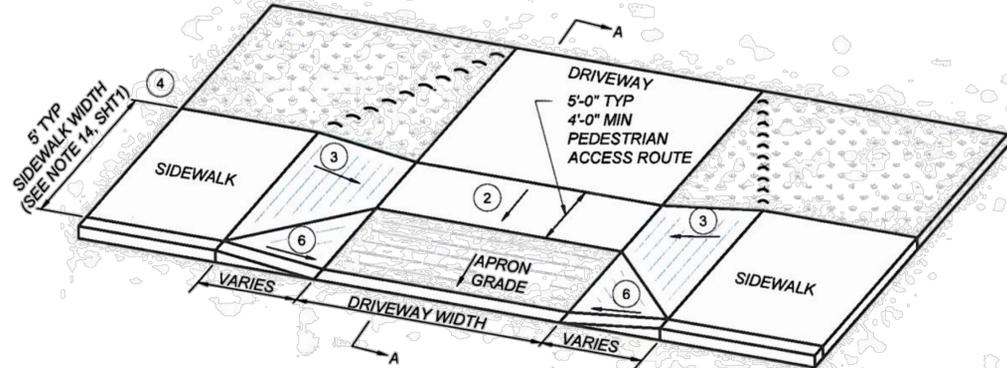
**TYPE 3A
DRIVEWAY APRON**
SCALE: NONE



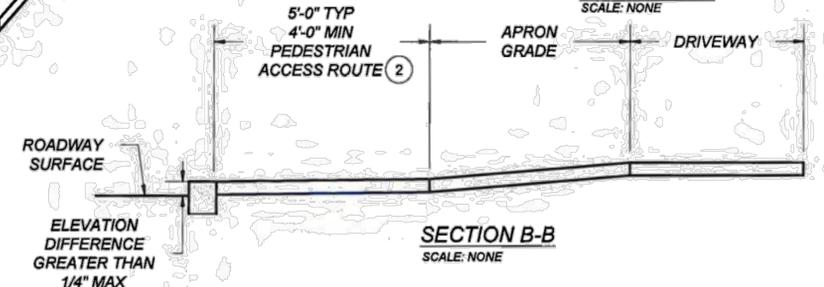
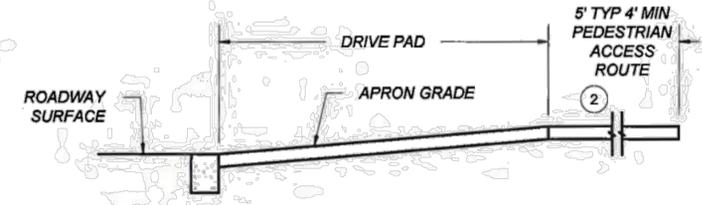
**TYPE 2A
DRIVEWAY APRON**
SCALE: NONE



**TYPE 2C
DRIVEWAY APRON**
SCALE: NONE



**TYPE 2B
DRIVEWAY APRON**
SCALE: NONE



KEYED NOTES

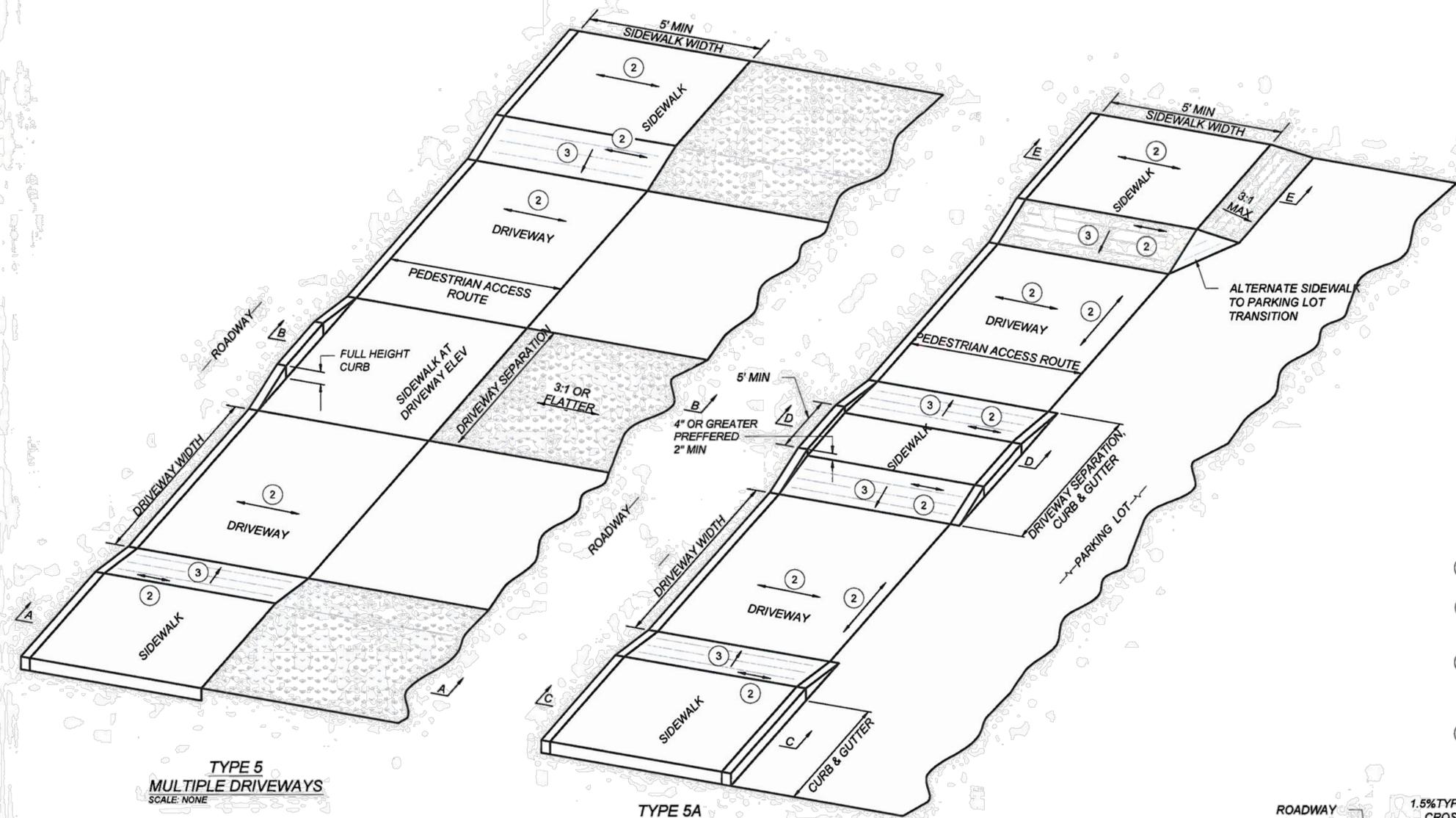
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NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DRIVEWAY APRONS			
APPROVED			1-18-15 DATE
			ENGINEER
608-001-9			608-9 of 12

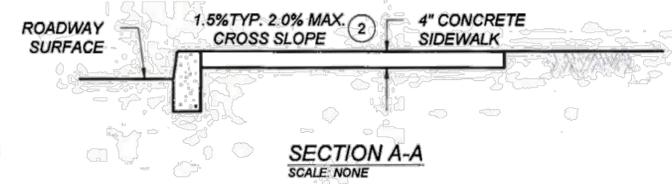
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 - B DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.
 - C IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.
 - D CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.

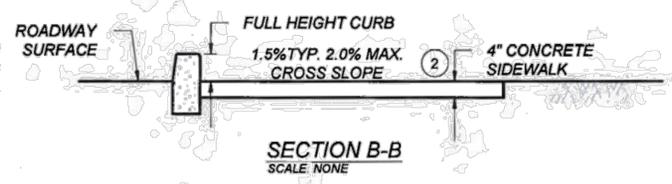


**TYPE 5
MULTIPLE DRIVEWAYS**
SCALE: NONE

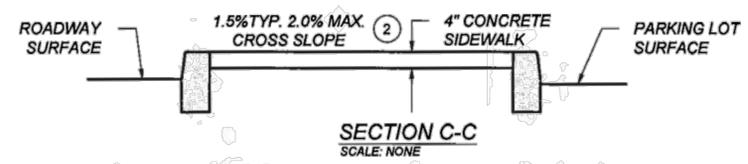
**TYPE 5A
MULTIPLE DRIVEWAYS**
SCALE: NONE



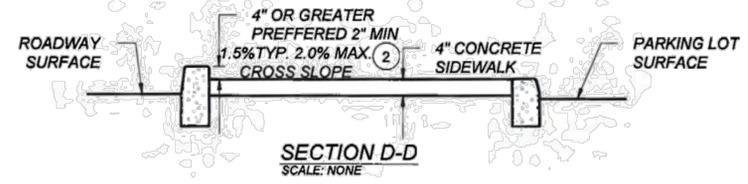
SECTION A-A
SCALE: NONE



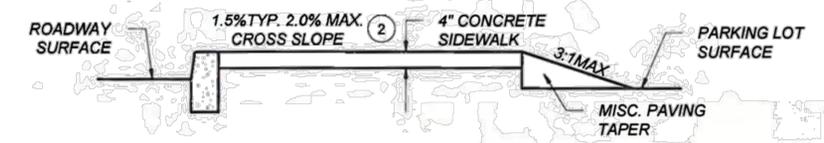
SECTION B-B
SCALE: NONE



SECTION C-C
SCALE: NONE



SECTION D-D
SCALE: NONE



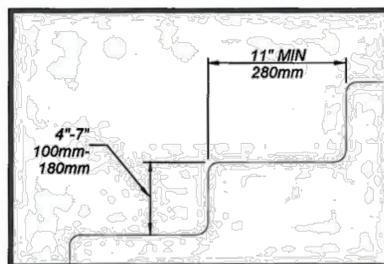
SECTION E-E
SCALE: NONE



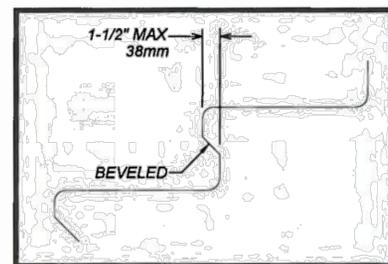
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
DRIVEWAY APRONS			
APPROVED	[Signature]		1-15-15 DATE
			DESIGN ENGINEER
608-001-10			608-10 of 12

STAIRWAY REQUIREMENTS

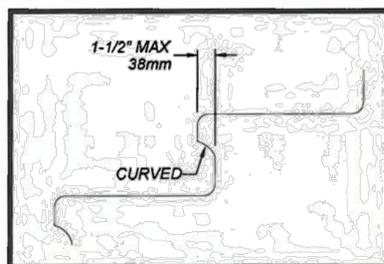
1. STAIRWAYS SHALL BE 4 FT WIDE MINIMUM BETWEEN HANDRAILS.
2. ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTH. RISERS SHALL BE 4 INCHES (100mm) HIGH MINIMUM AND 7 INCHES (180mm) MAXIMUM. TREADS SHALL BE 11 INCHES (280mm) DEEP MINIMUM MEASURED FROM RISER TO RISER.
3. OPEN RISERS SHALL NOT BE PERMITTED.
4. STAIR TREADS SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
5. THE RADIUS OF CURVATURE AT THE LENDING EDGE OF THE TREAD SHALL BE 1/2 INCH (13mm) MAXIMUM. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LANDING EDGE CURVED OR BEVELED. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM THE VERTICAL. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 INCHES (38mm) MAXIMUM BEYOND THE TREAD BELOW.
6. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS.
7. OUTDOOR STAIRS AND OUTDOOR APPROACHES TO STAIRS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



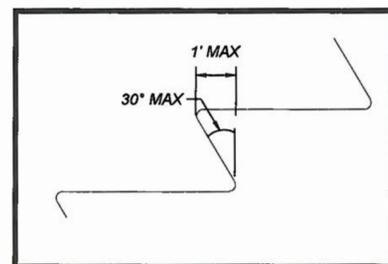
VERTICAL RISER



BEVELED RISER



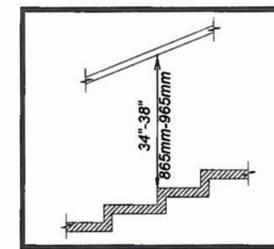
CURVED RISER



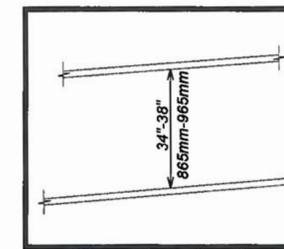
ANGLED RISER

HANDRAIL REQUIREMENTS

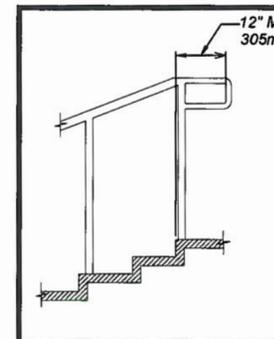
1. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS.
2. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCH BACK OR DOGLEG STAIRS OR RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS.
3. TOP GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865mm) MINIMUM AND 38 INCHES (965mm) MAXIMUM VERTICALLY ABOVE STAIR NOSINGS AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSINGS AND RAMP SURFACES.
4. CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE 1 INCH (38mm) MINIMUM
5. GRIPPING SURFACES SHALL BE CONTINUOUS WITHOUT INTERRUPTION BY NEW POSTS, OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.
EXCEPTION: HANDRAIL BRACKETS OR BALUSTERS ATTACHED TO THE BOTTOM SURFACE OF THE HANDRAIL SHALL NOT BE CONSIDERED OBSTRUCTIONS PROVIDED THEY COMPLY WITH THE FOLLOWING CRITERIA:
 - A. NOT MORE THAN 20 PERCENT OF THE HANDRAIL LENGTH IS OBSTRUCTED.
 - B. HORIZONTAL PROJECTIONS BEYOND THE SIDES OF THE HANDRAIL OCCUR 2 INCHES (64mm) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL AND
 - C. EDGES HAVE 11 INCH (32MM) MINIMUM RADIUS.
6. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OD 1-1/4" or 1.25" INCH (32mm) MINIMUM AND 2 INCH (51mm) MAXIMUM OR SHALL PROVIDE EQUIVALENT GRASPABILITY.
EXCEPTION: HANDRAILS WITH OTHER SHAPES SHALL BE PERMITTED PROVIDED THEY HAVE A PERIMETER DIMENSION OF 4 INCH (100mm) MINIMUM AND A 6.25 INCH (160mm) MAXIMUM AND PROVIDED THEIR LARGEST CROSS SECTION DIMENSION IS 2.25 INCH (57mm) MAXIMUM.
7. HANDRAILS AND ANY WALL OR OTHER SURFACES ADJACENT TO THEM, SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE 1 INCH (32mm) MINIMUM RADIUS.
8. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
9. HANDRAILS FOR STAIRS AND RAMPS SHALL HAVE EXTENSIONS.
EXCEPTIONS:
 - A. EXTENSIONS ARE NOT REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF STAIRS AND RAMPS
 - B. IN ALTERATIONS FULL EXTENSIONS OF HANDRAILS SHALL NOT BE REQUIRED WHERE SUCH EXTENSIONS WOULD BE HAZARDOUS OR IMPOSSIBLE DUE TO PLAN CONFIGURATION.
10. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY 12 INCHES (305mm) MINIMUM BEYOND OF RAMP RUNS SUCH EXTENSION SHALL RETURN TO WALL GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.
11. AT THE TOP OF A STAIR FLIGHT HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305mm) MINIMUM BEGINNING DIRECTLY ABOVE THE FIRST RISER NOSING. SUCH EXTENSIONS SHALL RETURN TO A WALL, OR THE WALKING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.
12. AT THE BOTTOM OF THE STAIR FLIGHT HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ON TREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENSIONS SHALL RETURN TO A WELL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.



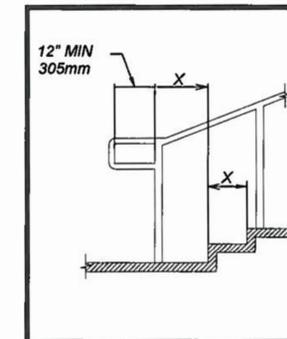
STAIR HANDRAIL HEIGHT



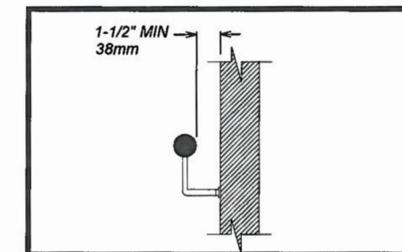
RAMP HANDRAIL HEIGHT



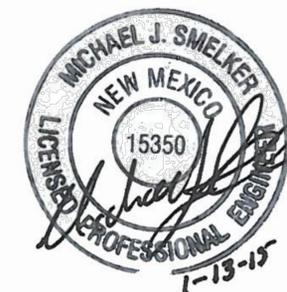
TOP HANDRAIL EXTENSION AT STAIRS



BOTTOM HANDRAIL EXTENSION AT STAIRS



HANDRAIL CLEARANCE



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN ACCESS DETAILS STAIRWAY AND HANDRAILS			
APPROVED			1-13-15 DATE
			DESIGN ENGINEER
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ACCESSIBLE ROUTES:

ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE OR FACILITY

ACCESSIBLE PARKING REQUIREMENTS:

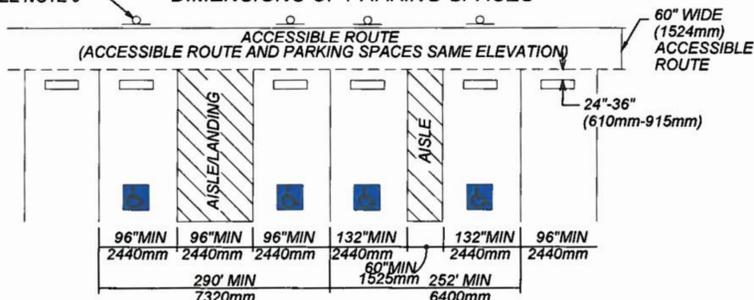
- EACH FACILITY SHALL PROVIDE ACCESSIBLE PARKING SPACES IN COMPLIANCE WITH THE FOLLOWING TABLE:

NUMBER OF ACCESSIBLE PARKING SPACES

TOTAL PARKING SPACES	TOTAL REQUIRED ACCESSIBLE PARKING SPACES	NUMBER REQUIRED TO BE VAN ACCESSIBLE
1-25	1	1
26-35	2	1
36-50	3	1
51-100	4	1
101-300	8	2
301-500	12	2
501-800	16	3
801-1000	20	4
OVER 1,000	20 SPACES PLUS 1 SPACE FOR EVERY 100 SPACES, OR FRACTION THEREOF, OVER 1,000	1 OF EVERY 6 ACCESSIBLE PARKING SPACES, OR FRACTION THEREOF

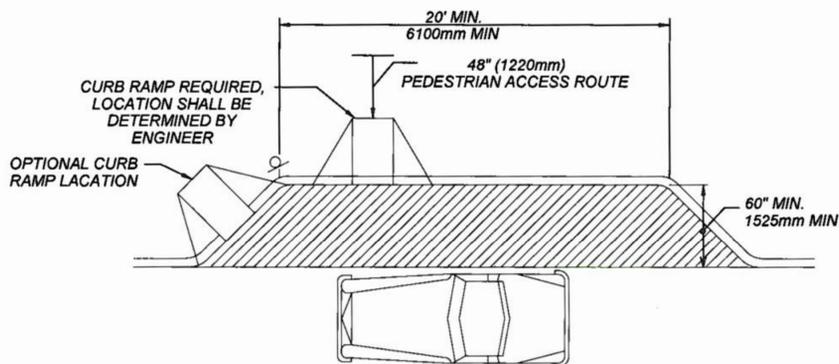
- CAR SPACES SHALL BE 96 INCHES (2440 mm) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES AND SHALL HAVE AN ADJACENT ACCESS AISLE.
- ACCESS AISLES SERVING PARKING SPACES SHALL CONNECT TO THE BUILDING OR FACILITY ENTRANCE BY AN ACCESSIBLE SIDEWALK. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE. THE VAN ACCESS AISLE IS PREFERRED TO BE AT THE RIGHT SIDE (PASSENGER SIDE) OF THE PARKING SPACE. (AN ACCESSIBLE SIDEWALK IS 60 INCHES (1525mm) MINIMUM CLEAR WIDTH, 50:1 MAXIMUM CROSS SLOPE WITH A RUNNING SLOPE OF 20:1 MAXIMUM OR THE RUNNING SLOPE MAY FOLLOW THE ADJACENT ROAD PROFILE GRADE.) PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE MINIMUM 48 INCH CLEAR WIDTH OF AN ACCESSIBLE ROUTE.
- ACCESS AISLES SERVING CAR PARKING SPACES SHALL BE 60 INCHES (1525mm) WIDE MINIMUM. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96 INCHES (2440mm) WIDE MINIMUM.
- ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE.
- PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.
- PARKING SPACES FOR VANS SHALL HAVE A VERTICAL CLEARANCE OF 98 INCHES (2490mm) MINIMUM AT THE SPACE AND ALONG THE VEHICULAR ROUTE THERETO.
- EACH ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. THE CLEARANCE TO THE BOTTOM OF THE SIGN (R7-8) SHALL BE AT LEAST 7 FEET (2100mm). LOCATED AT THE HEAD OF THE PARKING SPACE. VAN ACCESSIBLE PARKING SPACES SHALL HAVE AN ADDITIONAL SIGN (R7-8A) MOUNTED BELOW THE INTERNATIONAL SYMBOL OF ACCESS IDENTIFYING THE SPACE AS "VAN ACCESSIBLE." SIGNS MUST INCLUDE THE LANGUAGE "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING."
- PARKING SPACE AND ACCESS AISLES SHALL HAVE OSHA SAFETY BLUE STRIPING. STRIPING SHALL BE 4 INCHES (100mm) WIDE. ACCESS AISLES STRIPING SHALL BE 30 INCHES (760mm) ON CENTER. ACCESS AISLE SHALL HAVE THE WORDS "NO PARKING" IN CAPITAL LETTER OF WHICH SHALL BE AT LEAST ONE FOOT HIGH AND AT LEAST TWO INCHES WIDE PLACED AT THE REAR OF THE PARKING SPACE SO AS TO BE CLOSE TO WHERE AN ADJACENT VEHICLES REAR TIRES WOULD BE PLACED.
- EACH ACCESSIBLE PARKING SPACE SHALL INCLUDE, CENTERED AT THE FOOT, A PAVEMENT MARKING OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY TO BE CLEARLY VISIBLE WHEN THE SPACE IS OCCUPIED.

DIMENSIONS OF PARKING SPACES



ACCESSIBLE PASSENGER LOADING ZONE REQUIREMENTS:

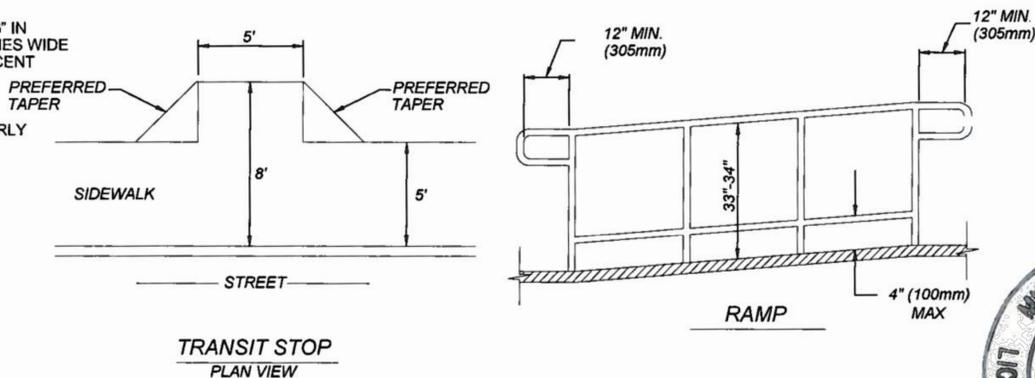
- PASSENGER LOADING ZONES SHALL PROVIDE A 60 INCH (1525mm) WIDE ACCESS AISLE ADJACENT AND PARALLEL TO A VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL BE 20 FEET (6100mm) LONG MINIMUM.
- ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE, AND MARKED TO DISCOURAGE PARKING.
- VEHICLE PULL-UP SPACES IN PASSENGER LOADING ZONES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE.
- VERTICAL CLEARANCE OF 114 INCHES (2895mm) MINIMUM SHALL BE PROVIDED AT PASSENGER LOADING ZONES AND ALONG VEHICLE ACCESS ROUTES TO SUCH AREAS FROM SITE ENTRANCES.
- EACH ACCESSIBLE PASSENGER LOADING ZONE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.



ACCESSIBLE PASSENGER LOADING ZONE
PLAN VIEW

TRANSIT STOP REQUIREMENTS

- TRANSIT STOPS SHOULD BE LOCATED SO THAT THERE IS A LEVEL AND STABLE SURFACE FOR BOARDING VEHICLES.
- LOCATING TRANSIT STOPS AT SIGNALIZED INTERSECTIONS INCREASE THE USABILITY FOR PEDESTRIANS WITH DISABILITIES.
- WHERE SECURITY BOLLARDS ARE INSTALLED AT TRANSIT STOPS, THEY MUST NOT OBSTRUCT THE CLEAR SPACE AT BOARDING AND ALIGHTING AREAS OR REDUCE THE REQUIRED CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES.
- TRANSIT STOPS SHALL COMPLY WITH PROWAG SECTION R 308 TRANSIT STOPS AND TRANSIT SHELTERS.



TRANSIT STOP
PLAN VIEW

RAMP REQUIREMENTS:

- RAMP RUNS SHALL HAVE A RUNNING SLOPE GREATER THAN 1:20 AND NOT STEEPER THAN 1:12. THE EXCEPTION SHALL REMAIN AS SHOWN, INCLUDING THE TABLE FOR EXISTING BUILDINGS AND FACILITIES.
- RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 12:1. EXCEPTION: RAMPS IN OR ON EXISTING BUILDINGS OR FACILITIES SHALL BE PERMITTED TO HAVE SLOPES STEEPER THAN 12:1 AND SHALL COMPLY WITH THE FOLLOWING TABLE WHERE SUCH SLOPES STEEPER THAN 8:1 SHALL NOT BE PERMITTED.

TABLE FOR EXISTING SITES, BUILDINGS AND FACILITIES

SLOPE	MAXIMUM RISE
STEEPER THAN 10:1 BUT NOT STEEPER THAN 8:1	3 INCHES (75mm)
STEEPER THAN 12:1 BUT NOT STEEPER THAN 10:1	6 INCHES (150mm)

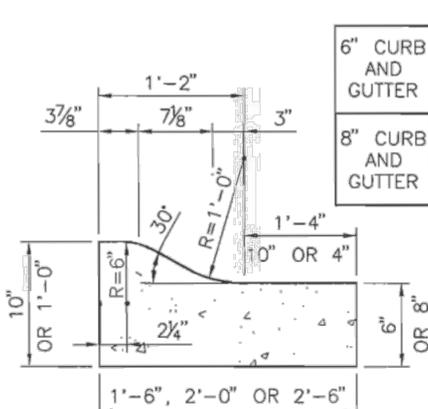
- CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 50:1.
- FLOOR OR GROUND SURFACES OF RAMP RUN SHALL BE STABLE, FIRM, AND SLIP RESISTANT.
- THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES (915mm) MINIMUM MEASURED BETWEEN HANDRAILS.
- THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES (760mm) MAXIMUM.
- RAMPS SHALL HAVE LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. LANDINGS SHALL COMPLY WITH THE FOLLOWING:
 - LANDINGS SHALL HAVE A SOPE NOT STEEPER THAN 50:1.
 - CLEAR WIDTH OF LANDINGS SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.
 - LANDING LENGTH SHALL BE 60 INCHES (1525mm) MINIMUM CLEAR.
 - RAMPS THAT CHANGE DIRECTION AT LANDINGS SHALL HAVE A 60 INCH BY 60 INCH (1525mm) MINIMUM LANDING.
 - WHERE DOORWAYS ARE ADJACENT TO A RAMP LANDING, MANEUVERING CLEARANCES SHALL COMPLY WITH 2010 AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN (2010 ADA) SECTION 404.
- RAMPS WITH A RISE GREATER THAN 6 INCHES (150mm) SHALL HAVE HANDRAILS. HANDRAILS SHALL NOT REDUCE THE REQUIRED CLEARANCES OF A RAMP RUN OR LANDINGS.
- EDGE PROTECTION SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND AT EACH SIDE OF RAMP LANDINGS.

EXCEPTIONS:

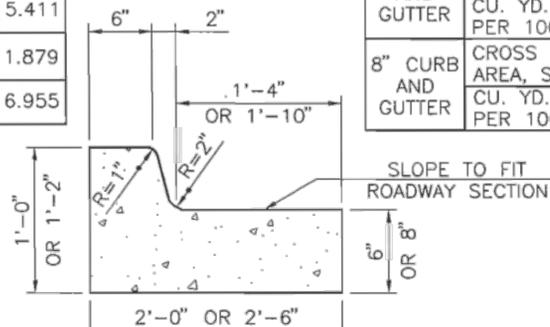
 - RAMPS NOT REQUIRED TO HAVE HANDRAILS WHERE SIDE FLARES ARE PROVIDED.
 - SIDES OF RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY.
 - SIDES OF RAMP TURN SPACE HAVING A VERTICAL DROP-OFF OF 1/2 INCH (13mm) MAXIMUM WITHIN 10 INCHES (255mm) HORIZONTALLY OF THE MINIMUM LANDING AREA.
- EDGE PROTECTION MAY BE PROVIDED BY EXTENDING A FLOOR OR GROUND SURFACE, OF THE RAMP RUN OR LANDING, 12 INCHES (305mm) MINIMUM BEYOND THE INSIDE FACE OF A HANDRAIL OR AN EDGE PROTECTION CURB OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4-INCH (100mm) DIAMETER SPHERE BELOW A HEIGHT OF 4 INCHES (100mm).
- OUTDOOR RAMPS AND APPROACHES TO RAMPS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.



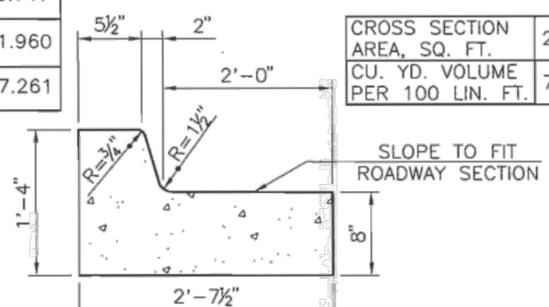
NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
PEDESTRIAN ACCESS DETAILS PARKING AND PASSENGER LOADING ZONES			
APPROVED	DESIGN ENGINEER		1-13-15 DATE
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		1'-6"	2'-0"	2'-6"
6" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	0.961	1.211	1.461
	CU. YD. VOLUME PER 100 LIN. FT.	3.559	4.485	5.411
8" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.211	1.544	1.879
	CU. YD. VOLUME PER 100 LIN. FT.	4.485	5.719	6.955



		2'-0"	2'-6"
6" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.294	1.544
	CU. YD. VOLUME PER 100 LIN. FT.	4.791	5.717
8" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.627	1.960
	CU. YD. VOLUME PER 100 LIN. FT.	6.026	7.261

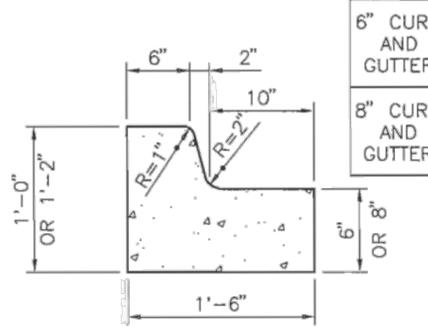


CROSS SECTION AREA, SQ. FT.	2.113
CU. YD. VOLUME PER 100 LIN. FT.	7.824

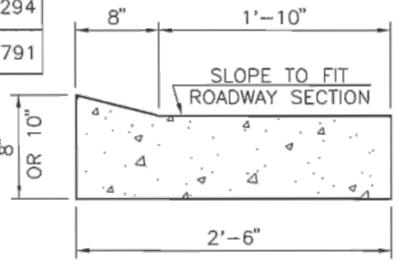
CONCRETE MOUNTABLE CURB AND GUTTER TYPE "A"

CONCRETE BARRIER CURB AND GUTTER TYPE "B"

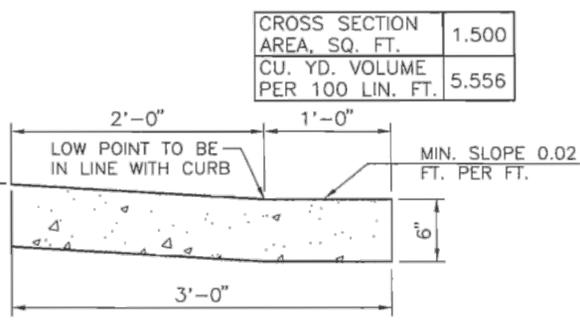
CONCRETE BARRIER CURB AND GUTTER TYPE "C"



6" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.044
	CU. YD. VOLUME PER 100 LIN. FT.	3.866
8" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.294
	CU. YD. VOLUME PER 100 LIN. FT.	4.791



6" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.306
	CU. YD. VOLUME PER 100 LIN. FT.	4.835
8" CURB AND GUTTER	CROSS SECTION AREA, SQ. FT.	1.722
	CU. YD. VOLUME PER 100 LIN. FT.	6.379

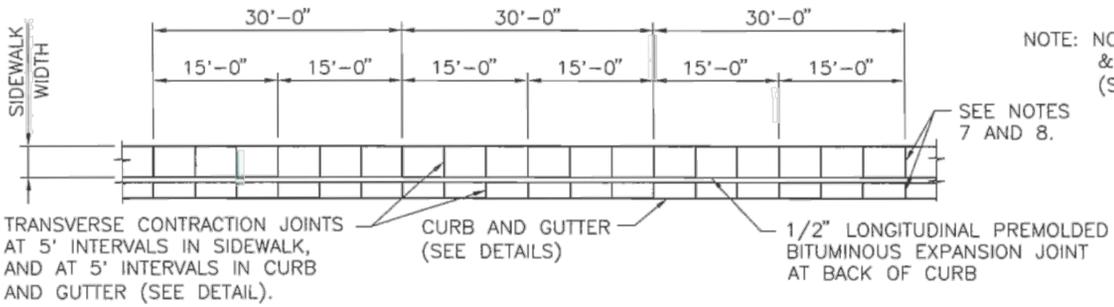


CROSS SECTION AREA, SQ. FT.	1.500
CU. YD. VOLUME PER 100 LIN. FT.	5.556

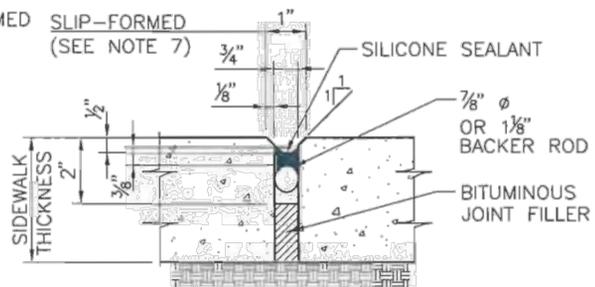
CONCRETE BARRIER CURB AND GUTTER TYPE "D"

CONCRETE LAYDOWN CURB TYPE "E"

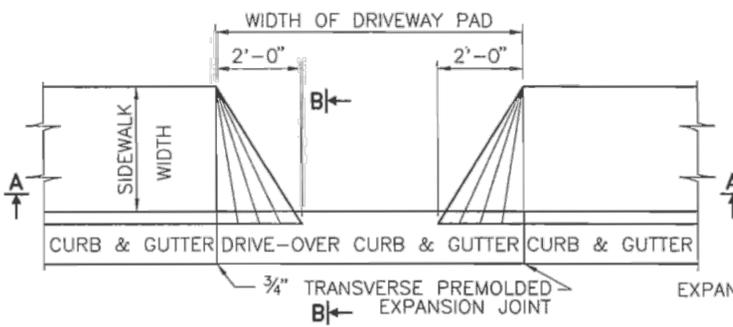
CONCRETE VALLEY GUTTER



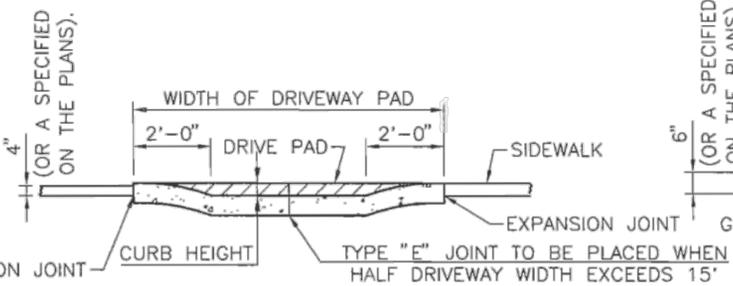
PLAN CURB AND GUTTER AND SIDEWALK



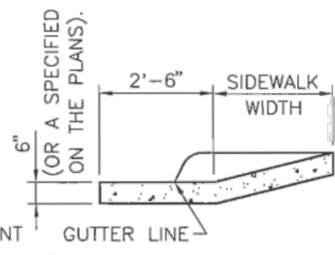
SEALED EXPANSION JOINT



PLAN DRIVE PAD



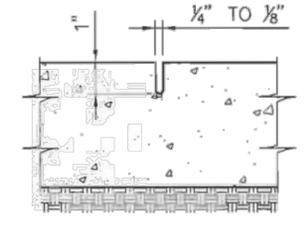
SECTION A-A



SECTION B-B

GENERAL NOTES

1. CONCRETE SHALL BE STRUCTURAL CONCRETE CLASS "A."
2. END OF DAYS POUR, 30 MINUTE INTERRUPTIONS, COLD JOINTS AND DROP INLETS SHALL DETERMINE THE LOCATION OF A CONSTRUCTION JOINT AND A 3/4" PREMOLDED BITUMINOUS JOINT IS REQUIRED.
3. PLACE TRANSVERSE CONTRACTION JOINTS AT 5'-0" INTERVALS AND AT THE END OF RADIUS POINTS OR ISLAND NOSES.
4. BED COURSE MATERIAL ON WHICH SIDEWALK IS TO BE PLACED SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T 99, METHOD C.
5. EXCAVATION AND PREMOLDED BITUMINOUS EXPANSION JOINTS TO BE INCLUDED IN THE UNIT PRICE BID FOR SIDEWALKS.
6. THE SILICONE SEALED JOINTS SHALL BE SEALED IN ACCORDANCE WITH SECTION 452 OF THE STANDARD SPECIFICATIONS.
7. FOR SLIP-FORMED CURB AND GUTTER, FURNISH 1" SEALED EXPANSION JOINTS AT 90' INTERVALS, AND TRANSVERSE CONSTRUCTION JOINTS AT 5' INTERVALS.
8. FOR SIDEWALKS AND NON-SLIP FORMED CURB AND GUTTER, FURNISH 3/4" SEALED EXPANSION JOINTS AT 30' INTERVALS, AND TRANSVERSE CONTRACTION JOINTS AT 5' INTERVALS.



TRANSVERSE CONTRACTION JOINT



NO.	DATE	REV. BY	DESCRIPTION
9/9/09	YML	ADDED DETAILS	
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
SIDEWALK CURB AND GUTTER			
DESIGNED BY _____ DRAWN BY SKL CHECKED BY YML			
609-01-1/1			

GENERAL NOTES

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION.
2. ALL CONCRETE SHALL BE CLASS "A". CHAMFER EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED ON THE DETAILS.
3. REINFORCING BARS SHALL CONFORM TO A.A.S.H.T.O. SPECIFICATION M 31, GRADE 60. DIMENSIONS REFER TO THE CENTERLINE OF BAR UNLESS OTHERWISE NOTED ON THE DETAILS.
4. STRUCTURAL STEEL SHALL CONFORM TO A.A.S.H.T.O. SPECIFICATION M 183 AND SHALL BE GIVEN A PROTECTIVE COATING IN CONFORMANCE WITH THE SPECIFICATIONS.
5. DROP INLETS MAY BE USED WITH EITHER R.C.P. OR C.M.P. R.C.P. IS SHOWN IN THE DETAILS..
6. QUANTITIES SHOWN ARE FOR INFORMATION ONLY.
7. INSTALLATIONS SHOWN ARE FOR DROP INLETS LOCATED WHERE THE MEDIAN DITCH LINE IS ON A CONTINUOUS SLOPE. IF THE DROP INLET IS LOCATED AT A LOW POINT IN THE MEDIAN DITCH LINE, NO DIKE WILL BE REQUIRED AND DETAILS FOR SLOPES SHOULD BE SHOWN ON THE UPGRADE SIDE. THE TOP OF THE INLET GRATE FOR ALL MEDIAN DROP INLETS SHALL BE SET AT AN ELEVATION THAT WILL PERMIT THE USE OF 6:1 OR FLATTER ROADWAY SLOPES OUTSIDE THE INLET GRATE. THE MEDIAN DITCH SHALL BE GRADED TO DRAIN TO THE DROP INLET.
8. THE URBAN GRATING DETAIL SHALL BE USED IN ALL CASES UNLESS NOTED ON THE PLANS AS ALTERNATE.

DRAWINGS REQUIRED

1. SERIAL 623-01-1/1: JUNCTION BOX, GRATES, NOTES, AND QUANTITIES.
2. SERIAL 623-02-1/1: DROP INLETS TYPE I AND II.
3. SERIAL 623-03-1/1: DROP INLET TYPE III.
4. ROADWAY DESIGN DRAWINGS: FOR TYPE, LOCATION, HEIGHT, AND NUMBER REQUIRED.

DESIGN DATA

DESIGN ACCORDING TO AASHTO SPECIFICATIONS CURRENT EDITION.
 DESIGN STRESSES:
 REINFORCED CONCRETE; f'c = 3,000 psi, fy = 60,000 psi, n = 10
 STRUCTURAL STEEL; fs = 20,000 psi, fy = 36,000 psi
 EARTH PRESSURE: 36 lb./cu.ft. EQUIV. FLUID PRESSURE, 2'-0" SURCHARGE.
 LIVE LOAD ON URBAN GRATING: ONE 16,000 lbs. WHEEL PLUS 30% IMPACT.
 LIVE LOAD ON RURAL GRATING: ONE 16,000 lbs. WHEEL PLUS 30% IMPACT, 35% OVERSTRESS.

NOTE: MEDIAN DROP INLETS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH.

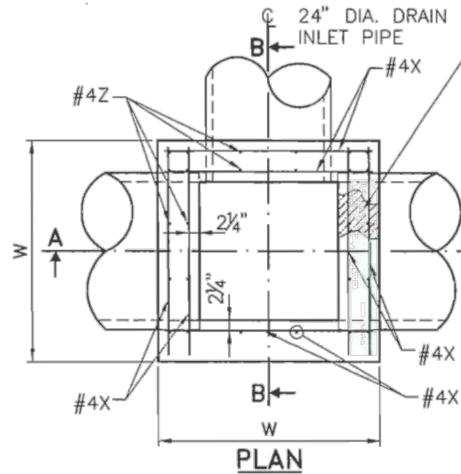
NO.	DATE	REV. BY	DESCRIPTION
2/10/09	YML	MADE 1/2" DIA. BAR FROM 3'-11 3/16" TO 3'-11 9/16" & REMOVED 3/16" DIM.	
2/11/09	YML	MADE GENERAL REVISIONS	

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

MEDIAN DROP INLET JUNCTION BOX, GRATES, NOTES, AND QUANTITIES

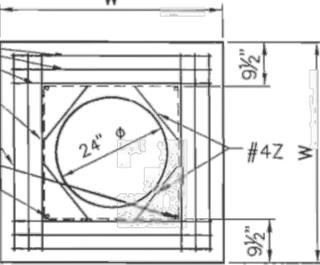
DESIGNED BY _____ DRAWN BY SKL CHECKED BY YML/TM
 623-01-1/1 1 of 1



PLACE 1/2" LAYER OF MORTAR ON TOP OF WALLS IMMEDIATELY BEFORE PLACING CAP. COST TO BE INCIDENTAL TO THE COMPLETION OF THE PROJECT.

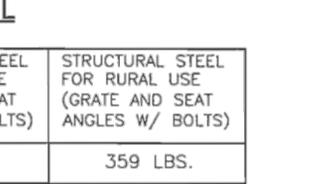
THREADED INSERTS, 500# LIFTING CAPACITY (MIN.) 4 REQUIRED

TYPE II PRECAST CONCRETE CAP



EXTRA #4X FOR "W" = 4'-6" LONG
 THREADED INSERTS, 500# LIFTING CAPACITY (MIN.) 4 REQUIRED

TYPE III PRECAST CONCRETE CAP



	STRUCTURAL STEEL FOR URBAN USE (GRATE AND SEAT ANGLES W/ BOLTS)	STRUCTURAL STEEL FOR RURAL USE (GRATE AND SEAT ANGLES W/ BOLTS)
	384 LBS.	359 LBS.

FOR CONTRACTOR'S INFORMATION ONLY.

CLASS "A" CONCRETE DEDUCTIONS (FOR ONE PIPE)

PIPE DIAMETER	9" WALL		7 1/2" PRECAST CONC. CAP	
	R.C. PIPE	C.M. PIPE	R.C. PIPE	C.M. PIPE
24"	.136 Cu.Yd.	.087 Cu.Yd.	.113 Cu.Yd.	.073 Cu.Yd.
30"	.207 Cu.Yd.	.136 Cu.Yd.	-----	-----
36"	.293 Cu.Yd.	.196 Cu.Yd.	-----	-----

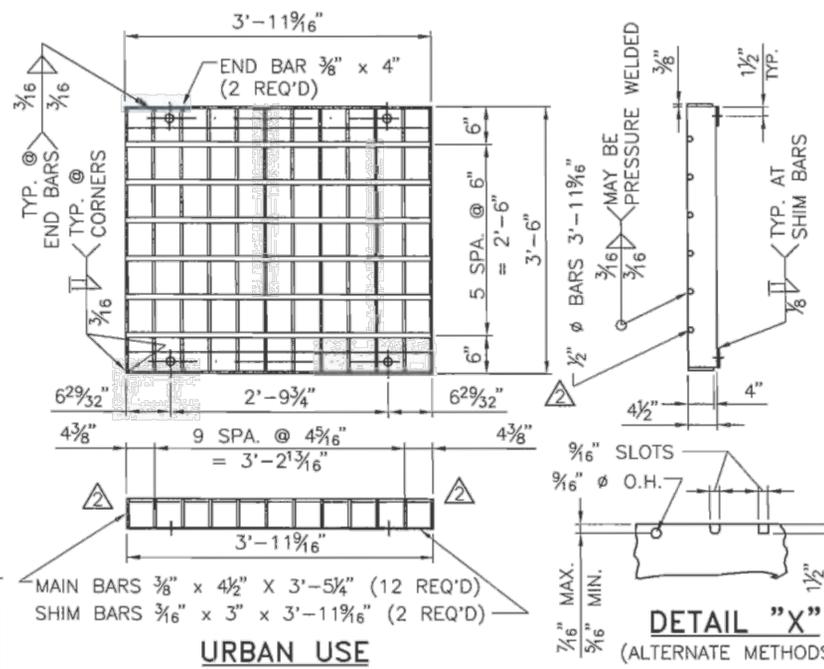
FOR PIPES SKEWED INTO WALL, MULTIPLY DEDUCTION BY THE SECANT OF THE SKEW ANGLE.

DATA FOR JUNCTION BOX

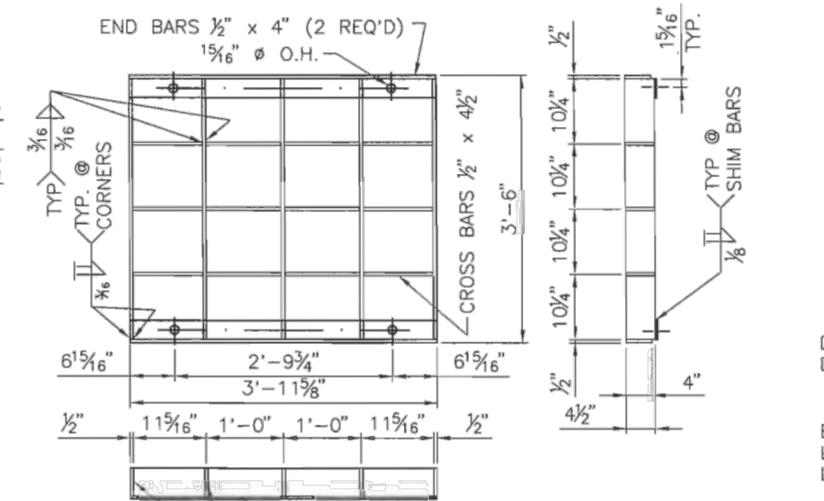
(FOR CONTRACTOR'S INFORMATION ONLY, NOT A BID ITEM)

CROSS DRAIN PIPE DIAMETER	W	H	#4X		#4Z		CLASS "A" CONCRETE		REINF. STEEL	TYPE II PRECAST CONC. CAP EST. WT.	TYPE III PRECAST CONC. CAP EST. WT.
			NO.	LENGTH	NO.	LENGTH	R.C. PIPE	C.M. PIPE			
24"	4'-0"	2'-11"	43	3'-9"	12	2'-3"	1.43 Cu.Yd.	1.58 Cu.Yd.	126 LBS.	1373 LBS.	914 LBS.
30"	4'-0"	3'-5"	43	3'-9"	12	2'-3"	1.47 Cu.Yd.	1.65 Cu.Yd.	126 LBS.	1373 LBS.	914 LBS.
36"	4'-6"	3'-11"	46	4'-3"	12	2'-6"	1.90 Cu.Yd.	2.15 Cu.Yd.	151 LBS.	1752 LBS.	1294 LBS.

NOTE: CONCRETE AND REINFORCING STEEL QUANTITIES INCLUDE TYPE II CAP AND DEDUCTIONS FOR CONCRETE INLET PIPE AND CROSS DRAIN PIPE.

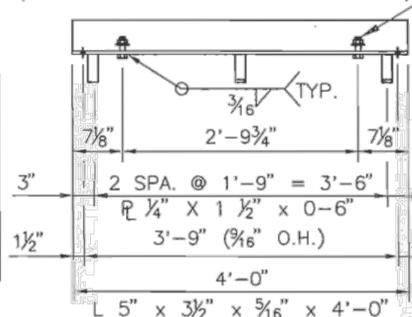


URBAN USE



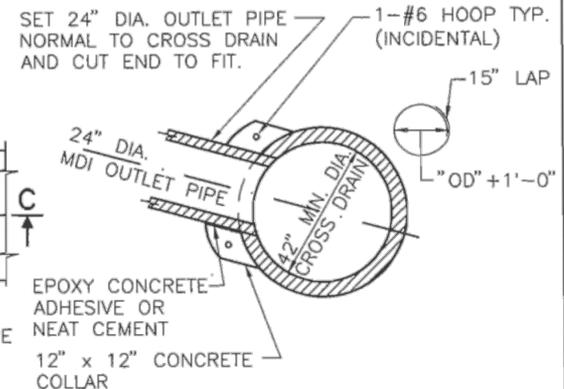
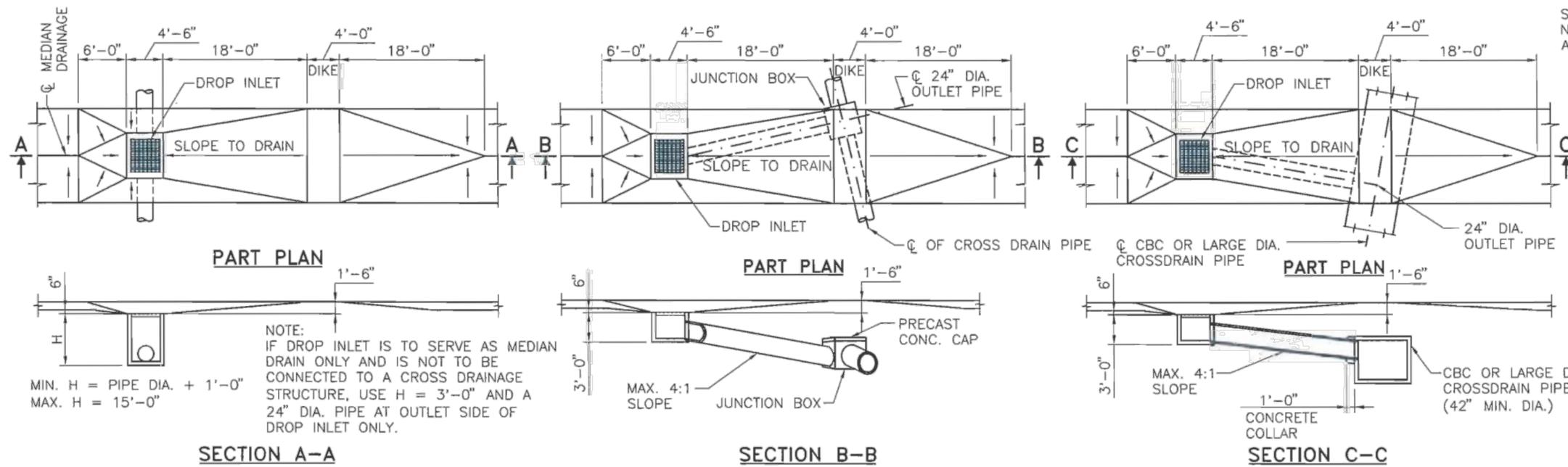
RURAL USE GRATING DETAILS

5/8" φ x 2 1/2" M.B. w/ NUT & WASHER (USED TO SECURE GRATE IN PLACE)



SEAT ANGLE DETAILS

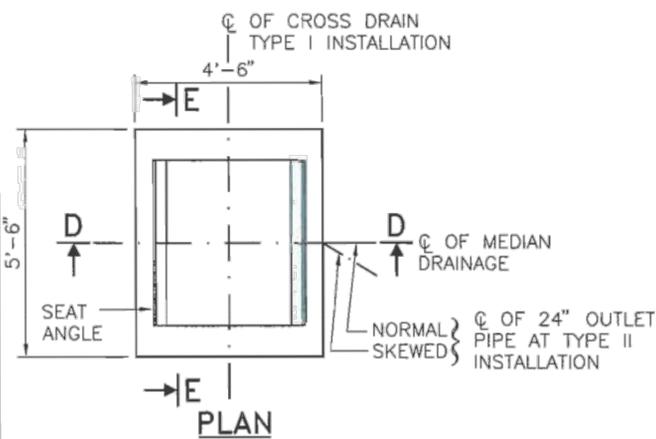




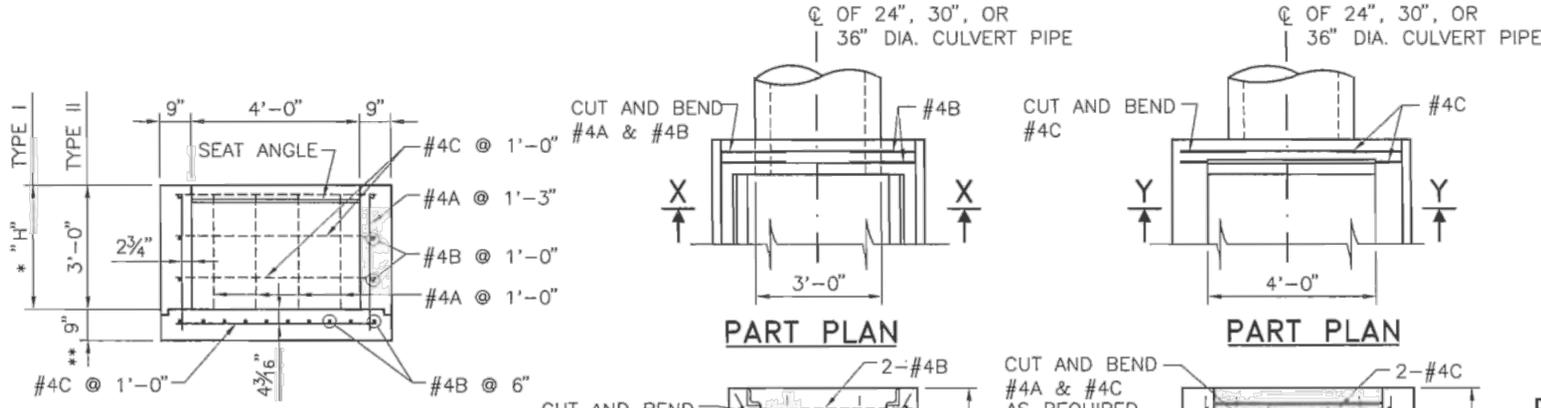
NOTE:
WHEN THE DROP INLET IS CONSTRUCTED IN CONJUNCTION WITH A NEW BOX CULVERT, THE 24" DRAIN OUTLET PIPE SHALL BE SET IN PLACE AND THE CULVERT WALL FORMED AROUND IT. IF THE DROP INLET IS TO BE USED WITH AN EXISTING BOX CULVERT OR PIPE CULVERT, A HOLE SHALL BE BROKEN THRU THE WALL AND ALL EXPOSED REINFORCING STEEL CUT OFF. CEMENT PIPE INTO CULVERT WALL SIMILAR TO THE CONNECTION SHOWN ABOVE.

TYPE I INSTALLATION

TYPE II INSTALLATION



**SECTION D-D
DETAILS OF DROP INLET**



SECTION E-E

PART PLAN

PART PLAN

**SECTION X-X
(TYPE I)**

**SECTION Y-Y
(TYPE II)**

** AVERAGE BOTTOM THICKNESS IS 9" USE 8 1/2" AT OUTLET AND 9 1/2" AT HIGH SIDE.
* "H" = DIA. OF PIPE + 1'-0" MINIMUM, AND 15'-0" MAXIMUM.

ESTIMATED QUANTITIES

(FOR CONTRACTOR'S INFORMATION ONLY, NOT A BID ITEM)

	TYPE I	TYPE II
CLASS "A" CONCRETE	.652+.4722 "H" CU. YDS.	2.07 CU. YDS.
REINFORCING STEEL	53.44+22.04 "H" LBS.	120 LBS.
STRUCTURAL STEEL (URBAN)	384 LBS	384 LBS.
STRUCTURAL STEEL (RURAL)	359 LBS	359 LBS.

NOTE: MEDIAN DROP INLETS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH.

NOTE: SERIAL 623-01-1/1 MUST ACCOMPANY THIS SHEET.

PART SECTION CONNECTION TO LARGE CROSS DRAIN PIPE

REINFORCEMENT	SIZE	REQUIREMENT
#4A	"H" PLUS 6"	REQ'D 14
#4B	4'-3"	REQ'D 11+2H*
#4C	5'-3"	REQ'D 5+2H*

TYPE I INSTALLATION

REINFORCEMENT	SIZE	REQUIREMENT
#4A	"H" PLUS 6"	REQ'D 14
#4B	4'-3"	REQ'D 17
#4C	5'-3"	REQ'D 11

TYPE II INSTALLATION

REINFORCING STEEL DETAILS

NOTE: ROUND OFF "H" TO THE NEAREST FOOT. USE SHORTER LENGTH WHEN DIMENSION FALLS ON 6".

NO.	DATE	REV. BY	DESCRIPTION
4/13/09	YML	ADDED AND REVISED NOTE AS SHOWN.	

REVISIONS (OR CHANGE NOTICES)

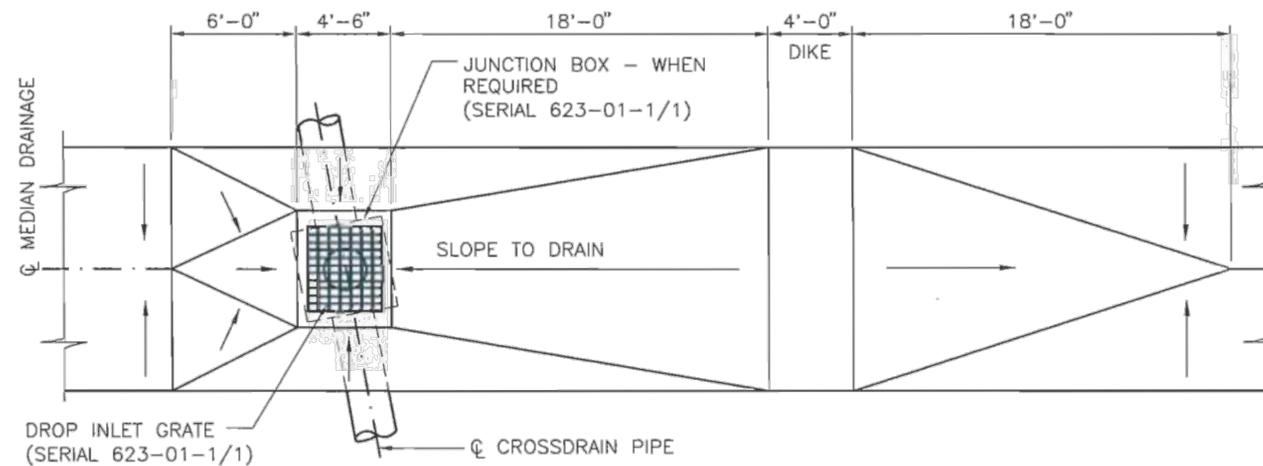
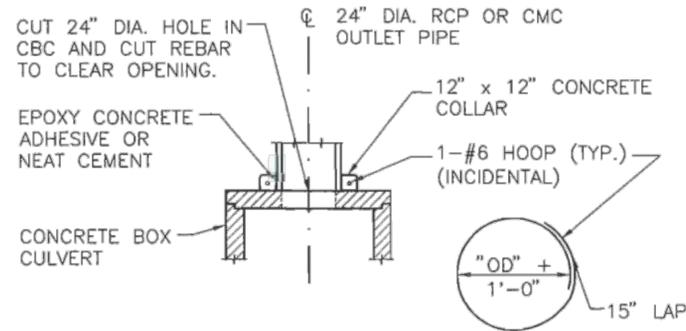
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

**MEDIAN DROP INLET
DETAIL AND QUANTITIES
TYPE I AND TYPE II**

DESIGNED BY _____ DRAWN BY SKL CHECKED BY YML/TM

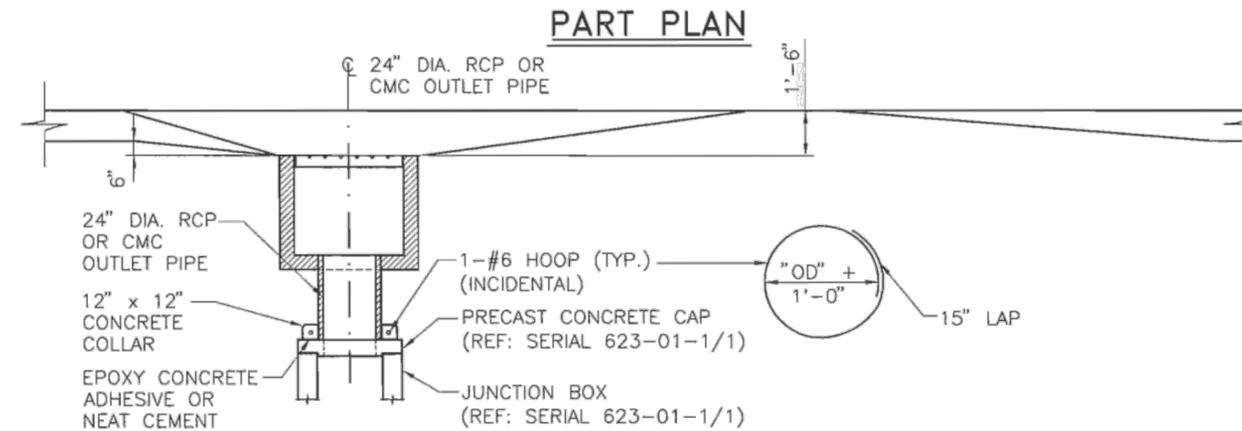
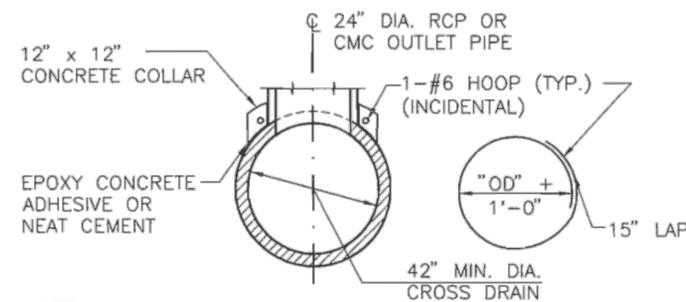
623-02-1/1





REINFORCING STEEL REQUIRED FOR DROP INLET

#4A	2'-6"	REQ'D. 14
#4B	4'-3"	REQ'D. 10
#4C	5'-3"	REQ'D. 8
#4D	3'-6"	REQ'D. 4



CLASS "A" CONCRETE:

USING R.C. PIPE	1.46 CU.YDS.
USING C.M. PIPE	1.51 CU.YDS.

REINFORCING STEEL:

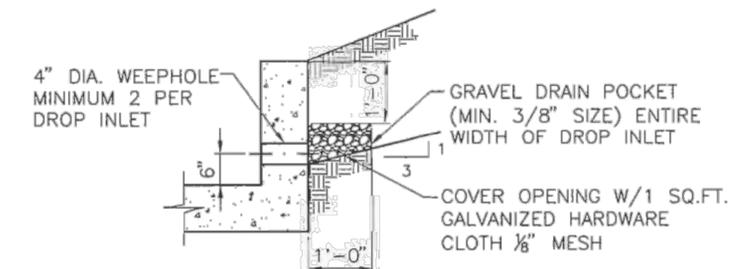
STRUCTURAL STEEL (URBAN)	384 LBS.
STRUCTURAL STEEL (RURAL)	359 LBS.

ESTIMATED QUANTITIES FOR DROP INLET

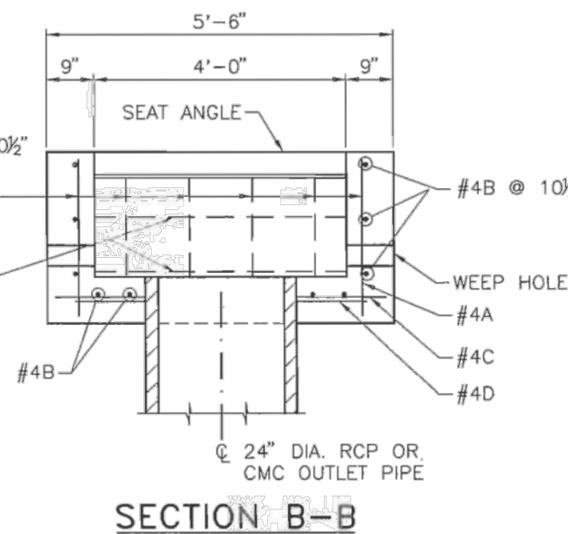
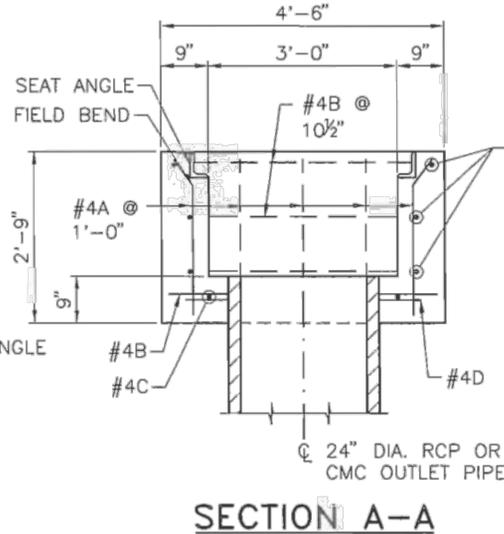
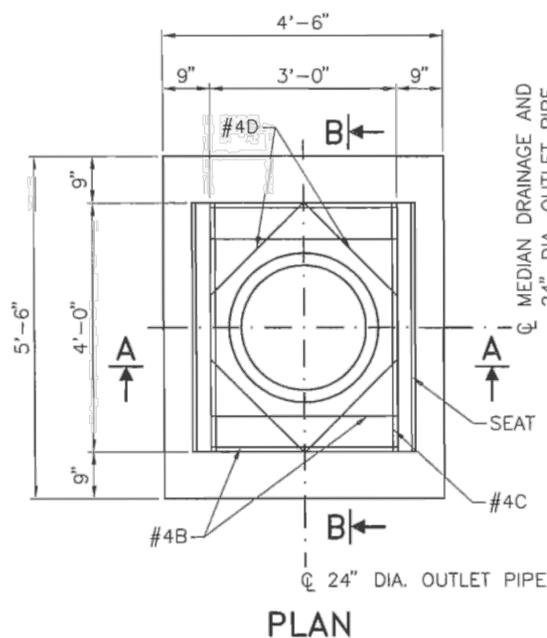
(FOR CONTRACTOR'S INFORMATION ONLY, NOT A BID ITEM).

NOTE:
CUT 24" DIA. HOLE IN CROSSDRAIN, CUT REINFORCING STEEL TO CLEAR HOLE AND SHAPE 24" OUTLET PIPE TO FIT OUTSIDE DIAMETER OF CROSSDRAIN PIPE.

TYPICAL INSTALLATION DETAILS



WEEP HOLE DETAIL



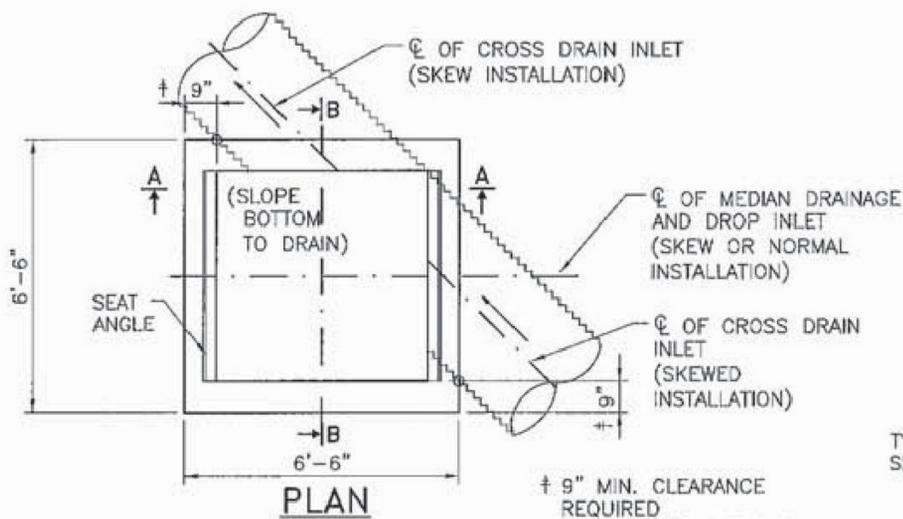
NOTE: MEDIAN DROP INLETS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH.

DROP INLET DETAILS

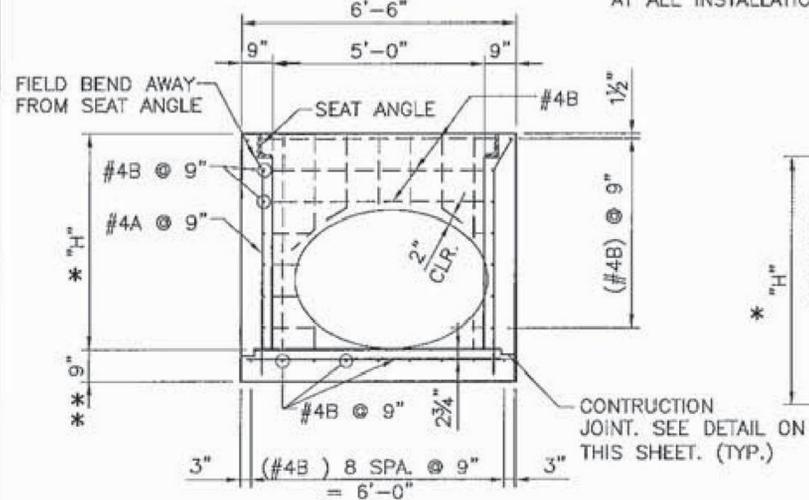
NOTE: SERIAL 623-01-1/1 MUST ACCOMPANY THIS SHEET.



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING			
MEDIAN DROP INLET DETAIL AND QUANTITIES TYPE III			
DESIGNED BY _____ DRAWN BY SKL CHECKED BY YML/TM			
623-03-1/1			



PLAN



SECTION A-A

NOTE: FIELD CUT AND BEND REBAR AS REQUIRED TO CLEAR SEAT ANGLES AND PIPE OPENINGS.

#4A	"H" PLUS 6"	REQ'D. 28
#4B	6'-3"	REQ'D. 18 + 5.33 "H" ▲

REINFORCING STEEL DETAILS

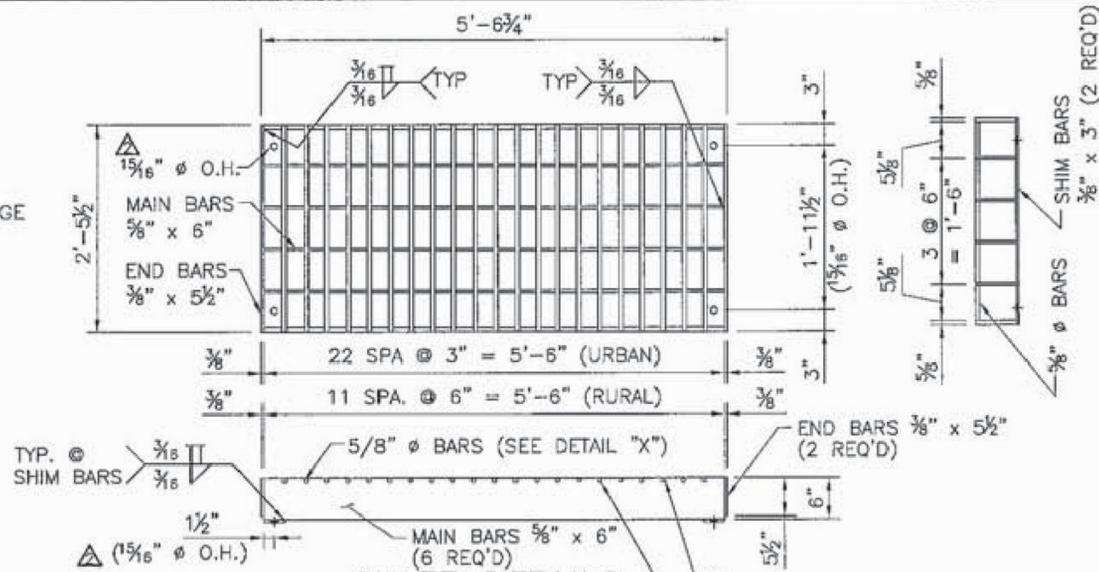
▲ NOTE: ROUND OFF "H" TO THE NEAREST FOOT, USE SHORTER LENGTH WHEN DIMENSION FALLS ON 6".

ESTIMATED QUANTITIES

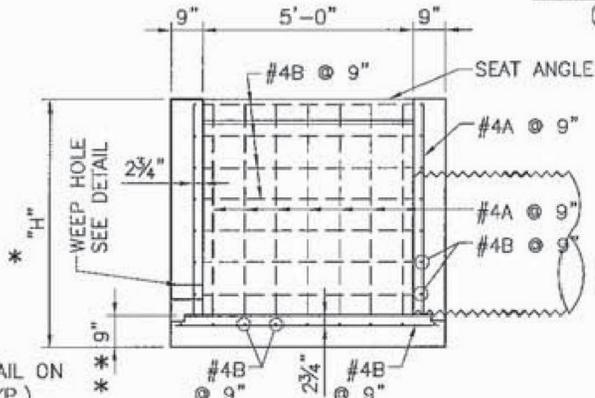
(FOR CONTRACTOR'S INFORMATION ONLY, NOT A BID ITEM)

CLASS "A" CONCRETE	1.102 + 0.639 "H" CU.YDS.
REINFORCING STEEL	84.50 + 40.96 "H" LBS.
STRUCTURAL STEEL (URBAN)	1198 LBS.
STRUCTURAL STEEL (RURAL)	1140 LBS.

NOTE: TO OBTAIN CLASS "A" CONCRETE QUANTITY, USE VALUE TABULATED ABOVE AND DEDUCT THE VOLUME OF THE PIPE OPENINGS FROM THE QUANTITY TABULATED.

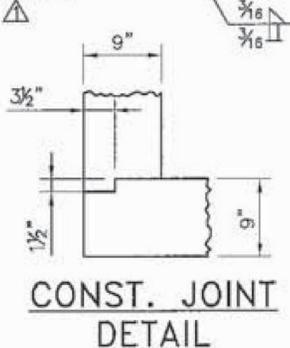


GRATE DETAILS

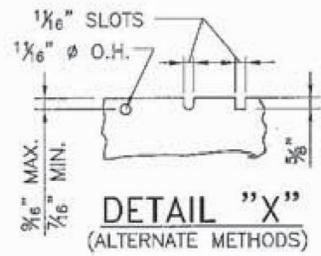


SECTION B-B

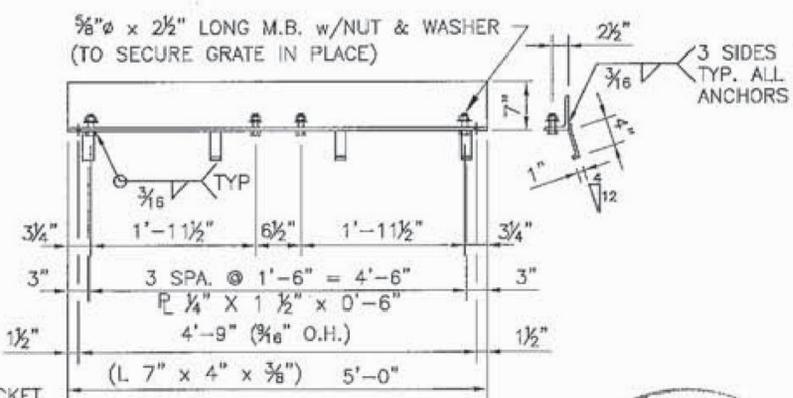
** AVERAGE BOTTOM THICKNESS USE 8 1/2" AT OUTLET AND 9 1/2" AT HIGH SIDE.
* "H" = DIA. OR RISE OF PIPE + 1'-3" MINIMUM, AND 15'-0" MAXIMUM.



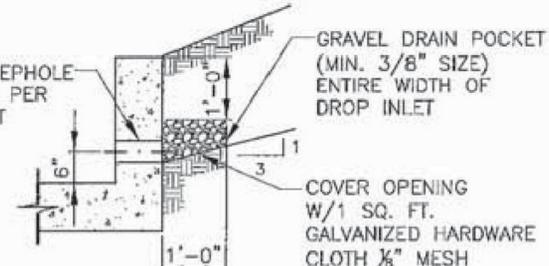
CONST. JOINT DETAIL



DETAIL "X"



SEAT ANGLE DETAILS



WEEP HOLE DETAIL

GENERAL NOTES

- WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, CURRENT EDITION.
- ALL CONCRETE SHALL BE CLASS "A." CHAMFER EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED ON THE DETAILS.
- REINFORCING BARS SHALL CONFORM TO AASHTO SPECIFICATION M 31, GRADE 60. DIMENSIONS REFER TO THE CENTERLINE OF BAR UNLESS OTHERWISE NOTED ON THE DETAILS.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION A 36 AND SHALL BE GIVEN A PROTECTIVE COATING IN CONFORMANCE WITH THE SPECIFICATIONS.
- DROP INLETS MAY BE USED WITH EITHER R.C.P. OR C.M.P. C.M.P. IS SHOWN IN THE DETAILS.
- PIPES MAY BE LOCATED ON ANY WALL AND MAY BE ANY SHAPE, DIAMETER OR SPAN OF THE PIPES WILL BE DETERMINED BY THE SKEW ANGLE AND THE REQUIRED CLEARANCE AS SHOWN ON THE PLAN VIEW.

DESIGN DATA

DESIGN ACCORDING TO AASHTO SPECIFICATIONS CURRENT EDITION.
 DESIGN STRESSES:
 REINFORCED CONCRETE: f'c=3,000 psi, fy=60,000 psi, n=10.
 STRUCTURAL STEEL: fs=20,000 psi, fy=36,000 psi.
 EARTH PRESSURE: 36lbs./cu.ft. EQUIV. FLUID PRESSURE 2'-0" SURCHARGE.
 LIVE LOAD ON STANDARD GRATING: ONE 16,000 lbs. WHEEL PLUS 30% IMPACT, 15% OVERSTRESS.

DRAWINGS REQUIRED

ROADWAY DESIGN DRAWINGS: FOR PIPE TYPE, LOCATION, HEIGHT, SKEW ANGLE, AND NUMBER REQUIRED.

NOTE: MEDIAN DROP INLETS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH.

NO.	DATE	REV. BY	DESCRIPTION
09/19/14	TAM		REVISED DIAMETER
5/20/09	YML		CORRECTED 4 REQ'D TO 2 REQ'D
REVISIONS (OR CHANGE NOTICES)			

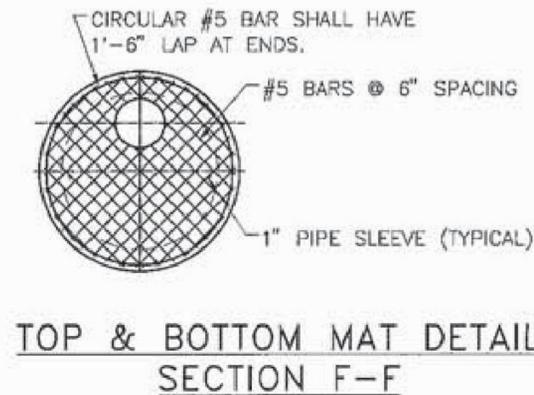
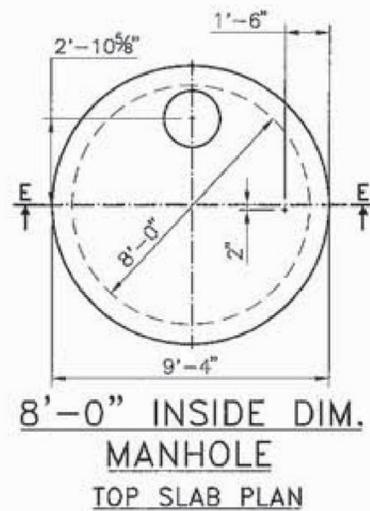
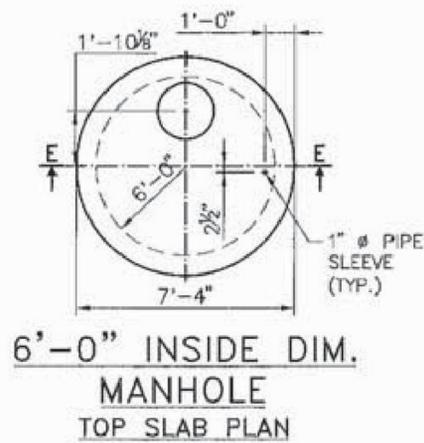
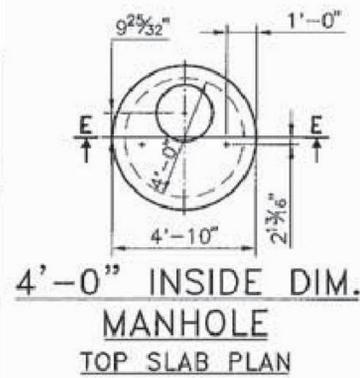
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

MEDIAN DROP INLET 5'-0" x 5'-0" DETAILS AND QUANTITIES

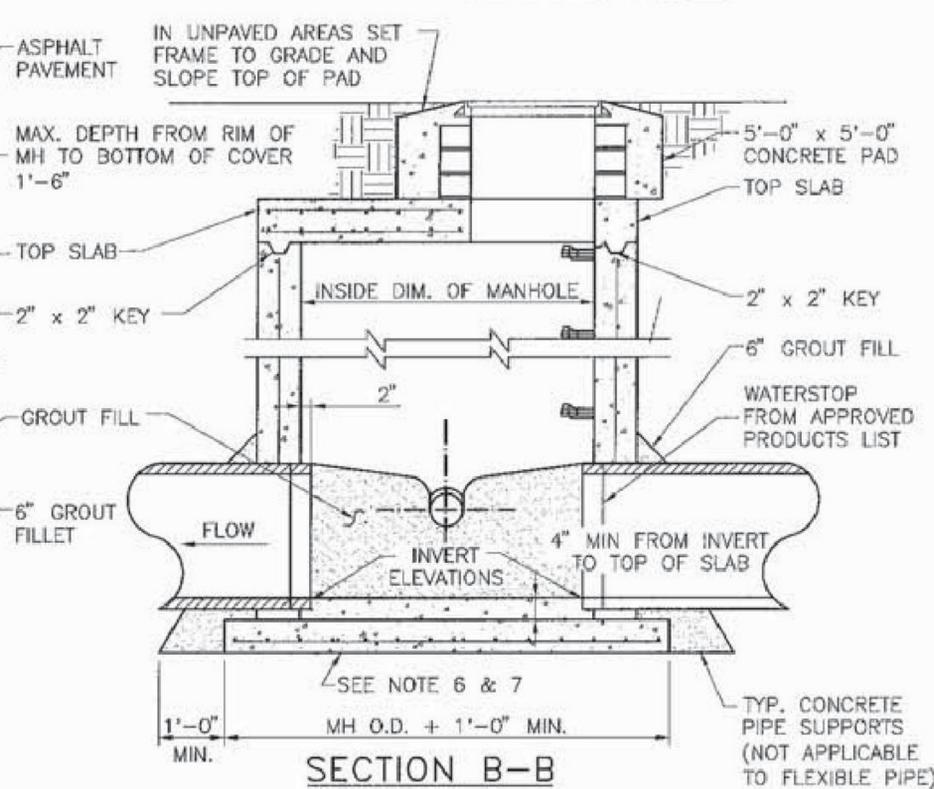
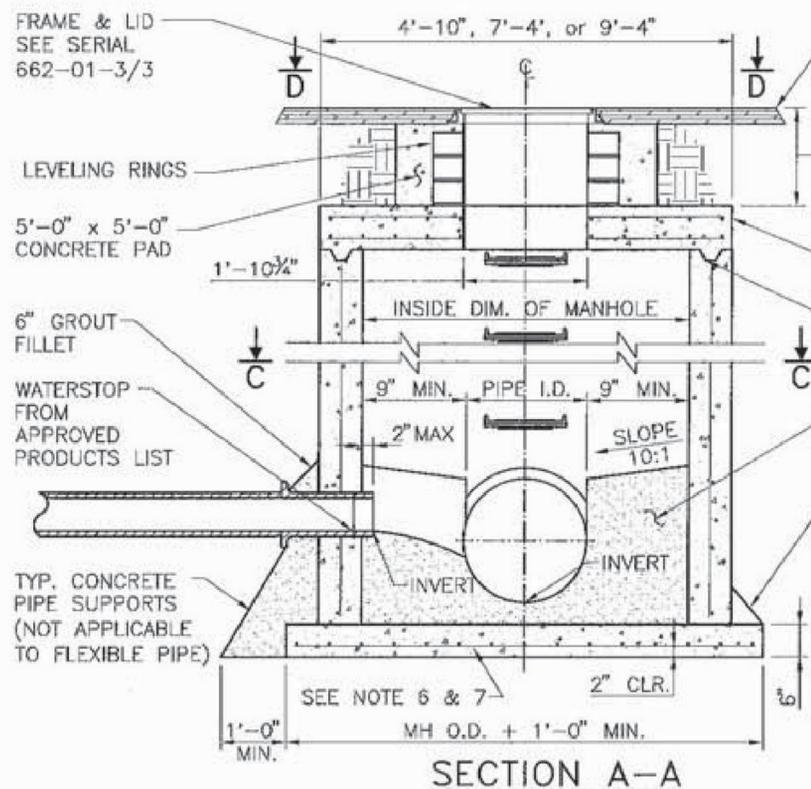
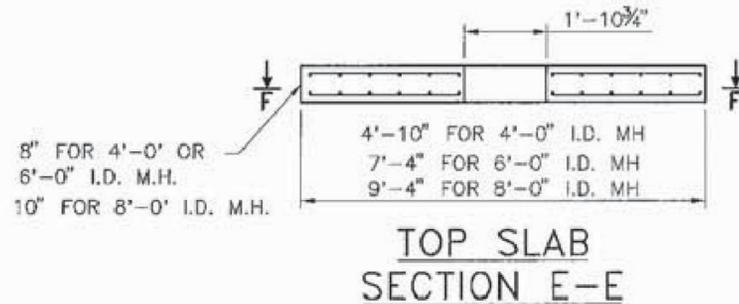
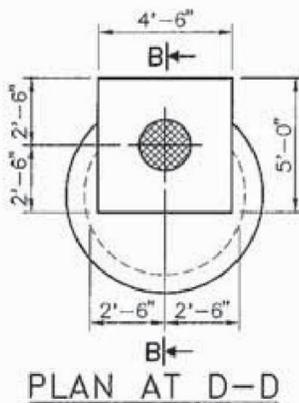
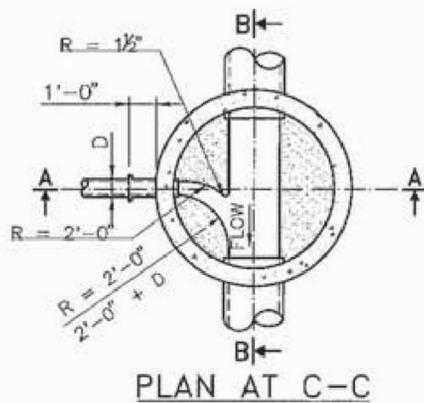


DESIGNED BY _____ DRAWN BY SKL CHECKED BY YML/TM

623-06-1/1 1 of 1



NOTE: ADD 5" AROUND OPENING AT 3" O.C. FOR FIRST 12" FROM OPENING.

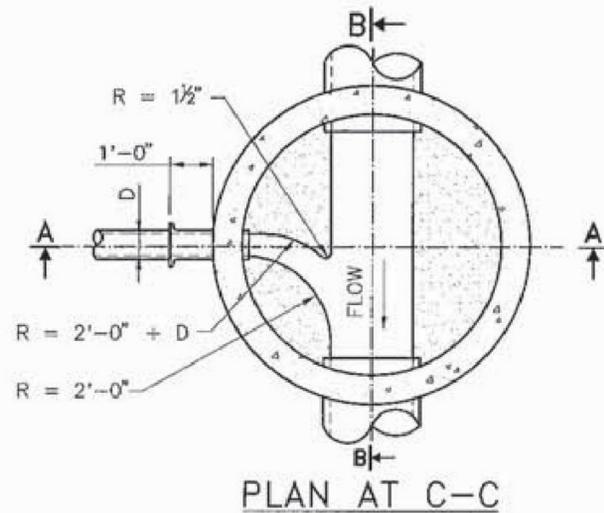


GENERAL NOTES:

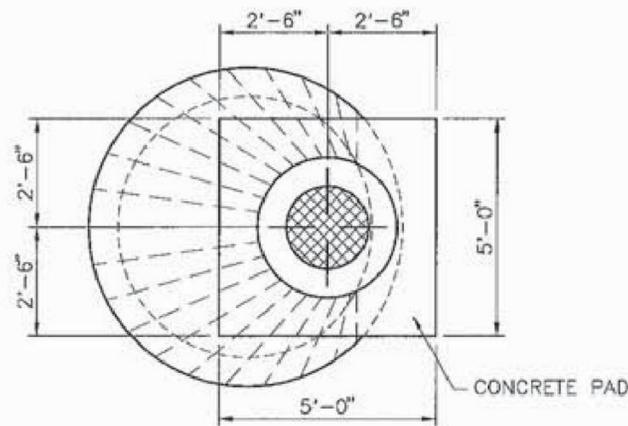
- DESIGN SHOWN ON THIS DRAWING APPLIES TO 4'-0", 6'-0" AND 8'-0" INSIDE DIMENSION MANHOLES ONLY
- USE NON-SHRINK GROUT FOR FILLETS, PENETRATIONS AND FILL.
- COMPACT ALL BACKFILL AROUND AND UNDER MANHOLE TO 95% OF MAXIMUM DENSITY.
- POSITION MANHOLE OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.
- USE APPROVED MASTIC OR RUBBER JOINT MATERIAL FOR ALL JOINTS.
- BOTTOM OF SLAB MAY BE POURED IN PLACE USING #5 BARS AT 6" O.C. EACH WAY FOR MANHOLE DEPTH OF 16'-0' OR GREATER, #5 BARS AT 1'-0" O.C. EACH WAY FOR MANHOLE DEPTH LESS THAN 16'-0". IF ANY PART OF THE RISER IS POURED IN PLACE, THE WALL THICKNESS SHALL BE 1 FOOT THICK MINIMUM AND HAVE #5 BARS AT 1'-0" ON CENTER EACH WAY FOR DEPTHS OF LESS THAN 16 FEET, #5 BARS AT 6" ON CENTER EACH WAY FOR DEPTHS GREATER THAN 16 FEET. THE DEPTH OF CAST-IN-PLACE CONCRETE OVER THE PIPES SHALL BE 1 FOOT MINIMUM.
- ALL CONCRETE SHALL BE CLASS "AA."
- FOR FRAME AND LID SEE SERIAL 662-01-3/3.
- CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO SPRING LINE NOT APPLICABLE TO FLEXIBLE PIPE.
- USE 1" OR 2" PRECAST RINGS ON UNPAVED STREET FOR FUTURE ADJUSTMENT OF MANHOLE FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2" MORTAR.
- REBAR AND CLASS "A" CONCRETE ARE INCIDENTAL TO THE MANHOLE.
- ALL PRECAST SECTIONS OF MANHOLE SHALL BE IN CONFORMANCE WITH ASTM C-478, EXCEPT THAT THE MINIMUM THICKNESS AND THE REINFORCEMENT SHALL BE AS INDICATED IN THE CONTRACT.
- THE USAGE, DESIGNING AND DETAILING OF THE REINFORCEMENT OF THE PRECAST SECTIONS OF MANHOLE SHALL BE IN CONFORMANCE WITH ASTM C-478, IF THE REINFORCEMENT OF THE PRECAST SECTIONS OF MANHOLE IS NOT INDICATED IN THE CONTRACT.
- THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE MANHOLE BASE, RISER AND TOP SECTION SHALL BE 4000 PSI (CLASS "AA") AT 28 DAYS AS REQUIRED BY ASTM C-478.
- WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION'S (NMDOT'S) STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION CURRENT EDITION, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.



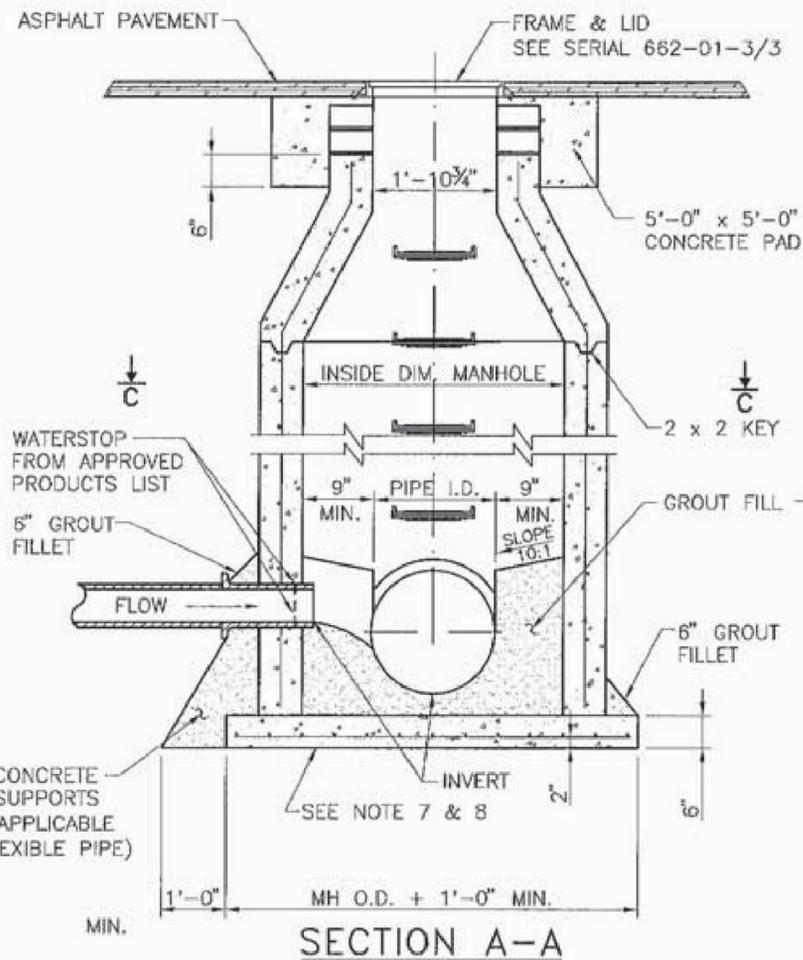
DATE	BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)		
NEW MEXICO		
DEPARTMENT OF TRANSPORTATION		
STANDARD DRAWING		
PRECAST CONCRETE MANHOLE TYPE "C" FOR STORM DRAINS		
DESIGNED BY:	DRAWN BY: SKL	CHECKED BY: YML/TM
662-01-1/3		1 of 1



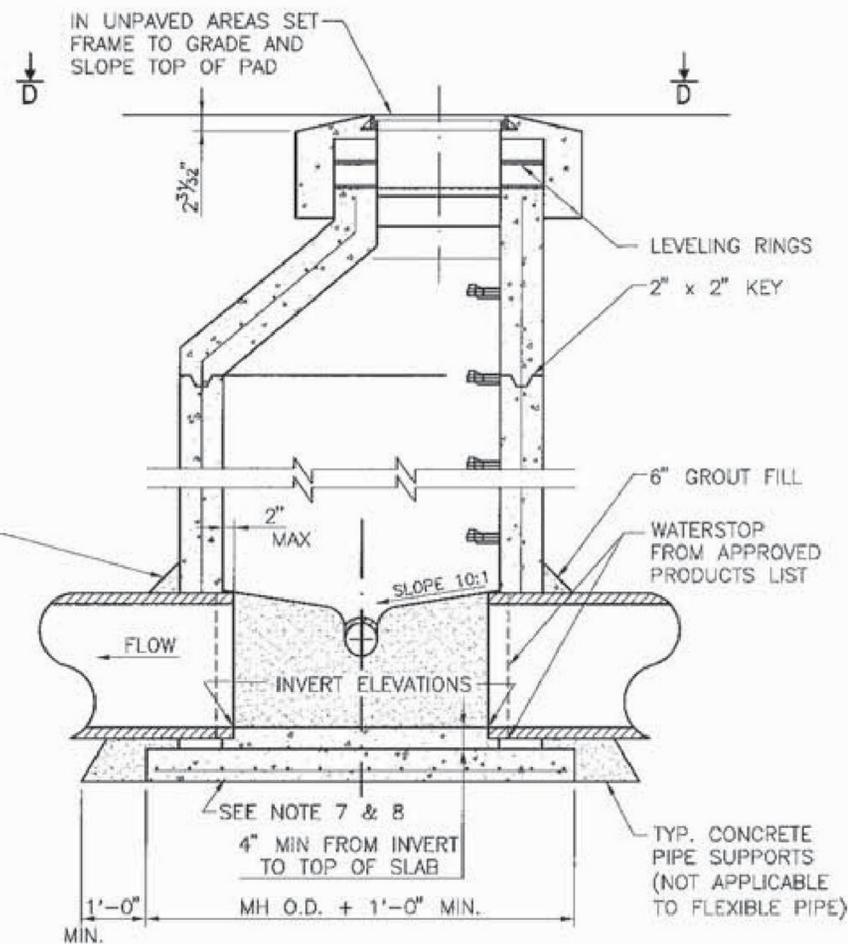
PLAN AT C-C



PLAN AT D-D



SECTION A-A



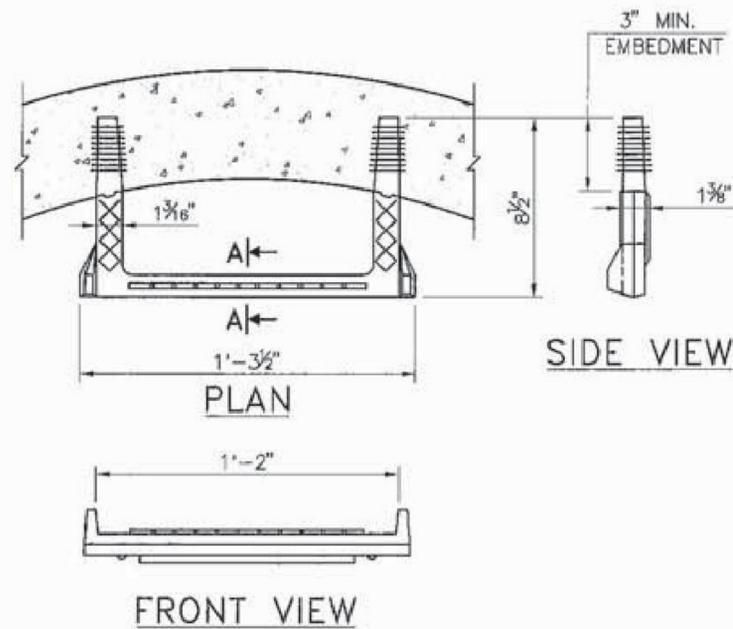
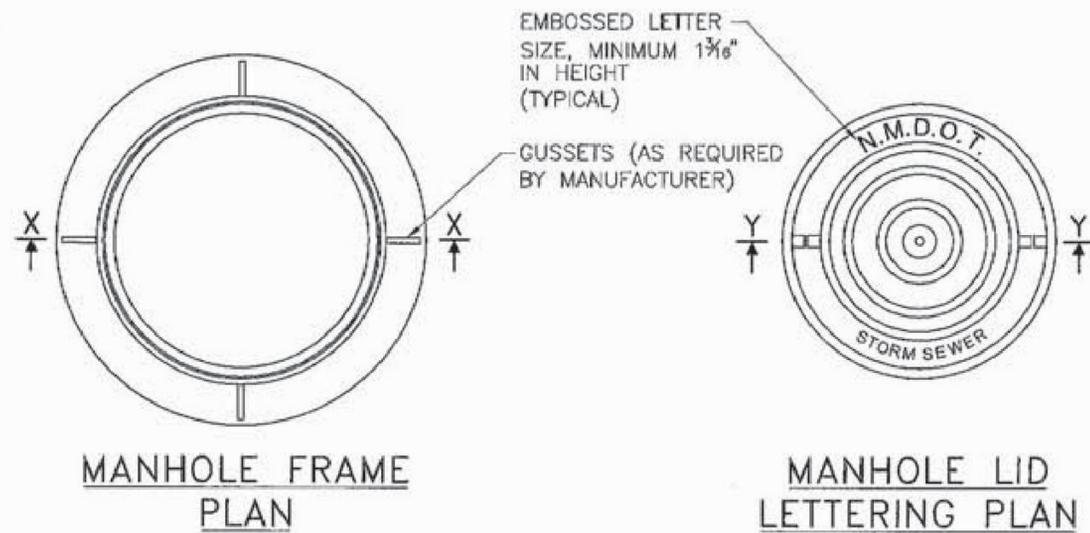
SECTION B-B

GENERAL NOTES:

- DESIGN SHOWN ON THIS DRAWING APPLIES TO 4'-0" AND 6'-0" INSIDE DIMENSION ONLY.
- USE TYPE "E" FOR MANHOLE DEPTHS OF EQUAL TO AND GREATER THAN 6'-0" MEASURED FROM INVERT TO RIM. USE TYPE "C" FOR MANHOLES LESS THAN 6 FEET IN DEPTH.
- USE NON-SHRINK GROUT FOR FILLETS, PENETRATIONS AND FILL.
- COMPACT ALL BACKFILL AROUND AND UNDER MANHOLE TO 95% OF MAXIMUM DENSITY.
- POSITION MANHOLE OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.
- USE APPROVED MASTIC OR RUBBER JOINT MATERIAL FOR ALL JOINTS.
- BOTTOM OF SLAB MAY BE POURED IN PLACE USING #5 BARS AT 6" O.C. EACH WAY FOR MANHOLE DEPTH OF 16'-0" OR GREATER, #5 BARS AT 1'-0" O.C. EACH WAY FOR MANHOLE DEPTH LESS THAN 16'-0". IF ANY PART OF THE RISER IS POURED IN PLACE, THE WALL THICKNESS SHALL BE 1 FOOT THICK MINIMUM AND HAVE #5 BARS AT 1'-0" ON CENTER EACH WAY FOR DEPTHS OF LESS THAN 16 FEET, #5 BARS AT 6" ON CENTER EACH WAY FOR DEPTHS GREATER THAN 16 FEET. THE DEPTH OF CAST-IN-PLACE CONCRETE OVER THE PIPES SHALL BE 1 FOOT MINIMUM.
- ALL CONCRETE SHALL BE CLASS "AA."
- PREFABRICATED METAL AND HDPE MANHOLES CAN BE USED AS AN ALTERNATE, WITH THE APPROVAL OF THE PROJECT MANAGER.
- ALL PRECAST SECTIONS OF MANHOLE SHALL BE IN CONFORMANCE WITH ASTM C-478, EXCEPT THAT THE MINIMUM THICKNESS AND THE REINFORCEMENT SHALL BE AS INDICATED IN THE CONTRACT.
- THE USAGE, DESIGNING AND DETAILING OF THE REINFORCEMENT OF THE PRECAST SECTIONS OF MANHOLE SHALL BE IN CONFORMANCE WITH ASTM C-478, IF THE REINFORCEMENT OF THE PRECAST SECTIONS OF MANHOLE IS NOT INDICATED IN THE CONTRACT.
- THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE MANHOLE BASE, RISER AND TOP SECTION SHALL BE 4000 PSI (CLASS "AA") AT 28 DAYS AS REQUIRED BY ASTM C-478.
- WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION'S (NMDOT'S) STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION CURRENT EDITION, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

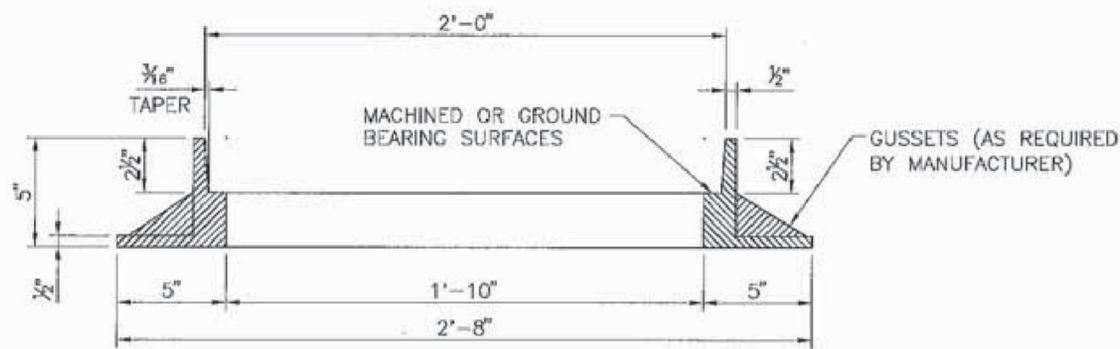


DATE	BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)		
NEW MEXICO		
DEPARTMENT OF TRANSPORTATION		
STANDARD DRAWING		
PRECAST CONCRETE MANHOLE TYPE "E" FOR STORM DRAINS		
DESIGNED BY: TM DRAWN BY: SKL CHECKED BY: YML/TM		
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1 of 1		

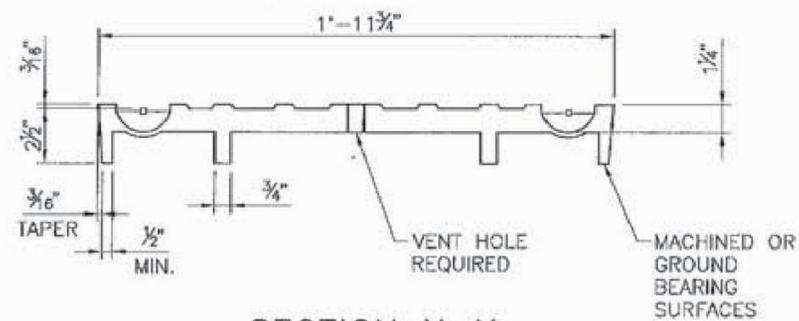
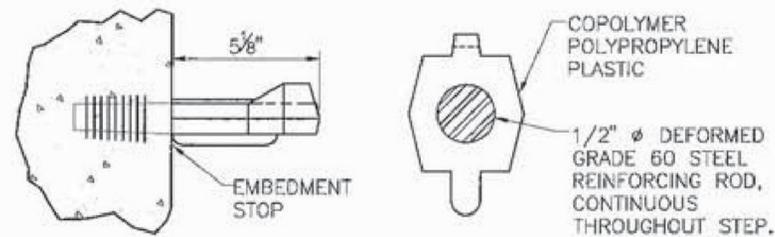


GENERAL NOTES:

1. MONOLITHIC CAST IRON ON STEEL ROD INSERTS. INSERT MUST HAVE 3/16" MINIMUM COVER AND 3" MINIMUM END EMBEDMENT IN CASTING.
2. VERTICAL AND HORIZONTAL LOAD TEST PROCEDURES FOR MANHOLE STEPS SHALL BE IN ACCORDANCE WITH THE METHODS ASTM G497, OTHERWISE THE CERTIFIED TEST RESULTS SHALL BE AVAILABLE FOR VERIFICATION.
3. THE HORIZONTAL PULL OUT LOAD SHALL BE 400 LBS. AND THE VERTICAL LOAD SHALL BE 800 LBS. ACCORDING TO ASTM-G478.
4. THE STEP IS TO BE INSERTED AT THE PRECASTING PLANT, BY PRESSURE, INTO PRECISELY PRE-FORMED TAPERED HOLES IN THE MANHOLE WALL.
5. THE VERTICAL SPACING BETWEEN INSTALLED STEPS SHALL NOT BE MORE THAN 1'-4" INCHES.



FRAME (140 LB. ± 5% TOLERANCE)



LID (170 LB. ± 5% TOLERANCE)



DATE	BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)		
NEW MEXICO		
DEPARTMENT OF TRANSPORTATION		
STANDARD DRAWING		
PRECAST CONCRETE MANHOLE FRAME LID DETAILS AND STEP DETAILS		
DESIGNED BY:	DRAWN BY: SKL	CHECKED BY: YML/TM
662-01-3/3		1 of 1