

DETAIL SUPPLEMENT No.	MUNICIPALITY	DETAIL TITLE	REVISED
101	MAG	General Information	
M-11	ME	General Notes	08-12-1999
119-1	PE	“As-Built” Requirements	12-26-2000
119-2	PE	“As-Built” Requirements	12-26-2000
P1100	PH	Standard Tracing Sizes	07-09-1992
T-115	TE	General Information	2005
110	MAG	Plan Symbols	
307A	GI	Yellow Line Plan Symbols	
307B	GI	White Line Plan Symbols	
G-210	GL	Standard Symbols To Be Used On City Improvement Plans	06-2002
G-210	GL	Standard Symbols To Be Used On City Improvement Plans	06-2002
G-210	GL	Standard Symbols To Be Used On City Improvement Plans	06-2002
G-210	GL	Standard Symbols To Be Used On City Improvement Plans	06-2002
G-3110-1	GO	Standard Symbols To Be Used On City Improvement Plans	07-1997
G-3110-2	GO	Standard Symbols To Be Used On City Improvement Plans	07-1997
G-3110-3	GO	Standard Symbols To Be Used On City Improvement Plans	07-1997
G-3110-4	GO	Standard Symbols To Be Used On City Improvement Plans	07-1997
4701	MC	Plan Symbols	01-2005
4702	MC	Plan Symbols	01-2005
112	MAG	Dimensioning For Road Improvement Plans	
120-1	MAG	Survey Marker	
120-2	MAG	Survey Marker (For Unincorporated Areas Of County)	
130	MAG	Barricades	
AJ-PW001	AJ	Open Trench/Open Pit/Utility Pole Fencing and Barricade Detail	09-1999
C-100	CH	Hazard Marker Placement	11-19-1999
C-101	CH	Hazard Marker	11-19-1999
C-102	CH	Hazard Marker Soil Anchor	11-19-1999
204	GI	Traffic Drum Details	
G-460	GL	Barricading on Subdivision Streets	06-27-2002

G-3170	GO	Barricading On Subdivision Street	07-1997
2056	MC	Roadway Markers	11-03-2002
2057	MC	Permanent Road Closure Using Type III Barricades	04-11-2000
116	PE	Fire Department Access Barrier	07-02-1998
P1024	PH	Steel Pipe Barricade	07-09-1992
P1106	PH	Barricade	07-09-1992
131	MAG	Street Sign Base	
79	GI	Square Tubing for Traffic Sign	
G-3140	GO	Street Names Sign and Support	07-1997
2054-1	MC	Street Name Sign Installation Details Posted Speed Limit of 25 MPH	04-2005
2054-2	MC	Street Name Sign Installation Details Posted Speed Limit Above 25MPH	04-2005
2058	MC	Square Perforated Tube Sign Post Foundation & Splice Details	05-2004
2059	MC	U-Channel Post Selection and Installation Details	05-2004
M-39	ME	Sign Post Installation (Square Tubing)	12-19-2001
132-1	Peoria	Sign Post Installation	12-12-2000
132-2	Peoria	Sign Post Specifications	12-12-2000
P1023	PH	Street Sign Base, Object Marker, & Delineator	07-09-1992
2131	SC	Sign Post Installation	1-3-1994
135-1	MAG	Steel Guard Rail	
135-2	MAG	Steel Guard Rail	
135-3	MAG	Steel Guard Rail	
135-4	MAG	Steel Guard Rail	
3001	MC	Typical Guardrail	04-30-2001
3002	MC	Type A Guardrail Installation	06-09-2004
3003	MC	Type B Guardrail Installation	06-09-2004
3004	MC	End Terminal Layout at Half Barrier Terminal	06-29-2004
3005	MC	End Terminal Layout With Curb and Gutter	05-01-2004
3006	MC	End Terminal Layout Without Curb and Gutter	05-01-2004
3007	MC	Departure End Terminal	06-20-2001
3008-1	MC	Nested Guardrail Type 1	05-02-2001
3008-2	MC	Nested Guardrail Type 2	06-27-2001
3008-3	MC	Nested Guardrail Type 3	05-01-2001
3010-1	MC	Bolted Guardrail Anchors	05-02-2001
3010-2	MC	Bolted Guardrail Anchors	05-02-2001
3012-1	MC	Guardrail Transition	06-27-2001

3012-2	MC	Concrete Half Barrier Transition	05-02-2001
3012-3	MC	Barrier Detail	08-06-2001
3016	MC	Guardrail Measurement	04-15-2004
140	MAG	Safety Post	
145	MAG	Safety Rail	
	AV	Handrail Elevation	
C-107	CH	Galvanized Handrail	11-19-1999
G-3560	GO	Handrail Detail	07-1997
M-65	ME	Safety Railing Details	01-01-2004
P1173	PH	Handrail Detail	07-19-2004
P1174	PH	Conditions Where Safety Railings Are Required	07-19-2004
2508	SC	Handrail Detail	03-28-2002
150	MAG	Precast Safety Curb	
160	MAG	6' Chain Link Fence And Grate	
170	MAG	Typical Runway Or Taxiway Edge Lighting Detail	
190	MAG	Rock Correction Procedure For Maximum Density Determination	

Series 100- General Information – Miscellaneous Detail Supplements

C-109	Chandler	Shallow Pit Percolation Test Requirements	11-19-1999
G-201	GL	Typical Vicinity Map	06-27-2002
G-202	GL	Typical Approval Blocks	06-27-2002
G-203	GL	Permit Fee Forms (Private Development Plans)	06-27-2002
G-207	GL	Right-Of-Way Improvements Estimated Quantities	06-27-2002
199	Peoria	Allowable Materials List	07-16-1998
P1130	PH	Multi-Use Trails	07-19-2004
P1131	PH	Vert. Clearance in MUT, SUT, and Bridge	02-11-2002

PARKING LOT DIMENSIONS

G-450	GL	Parking Lot Dimensions	06-27-2002
G-3150	GO	Parking Lot Dimensions	07-1997

TRASH/REFUSE ENCLOSURES

	AV	Garbage Enclosure	
80	GI	Driveway Standards for Refuse Trucks and Dumpster Bin Enclosure	01-28-2004
80-1	GI	Single and Double-Wide Bin Enclosures	2004
80-2	GI	Triple-Wide Bin Enclosures	01-2005
80-3	GI	Bin Enclosure Screen Wall, Safety Post and Gate Standards	01-2005
80-4	GI	Standard Refuse Area	01-2004

80-5	GI	Small Compactor Refuse Area	2004
80-6	GI	Large Compactor Refuse Area	2004
81	GI	6 CU YD Metal Front Loading Refuse Container	08-01-1995
82	GI	3 CU YD Metal Front Loading Refuse Container	08-01-1995
G-934	GL	Refuse Collection Enclosure Design and Construction	06-28-2002
G-935	GL	Refuse Collection Station, Design, Location and Construction (Front Load)	06-28-2002
G-936	GL	Refuse Collection Station, Design, Location and Construction (Roll Off)	06-28-2002
G-3160	GO	Refuse Collection Station Locations Design and Construction	07-1997
G-3161	GO	Refuse Collection Stations Design and Construction	07-1997
G3162-1	GO	Refuse Enclosure	07-1997
G-3162-2	GO	Refuse Enclosure with Grease Containment Area	07-1997
G-3164-1	GO	Double Refuse Enclosure	07-1997
G-3164-2	GO	Double Refuse Enclosure with Grease Containment Area	07-1997
G-3166-1	GO	16' Sliding Gate & Hinged Door	07-1997
G-3166-2	GO	16' Sliding Gate	07-1997
M-62.1	ME	Standard for Solid Waste Vehicle Access	02-08-2000
M-62.2	ME	Single and Double-Wide Bin Enclosures	01-01-2004
M-62.3	ME	Triple -Wide Bin Enclosures	07-01-2002
M-62.4	ME	Bin Enclosure Screen Wall, Safety Post & Gate Standards	07-01-2002
M-62.5	ME	Storage Area Screen Walls- Barrel Service	01-01-2002
911	PE	Trash Enclosure	02-20-2001
2146-1	SC	Refuse Enclosure	05-09-2002
2146-2	SC	Refuse Enclosure W/ Grease Containment Area	05-09-2002
2147-1	SC	Double Refuse Enclosure	05-09-2002
2147-2	SC	Double Refuse Enclosure W/ Grease Containment Area	05-09-2002
2165-1	SC	16' Sliding Gate & Hinged Door	04-12-2005
2165-2	SC	16' Sliding Gate	04-12-2005

1. THESE DETAILS HAVE BEEN PREPARED IN AN EFFORT TO STANDARDIZE THE CONSTRUCTION DETAILS USED BY VARIOUS CONTRACTING AGENCIES IN MARICOPA COUNTY. THEY ARE TO BE USED IN CONJUNCTION WITH THE CURRENT METRIC EDITION OF THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS.
2. MANY NOTES WITHIN THESE DETAILS REFER TO VARIOUS SECTIONS OF THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION." WHERE THIS REFERENCE IS MADE, ONLY THE ABBREVIATION "SECT." IS USED. AN EXAMPLE OF THIS REFERENCE WOULD BE: "CLASS 'A' CONCRETE PER SECT. 725."
3. MANY NOTES WITHIN THESE DETAILS REFER TO OTHER DETAILS WITHIN THIS BOOK. WHERE THIS REFERENCE IS MADE, THE ABBREVIATION "DETAIL" IS USED. AN EXAMPLE OF THIS WOULD BE: "SEE DETAIL 391 FOR VALVE BOX INSTALLATION."
4. MANY DETAILS COVER MORE THAN ONE SHEET. THESE SHEETS HAVE BEEN GIVEN THE SAME NUMBER WITH A SUFFIX NUMBER, EXAMPLE: 391-1 AND 391-2.
5. AN EFFORT HAS BEEN MADE TO INCLUDE THE MOST COMMONLY USED CONSTRUCTION DETAILS IN THIS BOOK. ITEMS WHICH REQUIRE DESIGN CONSIDERATION BY THE DESIGNING ENGINEER HAVE NOT BEEN INCLUDED.
6. SOME OF THE DETAILS PRINTED HEREIN MAY BE USED BY SOME OF THE AGENCIES BUT NOT OTHERS. THE DESIGNING ENGINEER SHOULD THEREFORE CONTACT THE AGENCY WITHIN WHOSE JURISDICTION HE IS WORKING FOR DIRECTION AS TO WHICH DETAIL OR PORTIONS OF DETAILS SHOULD BE USED.
7. DETAIL DRAWINGS ARE NOT TO SCALE.

DETAIL NO. 101	 MARICOPA ASSOCIATION of GOVERNMENTS STANDARD DETAIL ENGLISH	GENERAL INFORMATION	REVISED	DETAIL NO. 101
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GENERAL NOTES

1. THE BOTTOM SECTION OF THE VALVE BOX HOUSING (M.A.G.DETAIL 391-1, TYPE C) SHALL BE PLASTIC ON ALL NEW INSTALLATIONS AND REPAIRS TO ANY EXISTING GAS VALVES. ALL VALVES BOXES TO BE TYPE C.
2. SANITARY SEWER AND STORM DRAIN MANHOLE RINGS AND COVERS INSTALLED IN MESA SHALL BE 30" IN ALL CASES.
3. SANITARY SEWER AND STORM DRAIN MANHOLES SHALL BE 5' IN DIAMETER.
4. SANITARY SEWER AND STORM DRAIN MANHOLES SHALL NOT INCLUDE STEPS.
5. CONTRACTION JOINTS SHALL BE PER THE MESA AMENDMENTS TO THE M.A.G. SPECIFICATIONS FOR ALL SIDEWALKS AND CURBS.
6. SCORE MARKS IN SIDEWALK AND CURB SHALL BE PER M.A.G. SECTION 340.
7. DRIVEWAY AND ALLEY ENTRANCES SHALL NOT BE DEPRESSED UNLESS CALLED OUT IN PLANS OR APPROVED BY INSPECTOR.
8. STREET SIGN POST (M-22.3 & M-39) LOCATIONS WILL BE SHOWN ON PLANS OR AS MARKED BY CITY INSPECTOR. MINIMUM DISTANCE BETWEEN POST AND FIRE HYDRANT IS 6 FEET.
9. FIRE LINE DETECTOR CHECK VAULTS (SEE M.A.G. DETAIL 346), SHALL HAVE AN O.S.& Y. VALVE ON CITY SIDE OF CHECK VALVE, IF DOMESTIC SERVICE OCCURS FROM SAME TAP. A HOSE BIBB SHALL BE INSTALLED ON CUSTOMER SIDE OF THE BY-PASS METER IN ALL SITUATIONS.
10. SURVEY MARKER PER M.A.G. DETAIL 120-1, TYPE A REQUIRED AT ALL INTERSECTIONS, SECTION CORNERS, AND QUARTER CORNERS. CHAINS AS NOTED IN DETAIL WILL BE REQUIRED.
11. WATER METER VAULTS SHALL BE CAST-IN-PLACE PER M.A.G. STANDARD DETAIL 321. PRE-CAST VAULTS PER M.A.G. STANDARD DETAIL 321 MAY BE USED IF APPROVED BY INSPECTOR. APPROVAL FOR PRE-CAST VAULT WILL ONLY BE GRANTED IF DELIVERY OF VAULT WILL NOT IMPACT PROJECT SCHEDULE.

GENERAL NOTES

DETAIL NO.
M-11

PEORIA DETAIL 119-1

"AS-BUILT" REQUIREMENTS



APPROVALS:

CITY ENGINEER

DATE

LAYER	COLOR	LINETYPE
O	WHITE	CONTINUOUS
CL	WHITE	CENTER
PL	BLUE	CONTINUOUS
LOTS	RED	CONTINUOUS
LOTN	RED	CONTINUOUS
ROW	MAGENTA	CONTINUOUS
STREETS	WHITE	CONTINUOUS
ADDRESS	MAGENTA	CONTINUOUS
SUBDIV	MAGENTA	CONTINUOUS
PUE	MAGENTA	DASHED
W	CYAN	CONTINUOUS
WTAPS	CYAN	HIDDEN
WDIM	WHITE	CONTINUOUS
S	GREEN	CONTINUOUS
STAPS	GREEN	HIDDEN
SDIM	WHITE	CONTINUOUS
SELEV	GREEN	CONTINUOUS
BOUNDARY	YELLOW	CONTINUOUS

LAYER DESCRIPTION

O	BLANK.
CL	STREET CENTERLINE, NO STREET DIMENSIONS ARE NECESSARY.
PL	PROPERTY LINES, THESE ARE THE BLOCK OUTLINES.
LOTS	ALL LOT LINES MUST BE DRAWN AS SEPARATE ENTITY, INCLUDING THE FRONT LOT LINE.
LOTN	LOT NUMBERS AND ALL TRACTS.
ROW	RIGHT-OF-WAY DIMENSIONS, NO LINE WORK.
STREETS	STREET NAMES.
ADDRESS	PROPERTY ADDRESSES, TO BE ADDED BY THE CITY OF PEORIA.
SUBDIV	NAME OF NEW SUBDIVISION, SURROUNDING SUBDIVISIONS OR WRITE UNSUBDIVIDED IF APPLICABLE.
PUE	PUBLIC UTILITY EASEMENTS AND OTHER EASEMENTS SHOWN ON FINAL PLAT.
W	WATER MAINS, INCLUDING THEIR SIZE AND TYPE, AND DIMENSIONS OFF THE CENTERLINE. ALSO VALVES AND FIRE HYDRANTS.
WTAPS	WATER TAPS.

PEORIA DETAIL 119-2

"AS-BUILT" REQUIREMENTS



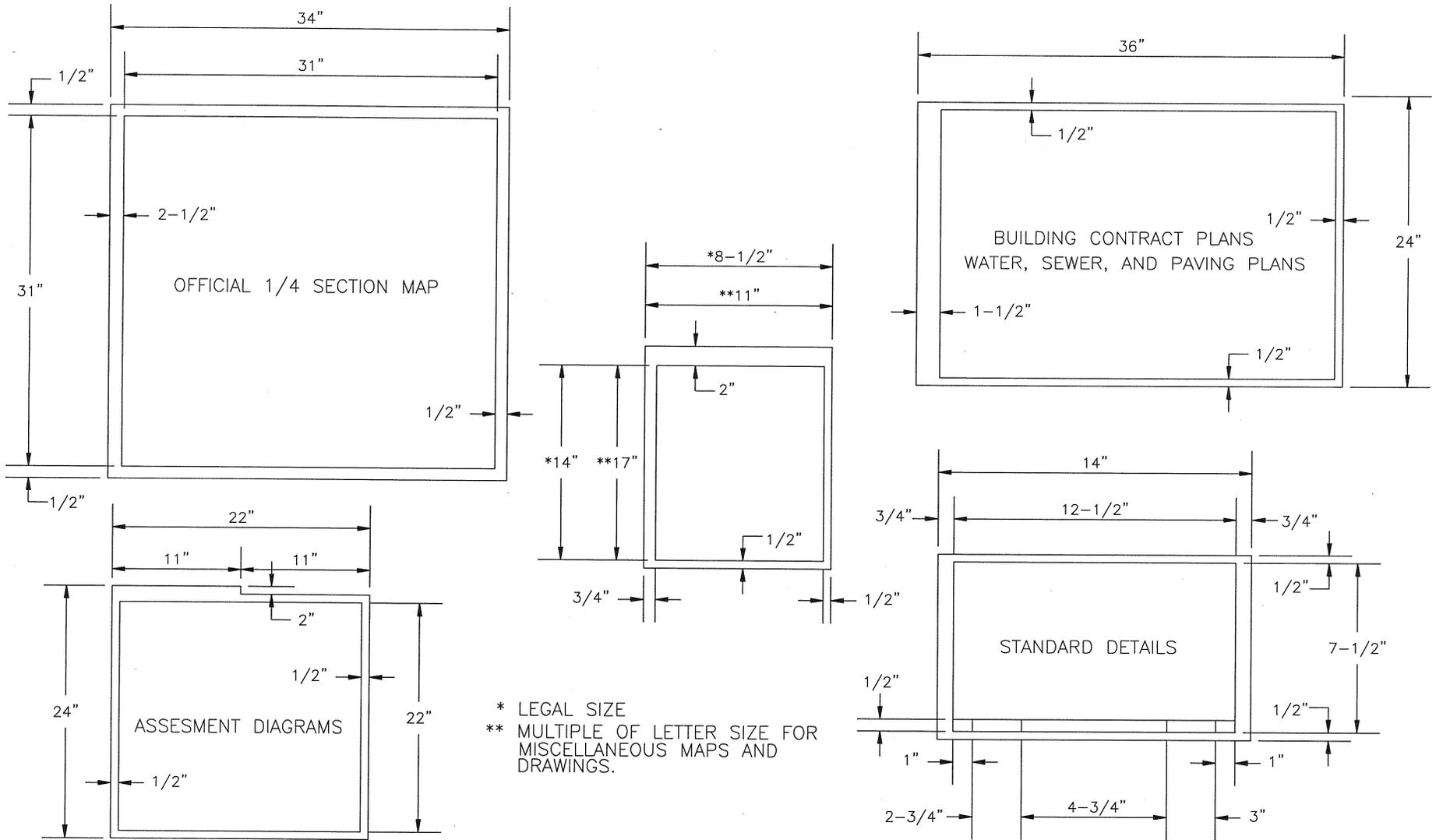
APPROVALS:

CITY ENGINEER

DATE

- WDIM PROPERTY LINES, THESE ARE THE BLOCK OUTLINES.
- S SEWER MAINS, INCLUDING THEIR SIZE AND TYPE, AND DIMENSIONS OFF THE CENTERLINE. ALSO MANHOLES.
- STAPS SEWER TAPS.
- SDIM SEWER TAP DIMENSION OFF OF PROPERTY LINES.
- SELEV RIM ELEVATIONS AND SEWERLINE INVERTS.
- BOUNDARY SUBDIVISIONS BOUNDARY.

1. ALL TEXT WILL BE 10 EXCEPT FOR NEW SUBDIVISION NAMES WHICH WILL BE 20.
2. THE CITY WILL PROVIDE THE DETAILS FOR THE WATER VALVES, FIRE HYDRANTS, MANHOLES, OR CLEANOUTS IF NEEDED.



DETAIL NO.
P1100



City of Phoenix
STANDARD DETAIL

STANDARD TRACING SIZES

APPROVED

Kenny W. Hain
CITY ENGINEER

07-09-92
DATE

DETAIL NO.
P1100

REFER TO M.A.G. STANDARD DETAILS

- DETAIL NO. 203 - THIS SCUPPER DETAIL SHALL BE USED ONLY WITH APPROVAL OF THE CITY ENGINEER.
- DETAIL NO. 220 - CURB HEIGHT 140 ON ALL ARTERIAL STREETS SHALL BE 7"
- DETAIL NO. 230 - WIDTH OF CONCRETE SIDEWALK SHALL BE 8' ALONG ARTERIAL STREETS, 6' ELSEWHERE, 5'-6' LOCAL STREETS MAY BE APPROVED BY CITY.
- DETAIL NO. 240 - VALLEY CUTTER WIDTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER (MAX. WIDTH 6')
- DETAIL NO. 250 - CONCRETE THICKNESS SHALL BE 8" FOR ALL DRIVEWAYS.
- DETAIL NO. 262 - THIS DETAIL SHALL BE USED FOR ALL ALLEY ENTRANCES, WING WIDTH SHALL BE 6' FOR 6" VERT CURB, 7" FOR 7" VERT CURB. OTHERS MAINTAIN A MAX. SLOPE OF 1/2". CONCRETE THICKNESS SHALL BE 9" FOR ALL ALLEY ENTRANCES. WATER SERVICE TAP AND/OR WATER METER SHALL NOT BE INSTALLED WITHIN AN ALLEY ENTRANCE. EXISTING UTILITIES SHALL BE RELOCATED IF IN CONFLICT WITH NEW ENTRANCE.
- DETAIL NO. 301 - VALVES THAT ARE 'IN-LINE' MAY HAVE MECHANICAL JOINTS ENDS. VALVES AT LINE INTERSECTIONS SHALL BE FLANGED DIRECTLY TO THE FITTING. ANY VALVE WHICH APPEARS TO BE WITHIN 25' OF THE PIPE INTERSECTION SHOWN OR INDICATED ON PLAN SHALL BE FLANGED TO THE TEE, CROSS OR ELBOW, UNLESS OTHERWISE SPECIFIED ON THE PLAN.
- DETAIL NO. 340 - DIMENSION IS 5' MINIMUM OF DISTANCE AS REQUIRED BY TAPPING AGENCY
- DETAIL NO. 390 - USE TYPE 'B' CURB STOP WITH FLUSHING PIPE ONLY.
- DETAIL NO. 391H - USE TYPE 'C' VALVE BOX INSTALLATION, TYLER AND RICH ONLY. NONLOCKING DEEP SHOULDERED VALVE BOX COVERS ARE ACCEPTABLE.
- DETAIL NO. 420, 520-522 - ALL MANHOLES SHALL BE 5' IN DIAMETER WITH NO STEPS.
- DETAIL NO. 440 - USE TYPE 'A' SEWER BUILDING CONNECTION ONLY. NO SEWER TAPS SHALL BE ALLOWED IN MANHOLES OR CLEANSOUTS.
- DETAIL NO. 441 - NO SEWER TAPS SHALL BE ALLOWED IN CLEANSOUTS.
- DETAIL Nos. 531 & 532 - ALL CATCH BASINS SHALL BE PER DETAIL Nos. 531 & 532 UNLESS APPROVED BY THE CITY ENGINEER.
MULTIPLE CATCH BASINS SHALL BE CONSTRUCTED BY INSTALLING CATCH BASINS SIDE BY SIDE WITH THE BOTTOM 15' OF THE COMMON WALL REMOVED AND TWO #4 REBAR INSTALLED IN THE BOTTOM EDGE OF THE COMMON WALL.

REFER TO TEMPE STANDARD DETAILS

DETAIL Nos. T-303 TO T-306 - (DEPTH OF BASE COURSE CHARTS) CHARTS TO BE USED ONLY WHEN 'AASHTO INTERIM GUIDE FOR DESIGN OF FLEXIBLE STRUCTURES' PROCEDURE NOT REQUIRED.

DETAIL Nos. T-322 TO T-328, T-348 TO T-351 (RAMP PREFERENCE):

- DIRECTIONAL RAMPS ARE PREFERRED AND SHOULD BE INSTALLED AT ALL INTERSECTIONS (PER DET. T-328) WHERE THERE IS ROOM FOR BOTH THE RAMPS AND THE REQUIRED 4-FOOT LANDING AREA. AT ARTERIAL-ARTERIAL INTERSECTIONS WHERE THERE IS NOT ROOM FOR THE FULL DIRECTIONAL RAMP TREATMENT, DIAGONAL RAMPS (PER DET. T-324) WITH A MINIMUM 8-FOOT WIDTH AND 4-FOOT LANDING ARE ACCEPTABLE. AND IF THERE IS NOT ROOM FOR THE LANDING, A BLENDED TRANSITION RAMP SHOULD BE USED (PER DET. T-326). AT ARTERIAL-TO-LOCAL INTERSECTIONS, IF THERE IS NOT ROOM FOR DIRECTIONAL RAMPS AND THEIR LANDINGS, THEN A BLENDED TRANSITION RAMP WILL BE PREFERRED (PER DET. T-326). DIAGONAL RAMPS MAY BE USED IF FOR SOME REASON A BLENDED TRANSITION IS NOT WORKABLE, BUT THE WIDTH OF A DIAGONAL RAMP AT THE CURB LINE SHOULD BE A MINIMUM OF 8-FEET.

GENERAL NOTES

- INSTALLATION OF NEW UTILITIES ON EXISTING CONCRETE STRUCTURES (I.E. CATCH BASINS, MANHOLES, HEADWALLS, STANDPIPE, PIPES ETC.) SHALL BE CORE DRILLED.
- UNLESS OTHERWISE NOTED ALL CONDUIT SHALL BE 3" MIN. PVC SCHEDULE 40 OR BETTER.
INSTALLATION OR REPLACEMENT OF UTILITY CABLES TO BE SLEEVED IN SCHEDULE 40 PVC OR BETTER. CONDUITS SHOULD BE SIZED AND PLACED TO ALLOW REPLACEMENT OF OR THE ADDITION OF CAPACITY TO EXISTING FACILITIES WITHOUT DISTURBING THE SURFACE.
CONDUITS IN PROTECTED AREAS SUCH AS BEHIND CURBS, IN SIDEWALKS, ETC. THAT ARE NOT SUBJECT TO VEHICULAR TRAFFIC SHALL BE AT A MINIMUM DEPTH OF 24 INCHES OR AS SPECIFIED IN EXHIBIT 'C' OF THE CITY OF TEMPE UTILITY PERMIT MANUAL.
CONDUITS INSTALLED UNDER ROADWAYS, DRIVEWAYS, PARKING LOTS OR ANY OPEN AREAS WHERE IT IS POSSIBLE FOR VEHICLES TO DRIVE, SHALL BE AT A MINIMUM DEPTH OF 24 INCHES OR AS SPECIFIED IN EXHIBIT 'C' OF THE CITY OF TEMPE UTILITY PERMIT MANUAL.
WHEN CONDUIT IN PROTECTED AND OPEN AREAS CANNOT BE INSTALLED AT THE MINIMUM DEPTHS, IT SHALL BE ENCASED IN CONCRETE A MINIMUM OF 3 INCHES.
- NO NEW POLES OR OVERHEAD LINES ALLOWED IN TEMPE PER TEMPE CITY CODE.
REPAIR OF EXISTING OVERHEAD LINES TO MAINTAIN 8' MIN. FROM GROUND.
- DETAIL DRAWINGS ARE NOT TO SCALE.

APPROVED: _____ DATE _____
DEPUTY PUBLIC WORKS MANAGER
CITY ENGINEER



CITY OF TEMPE
PUBLIC WORKS DEPARTMENT

GENERAL INFORMATION

DETAIL T-115

REVISED 2005

CONCRETE PVMT. SECTION		MANHOLE		SINGLE CURB	
SUBGRADE SEAL SECTION		SEWER CLEANOUT		MAIL BOX	
SELECT MATERIAL SECTION		RAILROAD		EXISTING WATER LINE	
AGGREGATE BASE SECTION		IRRIGATION LINE		EXISTING TELEPHONE LINE	
BITUMINOUS PVMT. SECTION		IRRIGATION STANDPIPE		EXISTING SEWER LINE	
EXISTING PAVEMENT		"L" HEADWALL		EXISTING GAS LINE	
OBLITERATE PAVEMENT		TELEPHONE OR TEL. LINE		EXISTING STORM DRAIN LINE	
CONCRETE PAVEMENT		POWER OR JOINT LINE		EXISTING IRRIGATION LINE	
BITUMINOUS PAVEMENT		DOWN GUY & ANCHOR			
		STREET LIGHT			
SECTION LINE		STREET SIGN			
ROADWAY CENTER LINE		TRAFFIC SIGN			
SURVEY MONUMENT		TRAFFIC SIGNAL LIGHT			
FIRE HYDRANT		SIDEWALK			
WATER METER		CURB & GUTTER			
WATER OR GAS VALVE		VALLEY GUTTER			
GAS METER		SINGLE GUTTER			

DETAIL NO.

110



MARICOPA
ASSOCIATION of
GOVERNMENTS

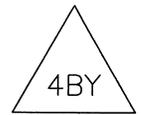
STANDARD DETAIL
ENGLISH

PLAN SYMBOLS

REVISED

DETAIL NO.

110



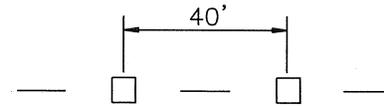
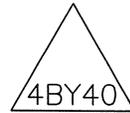
4" BROKEN YELLOW LINE
WITH A 10' LINE SEGMENT
AND A 30' GAP



24" SOLID YELLOW LINE



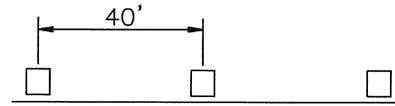
4" SOLID YELLOW LINE



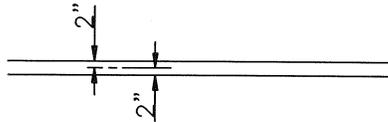
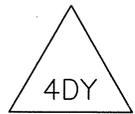
4" BROKEN YELLOW LINE
WITH A 10' LINE SEGMENT
AND A 30' GAP WITH
TYPE 'D' RPM'S @
40' SPACING



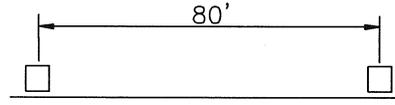
4" DOUBLE YELLOW LINE
ONE SOLID, ONE BROKEN
WITH A 10' LINE SEGMENT
AND A 30' GAP



4" SOLID YELLOW LINE
WITH TYPE 'D' RPM'S @
40' SPACING



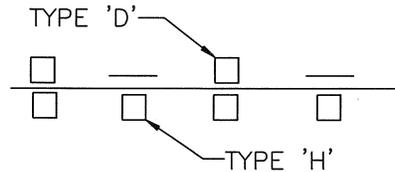
4" SOLID DOUBLE YELLOW LINE



4" SOLID YELLOW LINE
WITH TYPE 'G' RPM'S @
80' SPACING



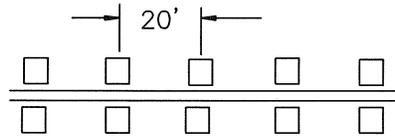
4" DASHED YELLOW LINE
WITH A 2' LINE SEGMENT
AND A 4' GAP



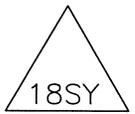
4" DOUBLE YELLOW LINE,
ONE SOLID, ONE BROKEN
WITH A 10' LINE SEGMENT
AND A 30' GAP, WITH
TYPE 'H' RPM'S @ A 20'
SPACING (SOLID), TYPE 'D'
RPM'S @ A 40' SPACING
(BROKEN)



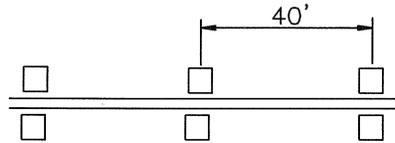
12" SOLID YELLOW LINE



4" SOLID DOUBLE YELLOW
LINE WITH TYPE 'D' RPM'S
@ 20' SPACING



18" SOLID YELLOW LINE



4" SOLID DOUBLE YELLOW
LINE WITH TYPE 'D' RPM'S
@ 40' SPACING

DETAIL NO.
307A

TOWN OF GILBERT
STANDARD DETAIL

YELLOW LINE PLAN SYMBOLS

REVISED

DETAIL NO.
307A

STANDARD DETAIL G-210

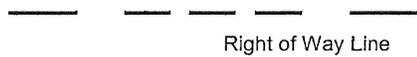
CITY OF GLENDALE
ENGINEERING



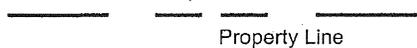
STANDARD SYMBOLS TO BE USED ON CITY IMPROVEMENT PLANS

NOTES:

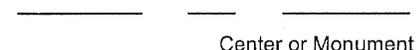
1. PLANS SHALL BE OF A QUALITY TO ALLOW MICROFILMING (i.e.: LINE WEIGHT AND LETTER SIZE SHALL BE EASILY READ WHEN REDUCED BY 50%)
2. EXISTING IMPROVEMENTS SUCH AS CURB, GUTTER, SIDEWALK, DRIVEWAYS, ETC. SHALL BE SHOWN BY DASHED LINES.
3. ALL PROPOSED CONSTRUCTION NOTES SHALL BE BOXED.



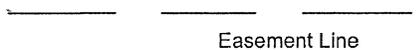
Right of Way Line



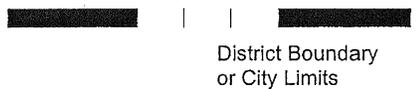
Property Line



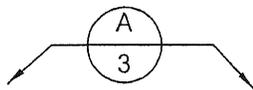
Center or Monument Line



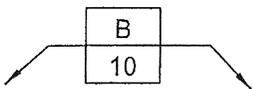
Easement Line



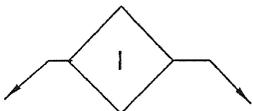
District Boundary
or City Limits



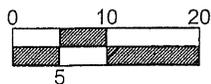
Line No.
Sheet No.



Type of Pavement Replacement
No. of Square Yards



Compaction Class



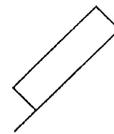
Graphic Scale



Bench Mark (Plan View)



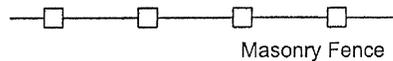
Existing Elevation



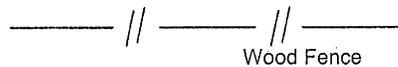
Proposed Elevation



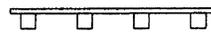
Wire Fence



Masonry Fence



Wood Fence



Barricade



Traffic Sign & Delineator



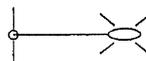
Commercial Sign



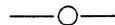
Street Sign



Mail Box



Street Light



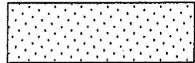
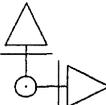
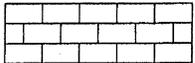
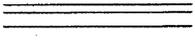
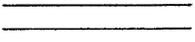
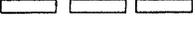
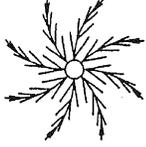
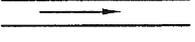
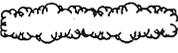
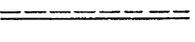
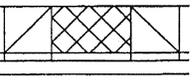
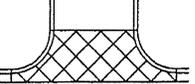
Telephone or Power Pole

STANDARD DETAIL G-210

CITY OF GLENDALE
ENGINEERING



STANDARD SYMBOLS TO BE USED ON CITY IMPROVEMENT PLANS

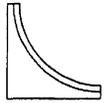
	Guy Anchor		Existing A/C Pavement
	Traffic Signal Light (Direction Light Faces)		Concrete Underlay
— TEL. CA. —	Telephone Cable		Concrete Pavement
— TEL. D.B. —	or Duct Bank		Concrete Sidewalk Salt Finish (Glendale Avenue required)
— 2" G —	Gas Line & Size		Brick Pavers
— 2" H.P.G. —	High Pressure Gas Line		Vertical Curb & Gutter
— T.V. —	Television Cable		Roll Curb & Gutter
— T.S. —	Traffic Signal Conduit		Single Vertical Curb
	Gas Meter		Concrete Safety Curb
	Palm Tree (Show Height)		Concrete Valley Gutter (W/Direction of Flow)
	Tree (Kind & Trunk Dia.)		Edge of Existing Pavement
	Hedge		Edge of Proposed Pavement W/Thickened Edge
			Wing Type Driveway
			Return Type Driveway

STANDARD DETAIL G-210

CITY OF GLENDALE
ENGINEERING



STANDARD SYMBOLS TO BE USED ON CITY IMPROVEMENT PLANS



Concrete Apron



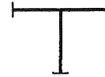
Survey Monument (Brass Cap,
Stone, Etc. in Hand Hole)



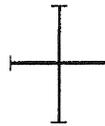
Survey Monument
(Brass Cap on Surface)



Survey Monument
(Rebar or Pipe)



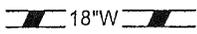
Tee



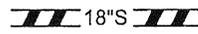
Cross



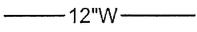
Bend



Water Line & Size (18" or
Larger at 20 Scale)



Sewer Line & Size (18" or
Larger at 20 Scale)



Water Line & Size (16" or
Smaller at 20 Scale)



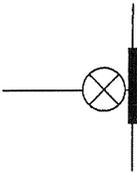
Sewer Line & Size (15" or
Smaller at 20 Scale)



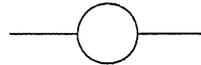
Water or Gas Valve



Sewer Service



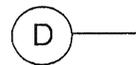
Tapping Sleeve & Valve



Manhole



Fire Hydrant



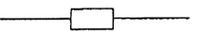
Drop Sewer Connection



Thrust Block



Sewer Cleanout



Meter Box & Service



Reducer

STANDARD DETAIL G-210

CITY OF GLENDALE
ENGINEERING



STANDARD SYMBOLS TO BE USED ON CITY IMPROVEMENT PLANS

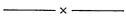
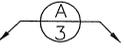
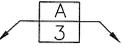
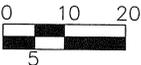
	Storm Drain & Size (18" or Larger at 20 Scale)		Irrigation Standpipe
	Storm Drain & Size (15" or Smaller at 20 Scale)		Alfalfa Valve
	Gutter Inlet		
	Curb Inlet		
	Irrigation Line & Size (18" or Larger at 20 Scale)		
	Irrigation Line & Size (15" or Smaller at 20 Scale)		
	Concrete Lined Ditch		
	Earth Ditch		
	Center of Stream W/Direction of Flow		
	Top of Bank		
	Toe of Slope		
	Irrigation Berm		
	Irrigation Junction Box		
	Wing Type Headwall		
	Plain Headwall		

REVISED: JUNE 2002

PREVIOUS:

NOTES:

1. PLANS SHALL BE OF A QUALITY TO ALLOW MICROFILMING. (i.e. LINE WEIGHT AND LETTER SIZE SHALL BE EASILY READ WHEN REDUCED BY 50%)
2. EXISTING IMPROVEMENTS SUCH AS CURB, GUTTER, SIDEWALK, DRIVEWAYS, ETC. SHALL BE SHOWN BY DASHED LINES.
3. ALL PROPOSED CONSTRUCTION NOTES SHALL BE BOXED.

	Right of Way Line		Proposed Elevation
	Property Line		Wire Fence
	Center or Monument Line		Masonry Fence
	Easement Line		Wood Fence
	District Boundary or City Limits		Barricade
	Line No. Sheet No.		Traffic Sign & Delineator
	Type of Pavement Replacement No. of Square Yards		Commercial Sign
	Compaction Class		Street Sign
	Graphic Scale		Mail Box
	Bench Mark (Plan View)		Street Light
	Existing Elevation		Telephone or Power Pole

DETAIL NO.
G-3110-1

CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee

7/97

STANDARD SYMBOLS TO BE USED ON
CITY IMPROVEMENT PLANS

DETAIL NO.
G-3110-1

← Guy Anchor

 Traffic Signal Light
(Direction Light Faces)

— TEL. CA.— Telephone Cable
— TEL COND.— or Conduit

— 2" G.— Gas Line & Size
— 2" H.P.G.— High Pressure Gas Line

— T.V.— Television Cable

— T.S. COND.— Traffic Signal Conduit

 Gas Meter

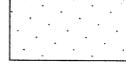
 Palm Tree
(Show Height)

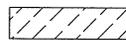
 Tree (Kind & Trunk Dia.)

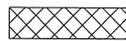
 Evergreen Tree
(Kind & Trunk Dia.)

 Hedge

 New A/C Pavement—Shaded

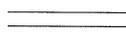
 Existing A/C Pavement

 Concrete Underlay

 Concrete Pavement

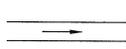
 Concrete Sidewalk

 Vertical Curb & Gutter

 Roll Curb & Gutter

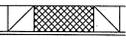
 Single Vertical Curb

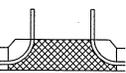
 Concrete Safety Curb

 Concrete Valley Gutter
(w/Direction of Flow)

 Edge of Existing Pavement

 Edge of Proposed Pavement
w/Thickened Edge

 Wing Type Driveway

 Return Type Driveway

DETAIL NO.
G-3110-2

CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee 7/97

STANDARD SYMBOLS TO BE USED ON
CITY IMPROVEMENT PLANS

DETAIL NO.
G-3110-2



Concrete Apron



Survey Monument (Brass Cap, Stone, Etc. in Hand Hole)



Survey Monument (Brass Cap on Surface)



Survey Monument (Rebar or Pipe)



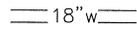
Tee



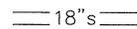
Cross



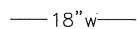
Bend



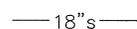
Water Line & Size (18" or Larger at 20 Scale)



Sewer Line & Size (18" or Larger at 20 Scale)



Water Line & Size (15" or Larger at 20 Scale)



Sewer Line & Size (15" or Smaller at 20 Scale)



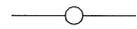
Water or Gas Valve



Sewer Service



Trapping Sleeve & Valve



Manhole



Fire Hydrant



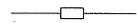
Drop Sewer Connection



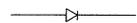
Thrust Block



Sewer Cleanout



Meter Box & Service



Reducer

DETAIL NO.
G-3110-3

CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee 7/97

STANDARD SYMBOLS TO BE USED ON
CITY IMPROVEMENT PLANS

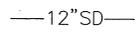
DETAIL NO.
G-3110-3



Storm Drain & Size (18" or Larger at 20 Scale)



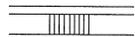
Irrigation Standpipe



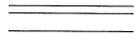
Storm Drain & Size (15" or Smaller at 20 Scale)



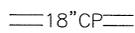
Alfalfa Valve



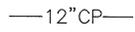
Gutter Inlet



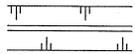
Curb Inlet



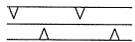
Irrigation Line & Size (18" or Larger at 20 Scale)



Irrigation Line & Size (15" or Smaller at 20 Scale)



Concrete Lined Ditch



Dirt Ditch



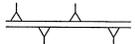
Center of Stream
w/Direction of Flow



Top of Bank



Toe of Slope



Irrigation Berm



Irrigation Junction Box



Wing Type Headwall



Plan Headwall

DETAIL NO.
G-3110-4

CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee 7/97

STANDARD SYMBOLS TO BE USED ON
CITY IMPROVEMENT PLANS

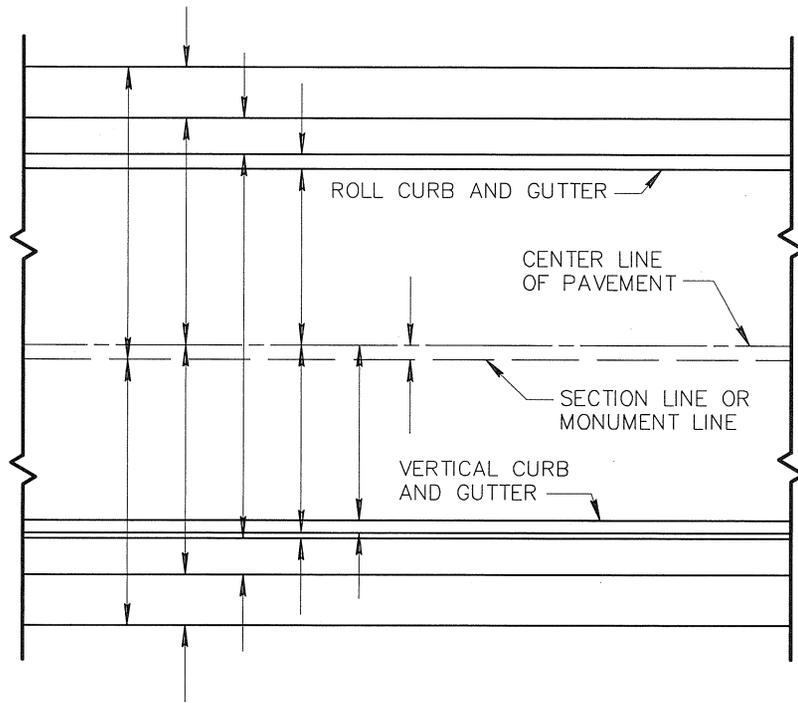
DETAIL NO.
G-3110-4

SYMBOLS

<u>SYMBOL</u>	<u>DESCRIPTION</u>
	No. 3½ Pull Box
	No. 3½ Pull Box Number
	No. 5 Pull Box
	No. 5 Pull Box w/Extension
	No. 5 Pull Box Number
	No. 7 Pull Box
	No. 7 Pull Box w/Extension
	No. 7 Pull Box Number
- - - - -	2" and 3" PVC Conduit Run
- - - - -	Loop Detector Lead
	Conduit Run Number
	Pole Foundation
	Pole Foundation Letter
	Traffic Signal Pole
	Multi-Use Traffic Signal Pole (Existing)
	'P' Cabinet Foundation w/ Concrete Pad
	'G' Control Cabinet (Existing or ITS Only)
	Meter Socket w/Circuit Breaker Box (Existing)
	Electrical Service Pedestal
	Battery Back-up System (BBS) w/Foundation
	Traffic Signal Head (Type 'F')
	Traffic Signal Head w/Directional Arrows (Type 'Q')
	Traffic Signal Head w/Directional Arrows (Type 'R')
	Flasher Signal Head
	'A' Pole w/Traffic Signal Head
	Video Camera

SYMBOLS

<u>SYMBOL</u>	<u>DESCRIPTION</u>
	<p>'E' or 'J' Pole w/Signal Mast Arm & Traffic Signal Heads 1- Each Aerial Indication for 'E' pole 2- Each Aerial Indications for 'J' pole</p>
	<p>'F' or 'Q' Pole w/Signal Mast Arm & Traffic Signal Heads 1- Each Aerial Indication for 'F' pole 2- Each Aerial Indications for 'Q' pole</p>
	<p>'K' Pole w/ Signal Mast Arm & Traffic Signal Heads 3-Each Aerial Indications</p>
	<p>'R' Pole w/ Signal and Luminaire Mast Arms & Traffic Signal Heads 3-Each Aerial Indications</p>
	<p>Pedestrian Signal Head</p>
	<p>Pedestrian Push Button w/ Sign</p>
	<p>Electrical Point of Service</p>
	<p>Loop Detector (Size As Indicated) (Diagonal and Corner Points are Core Drilled)</p>
	<p>MCDOT Luminaire On Mast Arm</p>
	<p>Luminaire On Mast Arm (Others)</p>
	<p>Aerial Cable</p>
	<p>Pedestrian Movement</p>
	<p>Vehicle Movement</p>



DIMENSION SHOULD BE GIVEN ONCE ON EACH SHEET AND SHOULD BE PLACED NEAR THE CENTER OF THE SHEET. IF ANY OF THE GIVEN CONDITIONS CHANGE, THEY SHOULD BE REDIMENSIONED AT THE POINT OF CHANGE.

GIVEN DIMENSIONS IN ORDER STARTING WITH THE LONGEST AND ENDING WITH THE SHORTEST, AS SHOWN IN THE SKETCH.

GIVE COMPLETE DIMENSIONS.

IF THE CENTERLINE OF PAVEMENT DOES NOT FALL ON THE SECTION LINE OR MONUMENT LINE OF THE STREET, DIMENSION AS ABOVE AND SHOW THE DIFFERENCE BETWEEN THE SECTION OR MONUMENT LINE AND THE CENTERLINE.

DETAIL NO.

112



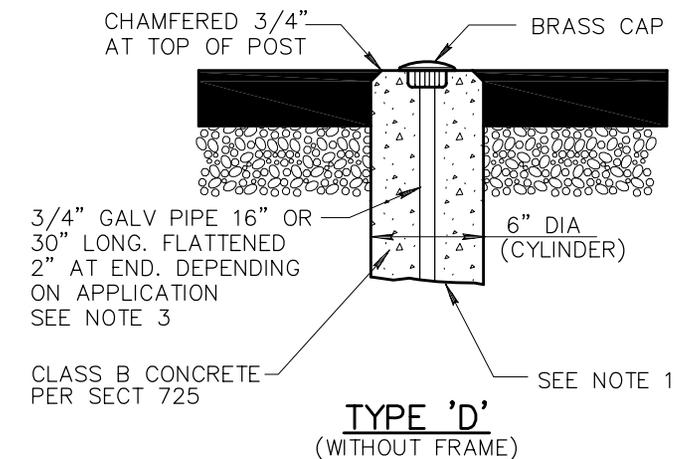
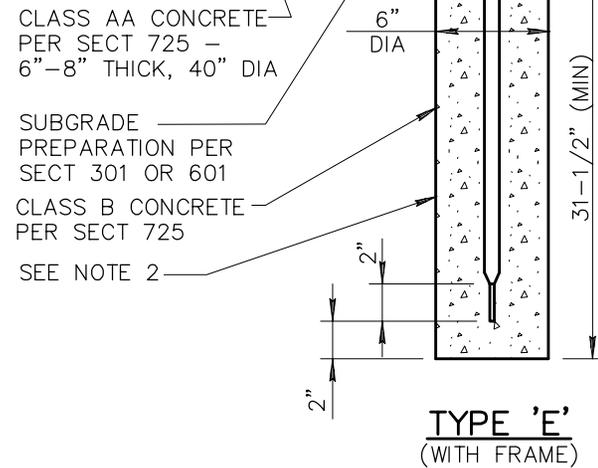
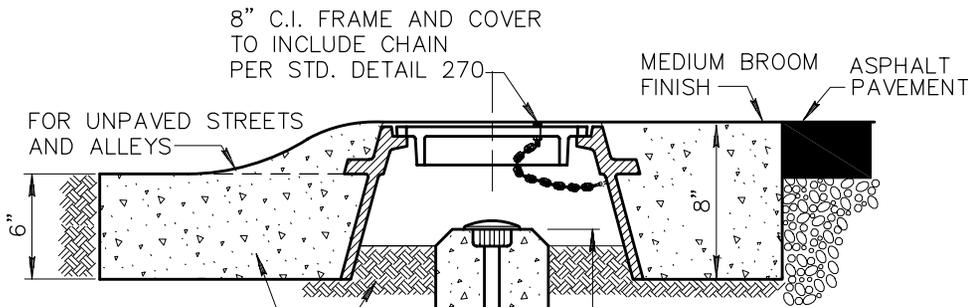
**STANDARD DETAIL
ENGLISH**

**DIMENSIONING
FOR ROAD IMPROVEMENT PLANS**

REVISED

DETAIL NO.

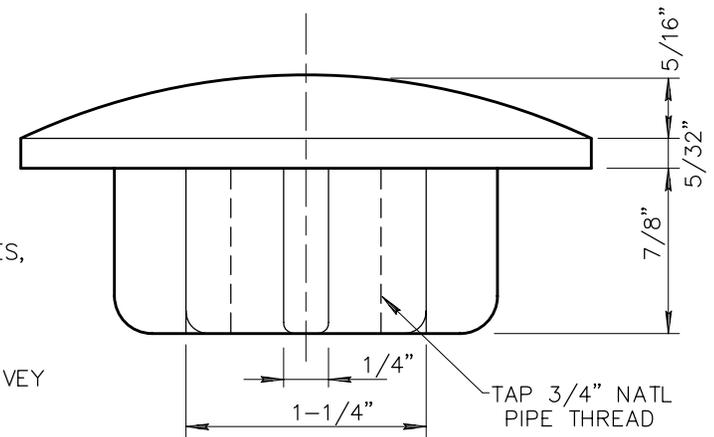
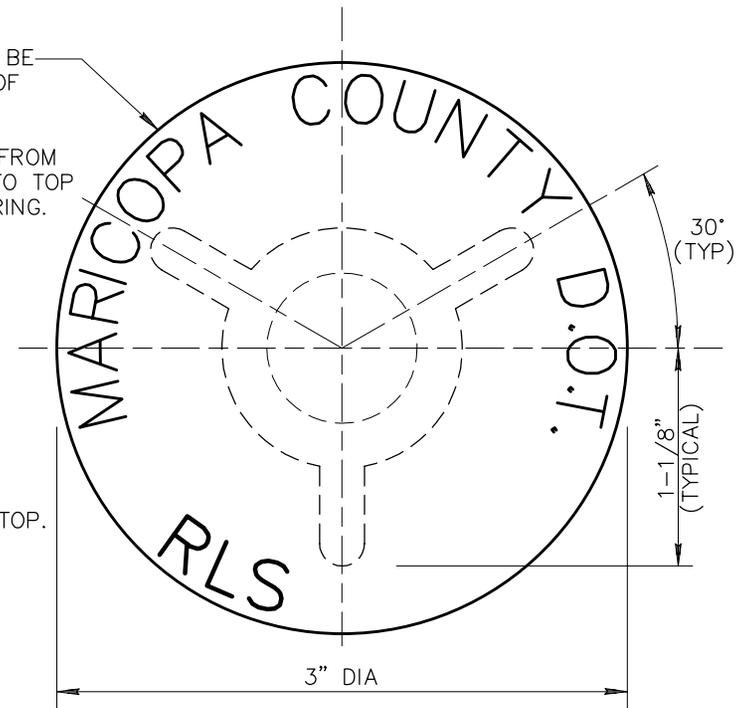
112



BRASS CAP TO BE CONSTRUCTED OF RED BRASS OR BRONZE.
1/16" BORDER FROM EDGE OF CAP TO TOP OF 1/4" LETTERING.

NOTES:

1. TYPE "D" NORMALLY USED AT STREET INTERSECTIONS, AS SUBDIVISION MONUMENTS AND 1/16 CORNERS.
2. TYPE "E" NORMALLY USED ON SECTION CORNERS, 1/4 CORNERS AND AT THE CENTER OF SECTIONS (PER ARS 33-103). CONCRETE POST IS CHAMFERED 3/4" AT TOP.
3. SECTION CORNERS, 1/4 CORNERS AND CENTER OF SECTIONS SHALL BE 30" LONG, ALL OTHER MARKERS SHALL BE A MINIMUM OF 16" PER THE ARIZONA BOARD OF TECHNICAL REGISTRATION (BTR) UNLESS SUBSURFACE OBSTRUCTIONS LIMIT LENGTH.
4. IN ALL CASES, THE POINT SURVEYED SHALL BE IDENTIFIED BY A PUNCH MARK AND IN ADDITION THE CAP SHALL BE STAMPED WITH THE REGISTERED LAND SURVEYOR (RLS) REGISTRATION NUMBER AND YEAR.
5. WHEN APPLICABLE, STAMP THE APPROPRIATE PUBLIC LAND MARKINGS PER CURRENT MANUAL OF INSTRUCTIONS FOR THE SURVEY OF THE PUBLIC LANDS OF THE UNITED STATES, PREPARED BY THE BUREAU OF LAND MANAGEMENT.
6. IN ALL CASES WHEN MONUMENTS ARE SET A CORNER RECORD OR RESULTS OF SURVEY SHALL BE RECORDED. (PER BTR)



CAP DETAIL

DETAIL NO.

120-2



STANDARD DETAIL
ENGLISH

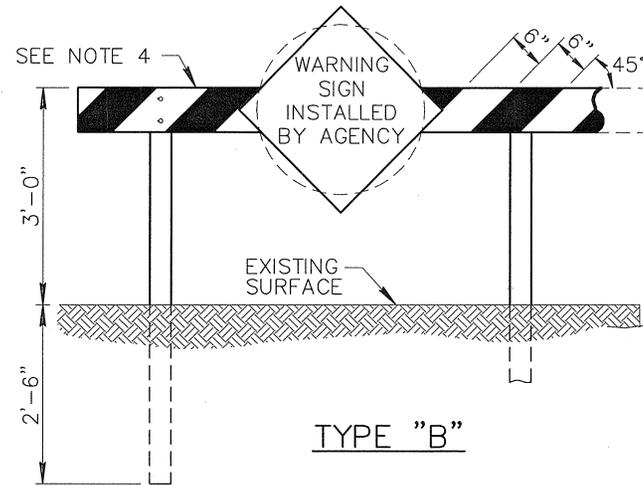
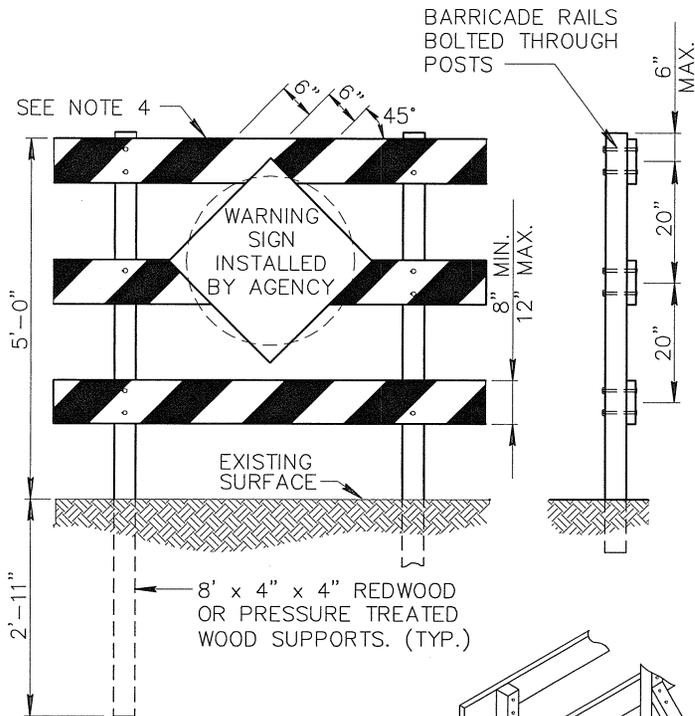
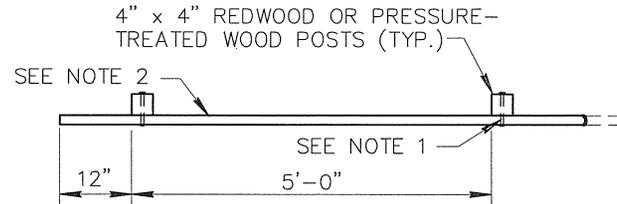
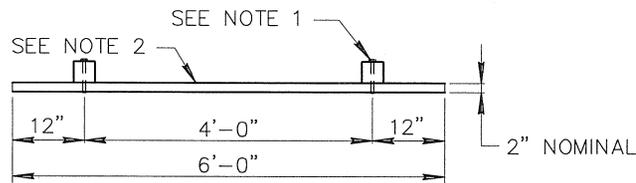
SURVEY MARKER
(FOR UNINCORPORATED AREAS OF COUNTY)

REVISED

01-01-2007

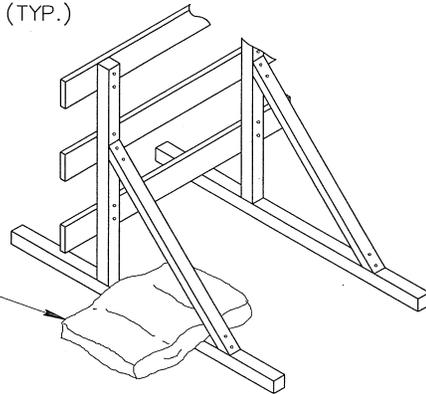
DETAIL NO.

120-2



TYPE "A"

SEE NOTE 3



NOTES:

1. FASTEN WITH 1/2" x 5" LAG SCREWS WITH 2 FLAT WASHERS OR (2) 5/8" BOLTS, WITH 4 FLAT WASHERS.
2. 2" x 8" DOUGLAS FIR PLANK (LENGTH TO BE DETERMINED ON PLANS.)
3. WHEN BARRICADE (TYPE "A") IS CONSTRUCTED ON BASES INSTEAD OF POSTS SET INTO THE GROUND, IT MAY BE DESIRABLE TO BALLAST THE BASES WITH SAND BAGS OR BY STAKING TO PROVIDE RESISTANCE TO OVERTURNING DURING PERIODS OF HIGH WINDS.
4. TWO COATS OF WHITE PAINT PER SECTION 790 SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE BARRICADE. AN ADDITIONAL TWO COATS OF ORANGE PAINT PER SECTION 790 SHALL BE APPLIED TO CREATE THE ALTERNATE ORANGE AND WHITE STRIPES FOR TEMPORARY BARRICADES AND TWO COATS OF RED PAINT PER SECTION 790 SHALL BE APPLIED TO CREATE ALTERNATE RED AND WHITE STRIPES FOR PERMANENT BARRICADES. HIGHWAY SAFETY SPHERES (BEADS) PER ADOT 708-2.02 SHALL BE APPLIED BY HAND TO ALL CROSS MEMBERS, FRONT AND BACK AND ON BOTH COLORS, IMMEDIATELY AFTER PAINTING. THE STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS.

DETAIL NO.

130



MARICOPA
ASSOCIATION of
GOVERNMENTS

STANDARD DETAIL
ENGLISH

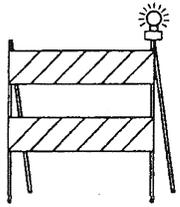
BARRICADES

REVISED

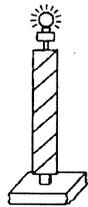
01-01-2003

DETAIL NO.

130

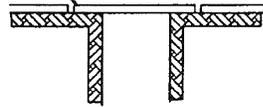


TYPE I & II
BARRICADE



VERTICAL PANEL
BARRICADE

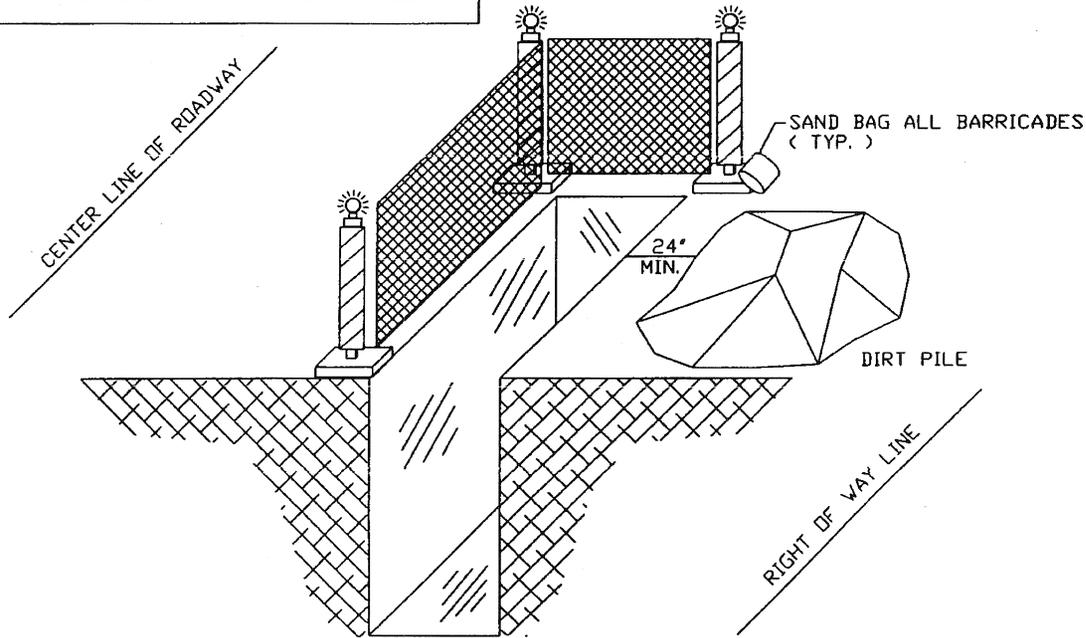
INLAY STEEL PLATE FLUSH TO EXISTING
PAVEMENT & COLD PATCH JOINT. PLACE
BUMP SIGNS AT ALL STEEL PLATE CROSSINGS.



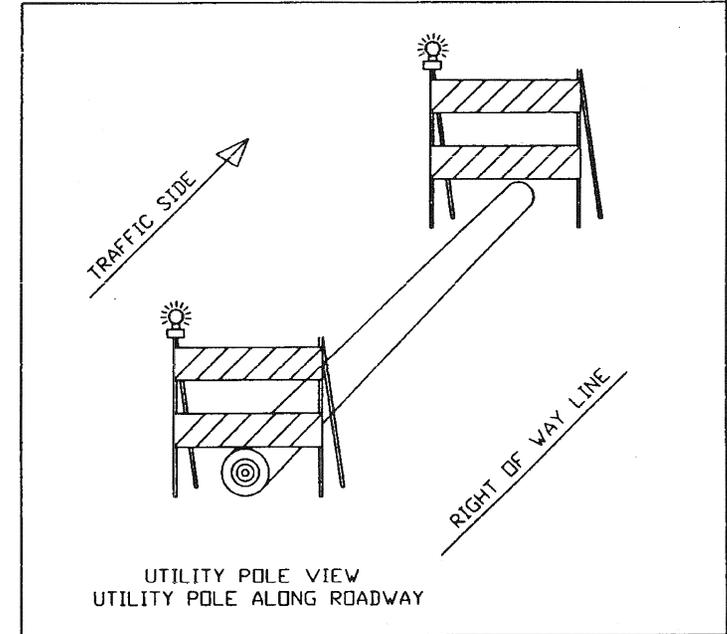
ROAD PLATE DETAIL

NOTE :

1. A SAFETY FENCE IS REQUIRED FOR ALL UNATTENDED TRENCHES 24 INCHES AND WIDER, AND/OR 36 INCHES AND DEEPER.
2. FOR UNATTENDED TRENCHES LEFT OVERNIGHT, USE LIGHTED VERTICAL PANEL BARRICADES WITH SAND BAGS AND/OR TYPE I, II BARRICADES. ANY ALTERNATIVE SOLUTION MUST BE APPROVED BY THE CITY ENGINEER.
3. ALL UTILITY POLE LOCATIONS NOT PLATED MUST HAVE SAFETY FENCE PLACED AROUND HOLE PRIOR TO CREWS LEAVING THE SITE.
4. ALL UTILITY POLES LEFT ALONG THE ROADWAY, MUST HAVE LIGHTED BARRICADES PLACED AT EACH END OF THE POLE.



SECTION VIEW
OPEN TRENCH / PIT



UTILITY POLE VIEW
UTILITY POLE ALONG ROADWAY

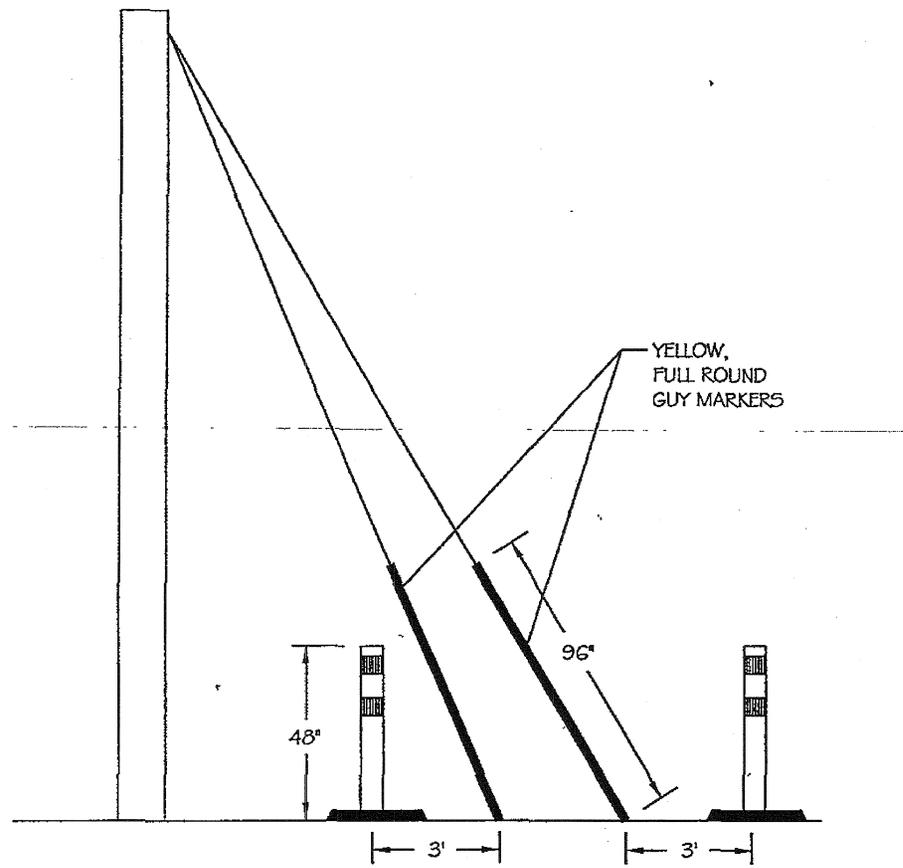
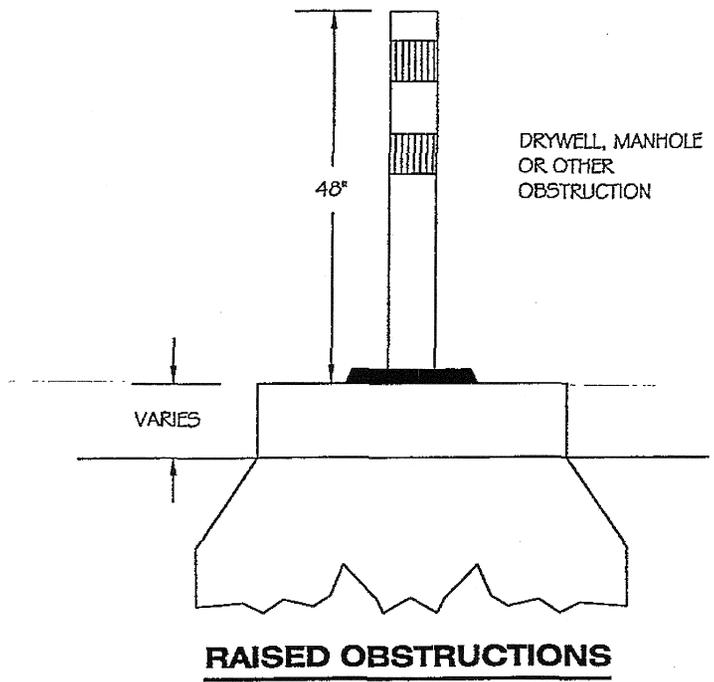
DETAIL NO.
AJ-PW001

STANDARD DETAIL
REVISED: SEPTEMBER, 1999

OPEN TRENCH / OPEN PIT / UTILITY POLE
FENCING / BARRICADE DETAIL

CITY OF APACHE JUNCTION
PUBLIC WORKS DEPARTMENT
(602) 982-1055

DETAIL NO.
AJ-PW001



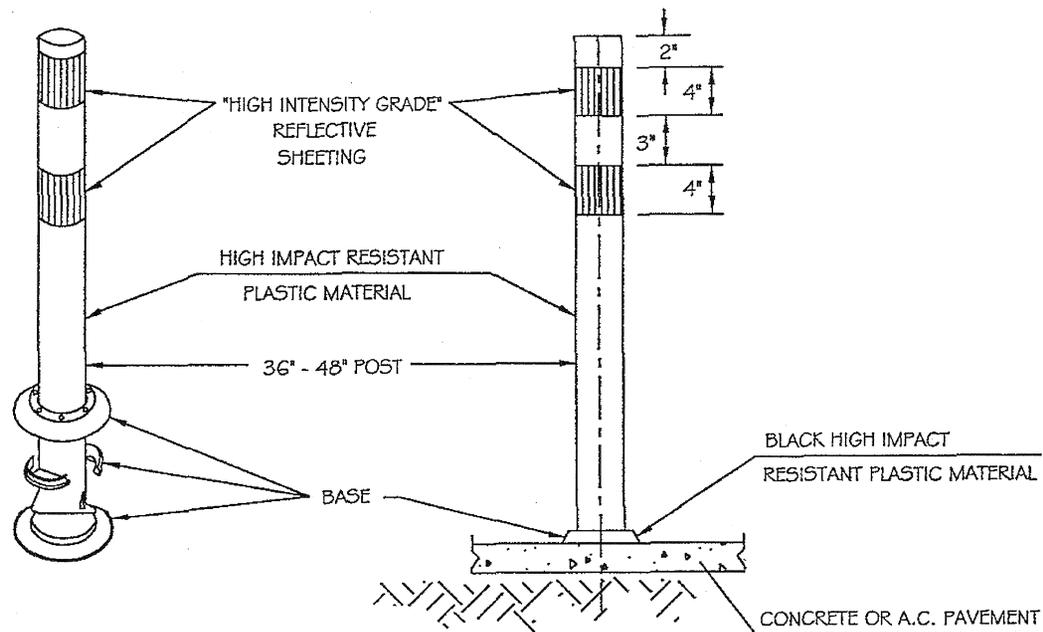
DOWN GUY WIRES

NOTES:

1. HAZARD MARKERS SHALL BE INSTALLED WHEN AN OBSTRUCTION MAY POSE A HAZARD TO MOTORIZED VEHICLES, MOWING EQUIPMENT, PEDESTRIANS, MAINTENANCE OPERATIONS OR AS DIRECTED BY THE ENGINEER.
2. HAZARD MARKERS SHALL MEET THOSE SPECIFICATIONS AS SHOWN IN C.O.C. STANDARD DETAIL NO. C-101 OR NO. C-102.
3. C.O.C. DETAIL NO. C-102 MAY BE USED AROUND RAISED OBSTRUCTIONS AS AN ALTERNATE; HOWEVER, THREE (3) MARKERS MUST BE PLACED AT 120° INTERVALS AROUND THE OBSTRUCTION.

<p>C-100 REPLACES 62</p>	 <p>CITY OF CHANDLER STANDARD DETAIL</p>	<p>HAZARD MARKER PLACEMENT</p>	<p>APPROVED: <i>Byron D. Johnson</i> CITY ENGINEER DATE: 11-19-99</p>	<p>DETAIL NO. C-100 NTS</p>
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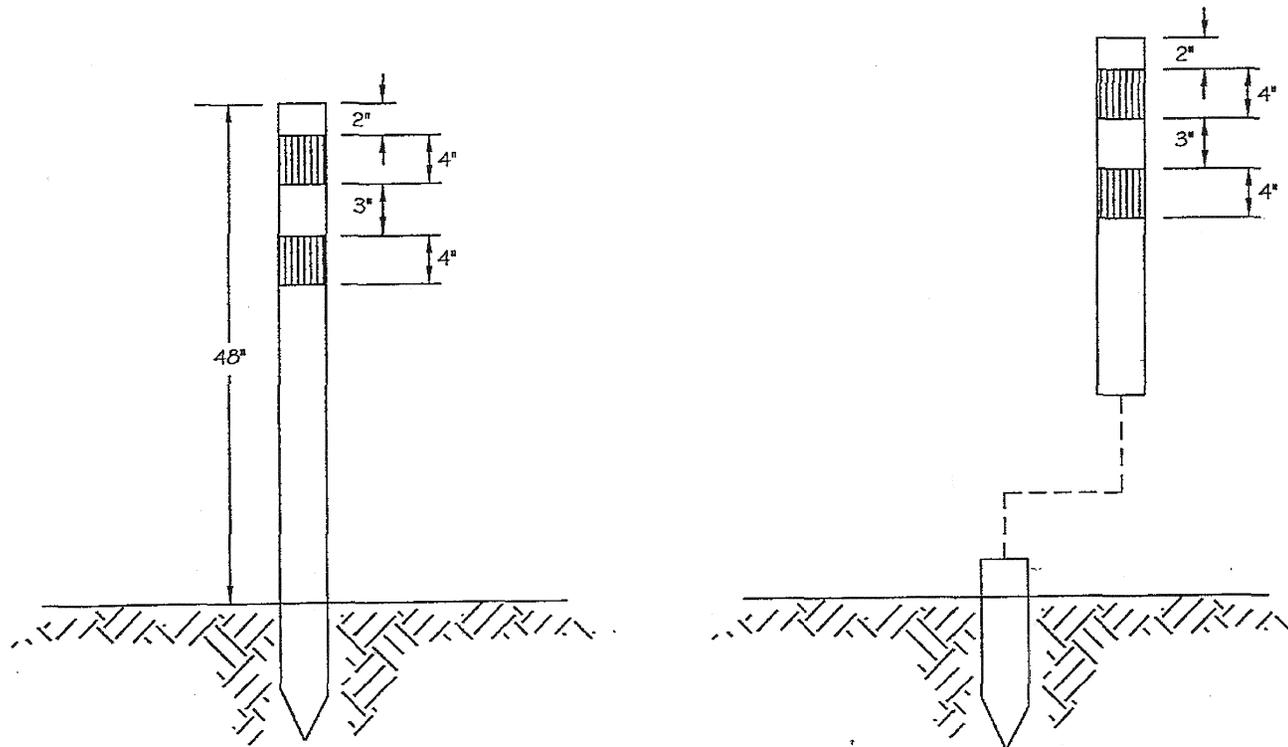




NOTES:

1. CONTRACTOR SHALL CLEAN ROADWAY SURFACE PRIOR TO PLACEMENT OF FLEXIBLE TUBULAR MARKER.
2. FLEXIBLE TUBULAR MARKERS SHALL BE INSTALLED WITH AN ADHESIVE AS PER TUBULAR MARKER MANUFACTURER'S SPECIFICATIONS.
3. YELLOW TUBULAR MARKERS SHALL HAVE A YELLOW POST AND YELLOW "HIGH INTENSITY GRADE" REFLECTIVE SHEETING. ORANGE TUBULAR MARKERS SHALL HAVE AN ORANGE POST AND WHITE HIGH INTENSITY REFLECTIVE SHEETING.
4. POST SHALL BE FLEXIBLE, HIGH IMPACT RESISTANT PLASTIC MATERIAL.
5. BASE SHALL BE CEMENTED TO SURFACE WITH EPOXY MATERIAL AS RECOMMENDED BY THE MANUFACTURER.

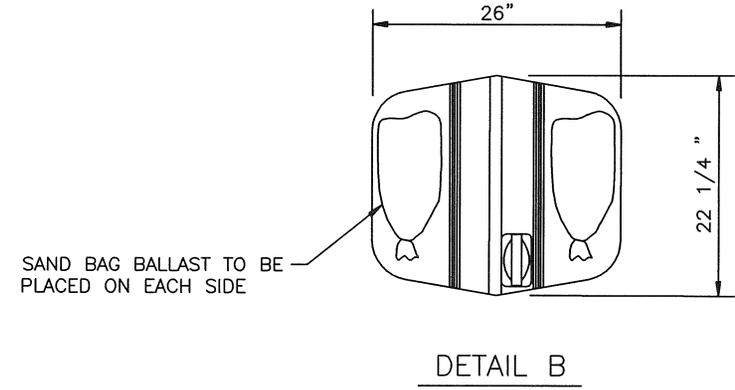
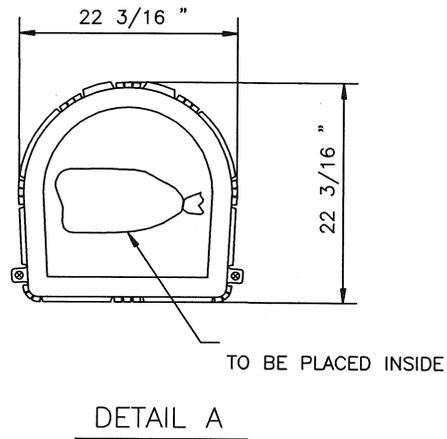
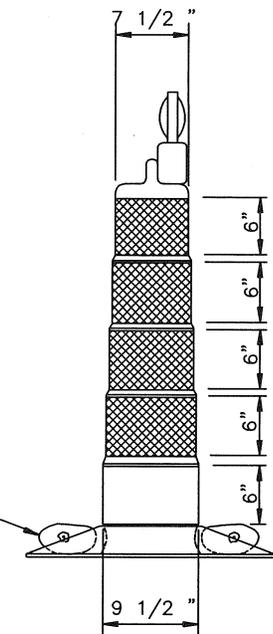
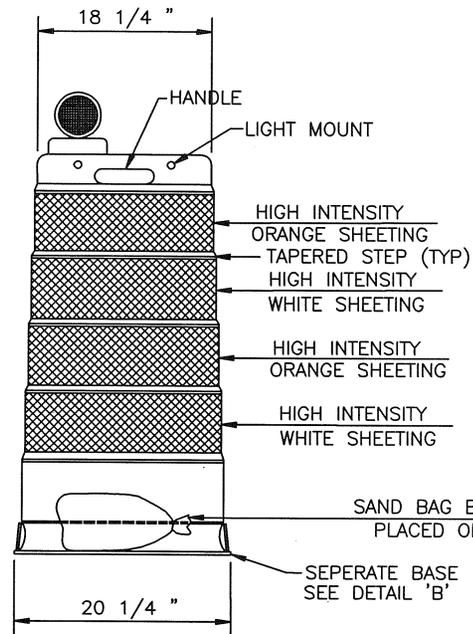
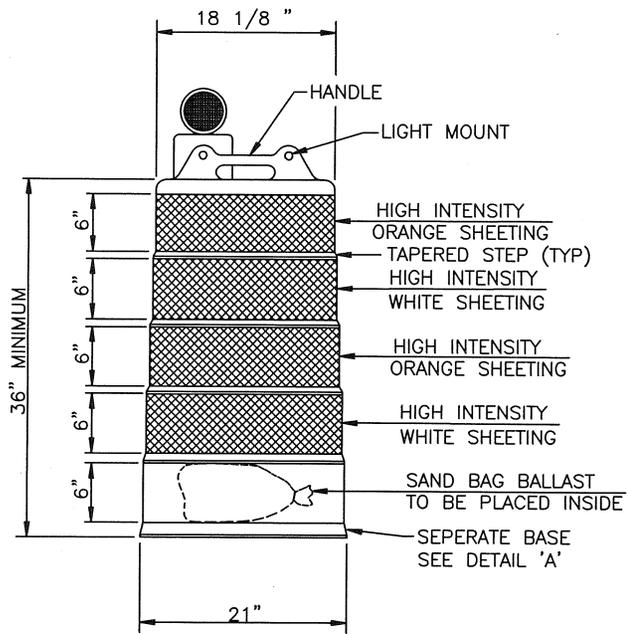
<p>C-101 REPLACES 63</p>	 <p>CITY OF CHANDLER STANDARD DETAIL</p>	<p>HAZARD MARKER</p>	<p>APPROVED: <i>Debra D. Patterson</i> CITY ENGINEER DATE: <i>11-19-99</i></p>	<p>DETAIL NO. C-101 NTS</p>
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NOTES:

1. YELLOW TUBULAR MARKERS SHALL HAVE A YELLOW POST AND YELLOW "HIGH INTENSITY GRADE" REFLECTIVE SHEETING. ORANGE TUBULAR MARKERS SHALL HAVE AN ORANGE POST AND WHITE HIGH INTENSITY REFLECTIVE SHEETING.
2. POST SHALL BE FLEXIBLE, HIGH IMPACT RESISTANT PLASTIC MATERIAL.

<p>C-102 REPLACES 64</p>	 <p>CITY OF CHANDLER STANDARD DETAIL</p>	<p>HAZARD MARKER SOIL ANCHOR</p>	<p>APPROVED: <i>Ray D. Robinson</i> CITY ENGINEER DATE: <i>11-19-99</i></p>	<p>DETAIL NO. C-102 NTS</p>
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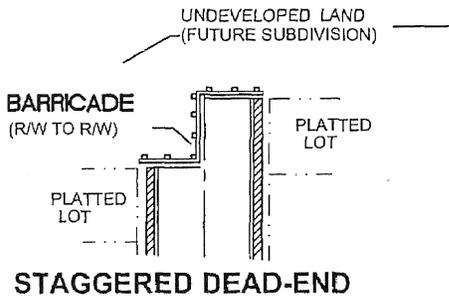
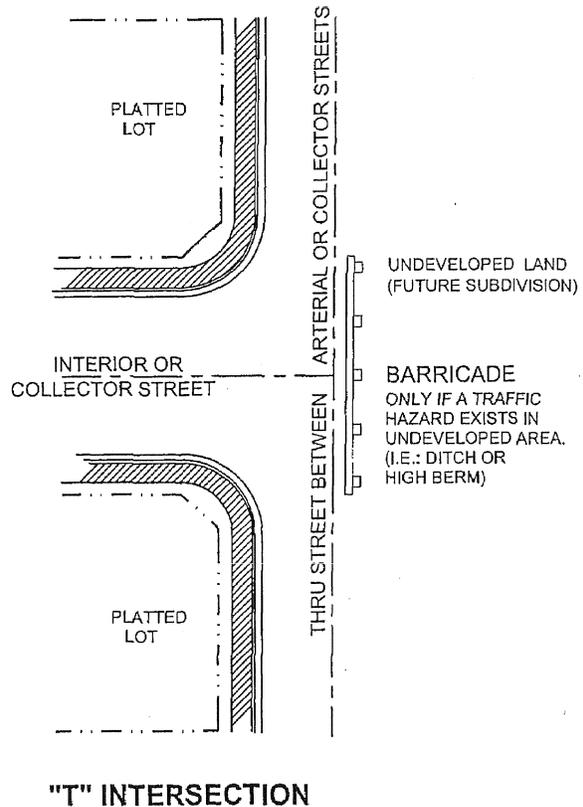
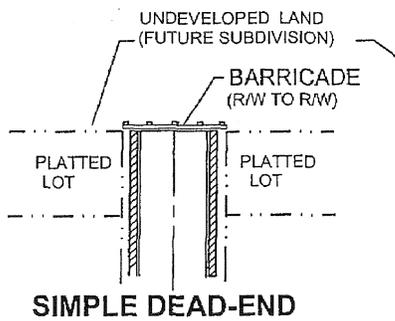
DETAIL NO. 204	TOWN OF GILBERT STANDARD DETAIL	TRAFFIC DRUM DETAILS	REVISED	DETAIL NO. 204
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STANDARD DETAIL G-460

CITY OF GLENDALE
TRANSPORTATION



BARRICADING ON SUBDIVISION STREETS

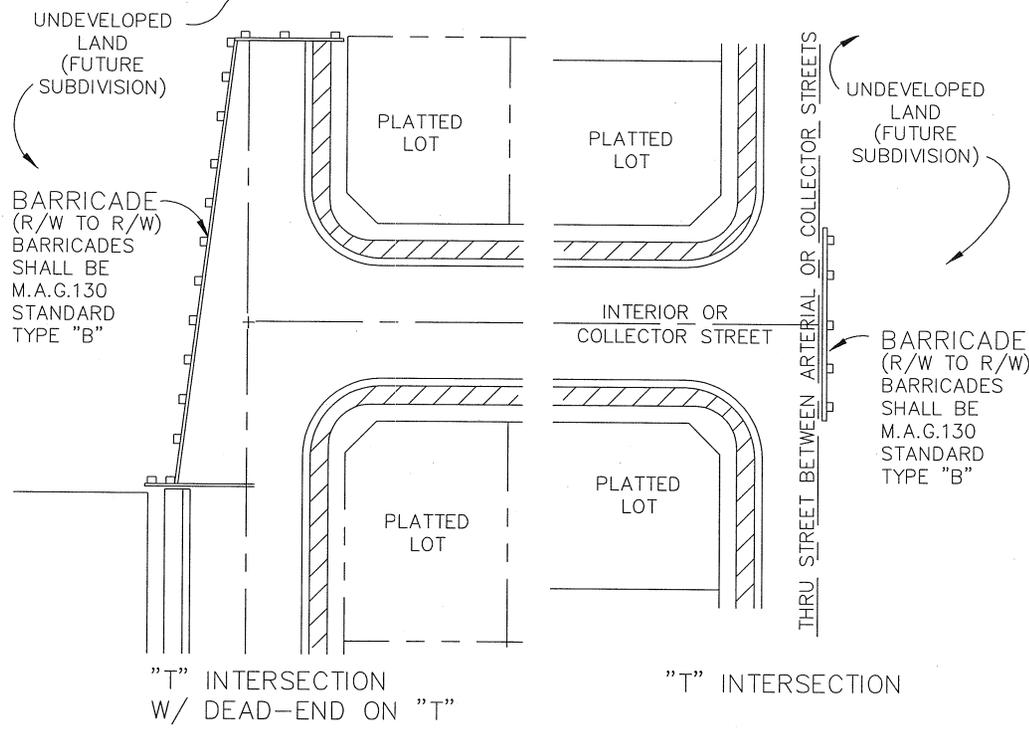
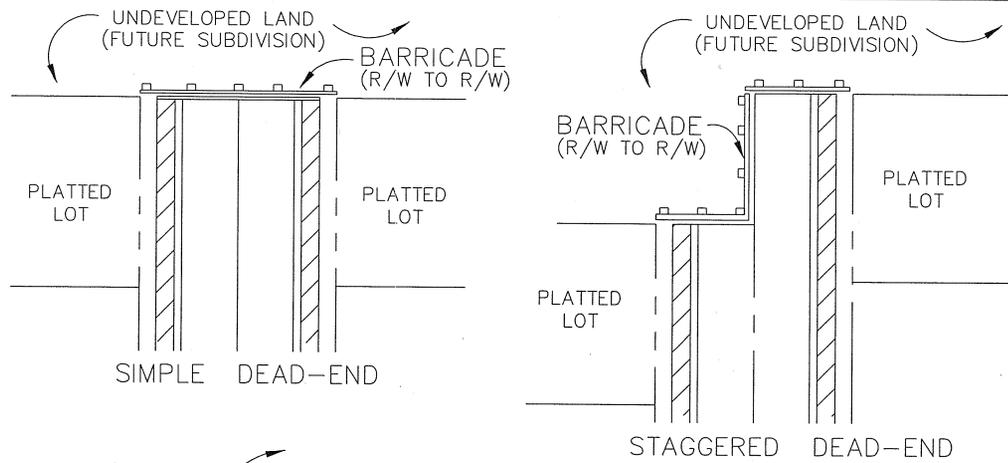


NOTE: ALL BARRICADES SHALL BE INSTALLED ACCORDING TO MAG STANDARD 130-B.

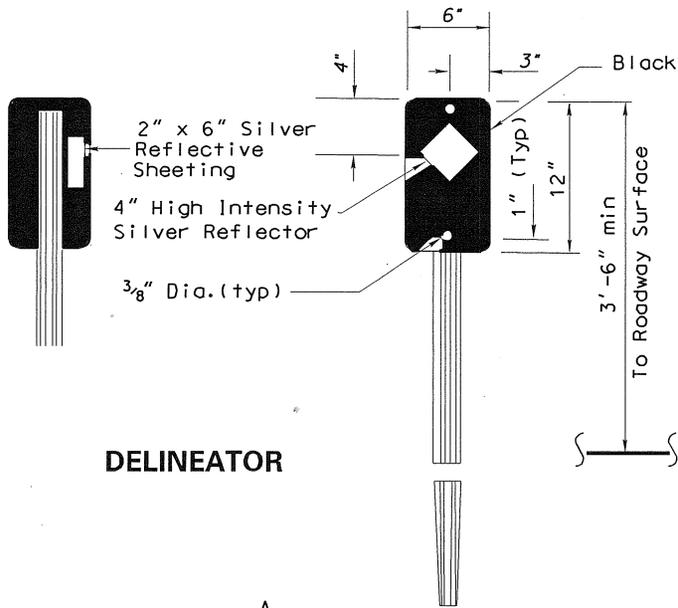
APPROVED BY:

James A. Book
TRANSPORTATION DIRECTOR

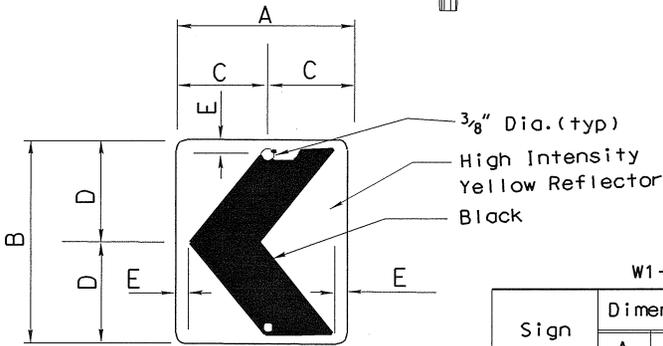
6.27.02
DATE



DETAIL NO. G-3170	CITY OF GOODYEAR STANDARD DETAIL	APPROVED BY: Goodyear Standards and Policies Committee 7/97	BARRICADING ON SUBDIVISION STREET	DETAIL NO. G-3170
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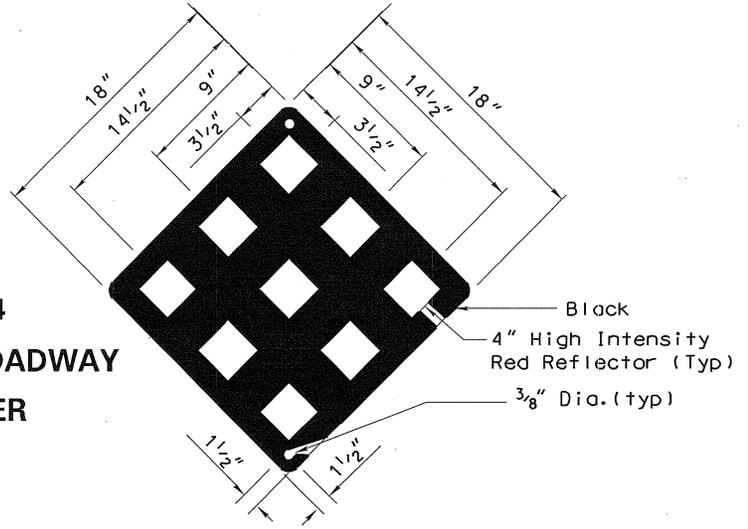


DELINEATOR

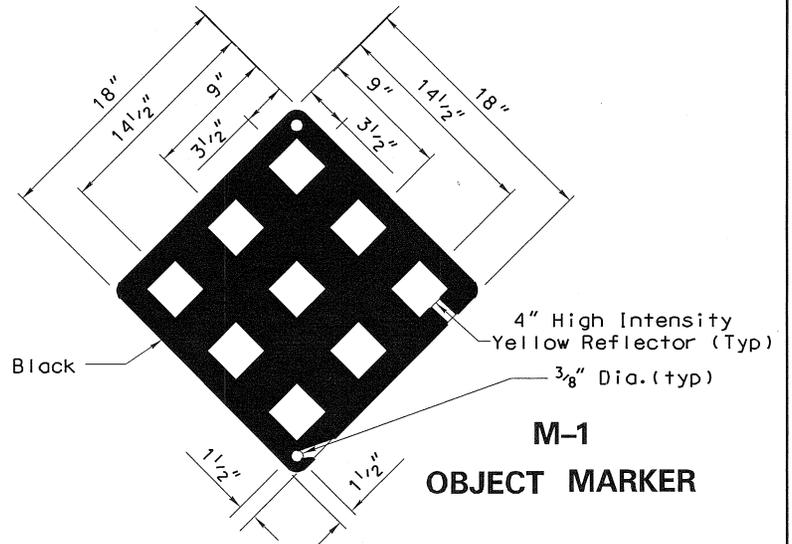


**W1-8
CHEVRON**

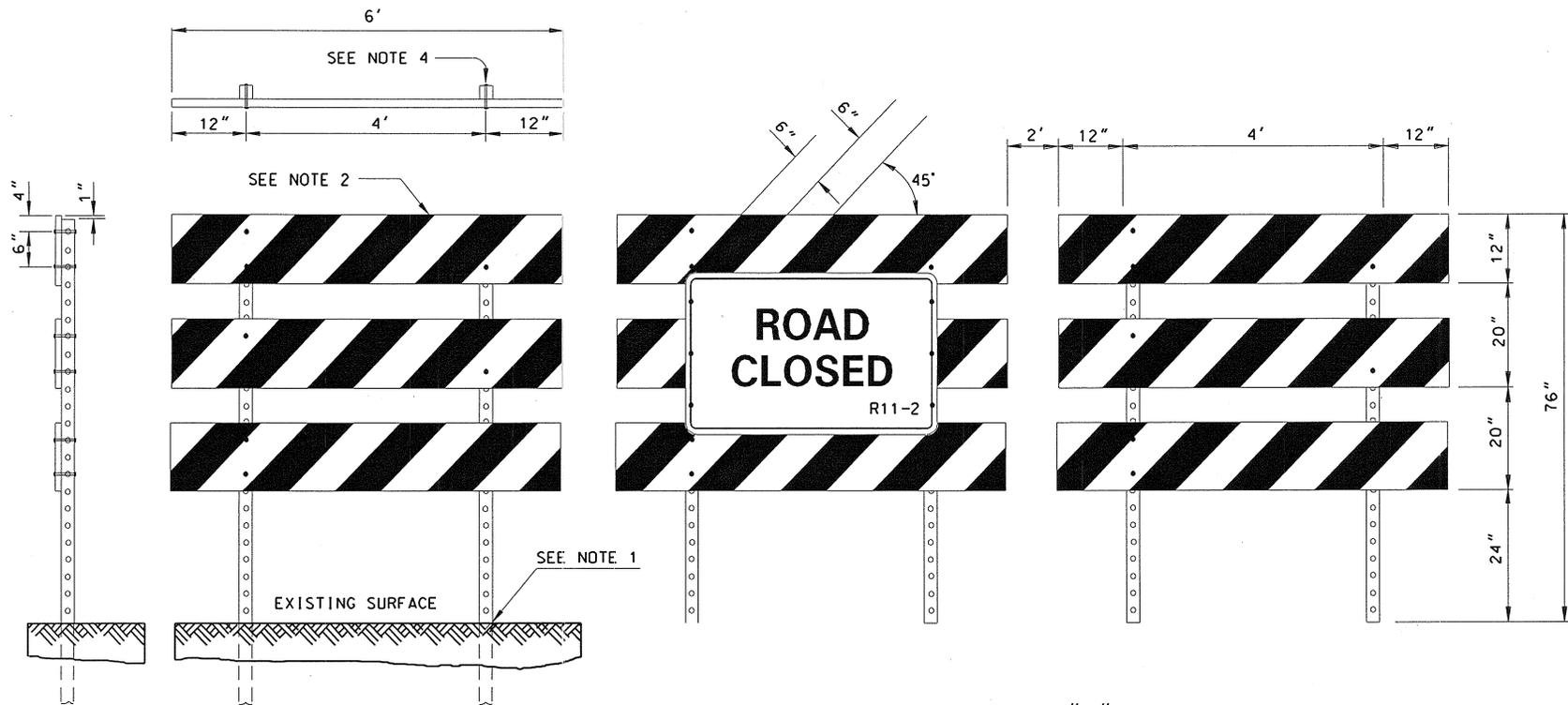
Sign	W1-8 CHEVRON				
	Dimensions (inches)				
	A	B	C	D	E
Min.	12	18	6	9	1/2
Std.	18	24	9	12	3/4
Special	24	30	12	15	7/8



**M-4
END OF ROADWAY
MARKER**



**M-1
OBJECT MARKER**



TYPE "A"

1. SEE DETAIL # 2058 FOR SQUARE TUBE MOUNTING INSTALLATION .
2. TYPE "A" MARKINGS SHALL BE ALTERNATE RED AND WHITE ENGINEERING GRADE REFLECTIVE STRIPS (SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS).
3. USE 12" X 6' X 0.100" ALUMINUM FOR THE BARRICADE RAILS.
4. FASTEN WITH $\frac{3}{8}$ " X 3" CAD. PLATED HEX. HEAD BOLT WITH FLAT AND LOCK WASHER UNDER NUT & FLAT WASHER UNDER HEAD.

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

PERMANENT ROAD CLOSURE
USING TYPE III BARRICADES

DATE:
4/11/00

DETAIL NO.
2057

PEORIA DETAIL 116

FIRE DEPARTMENT ACCESS BARRIER



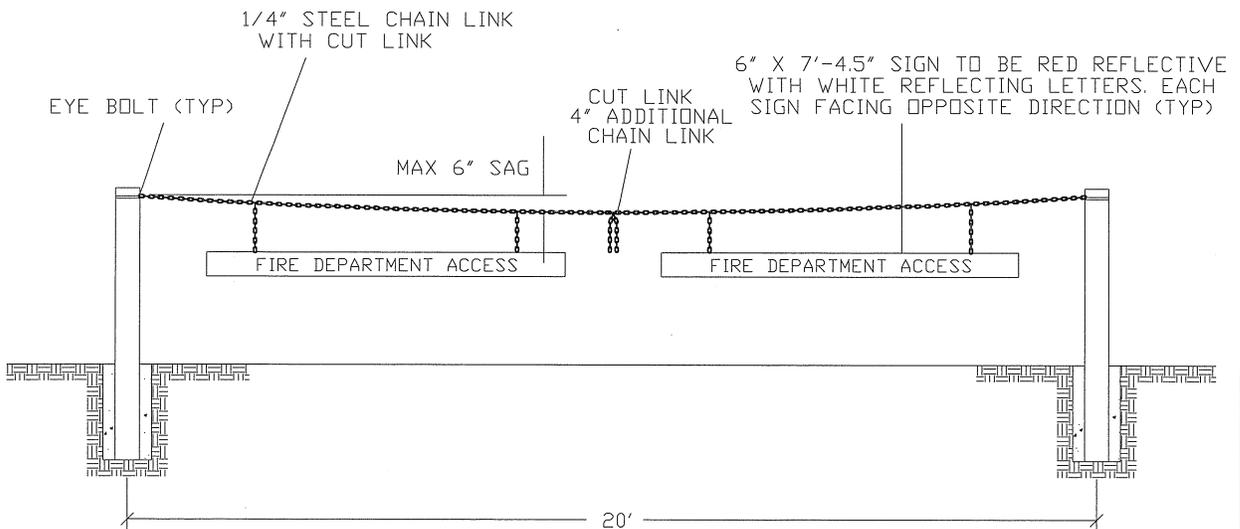
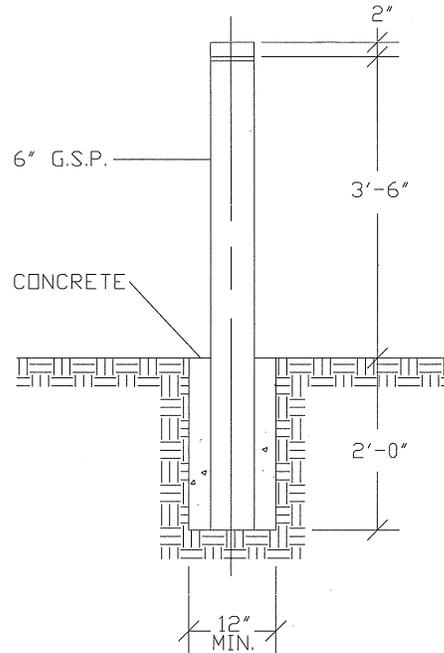
APPROVALS:

CITY ENGINEER

DATE

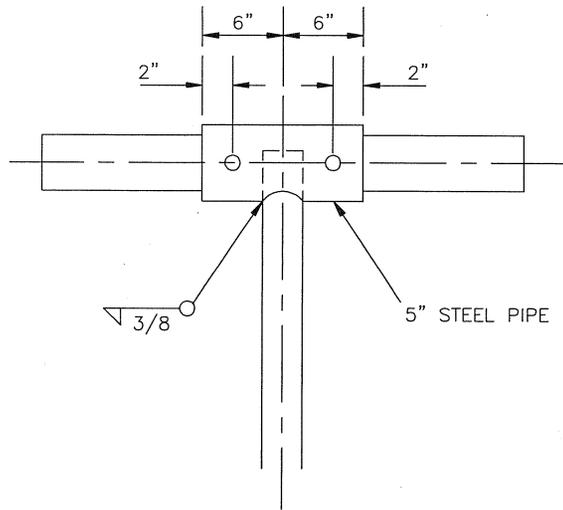


POST TO BE FILLED
WITH CONCRETE AND
ROUNDED ON TOP

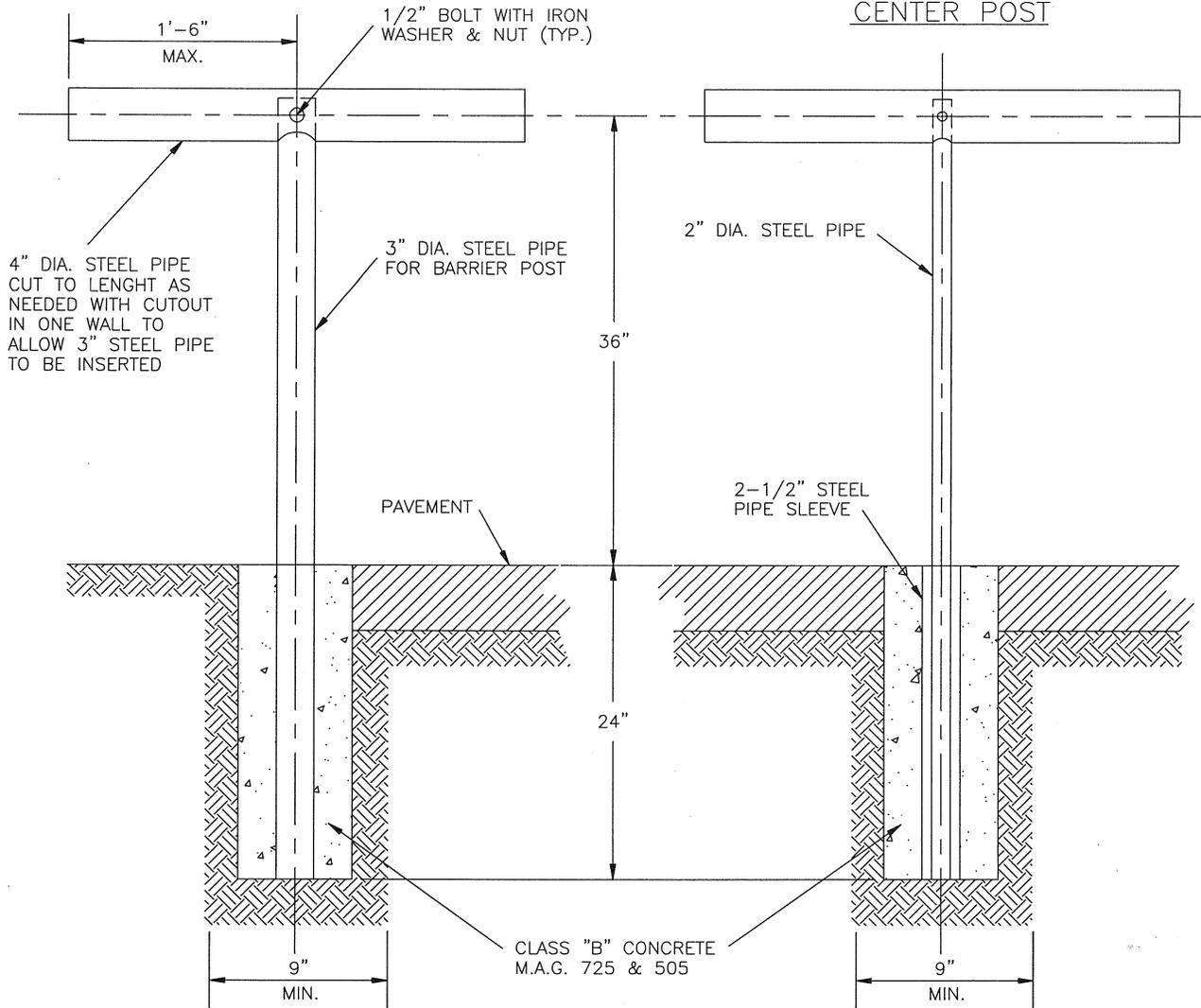


I:\GUIDE_DETAILS\116.DWG

07/02/98



"T" SLEEVE OPTION



NOTES:

1. 1'-6" MAX. OVERHANG
2. MAX. OVERALL LENGTH IS 33'
3. CENTER POST REQUIRED IF CLEAR SPAN EXCEEDS 15'
4. CENTER POST SHALL BE 2" DIA. WITH A 2-1/2" DIA. SLEEVE IN THE FOOTING.
5. ALL PIPE IS SCHEDULE 40, GALVANIZED STEEL. (ASTM A 53)

DETAIL NO.
P1024



City of Phoenix
STANDARD DETAIL

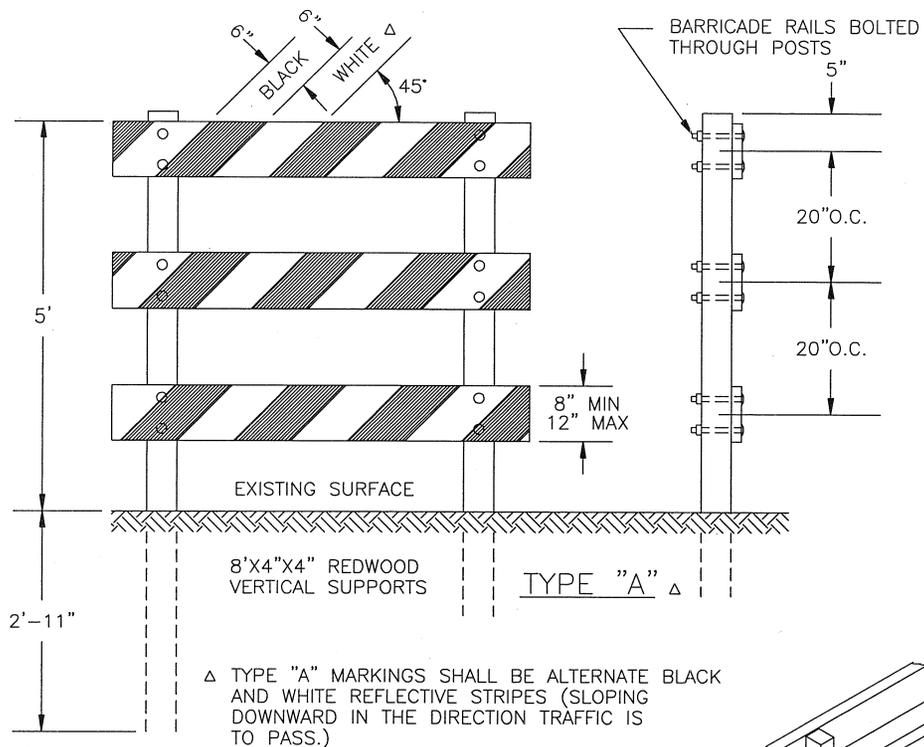
STEEL PIPE BARRICADE

APPROVED

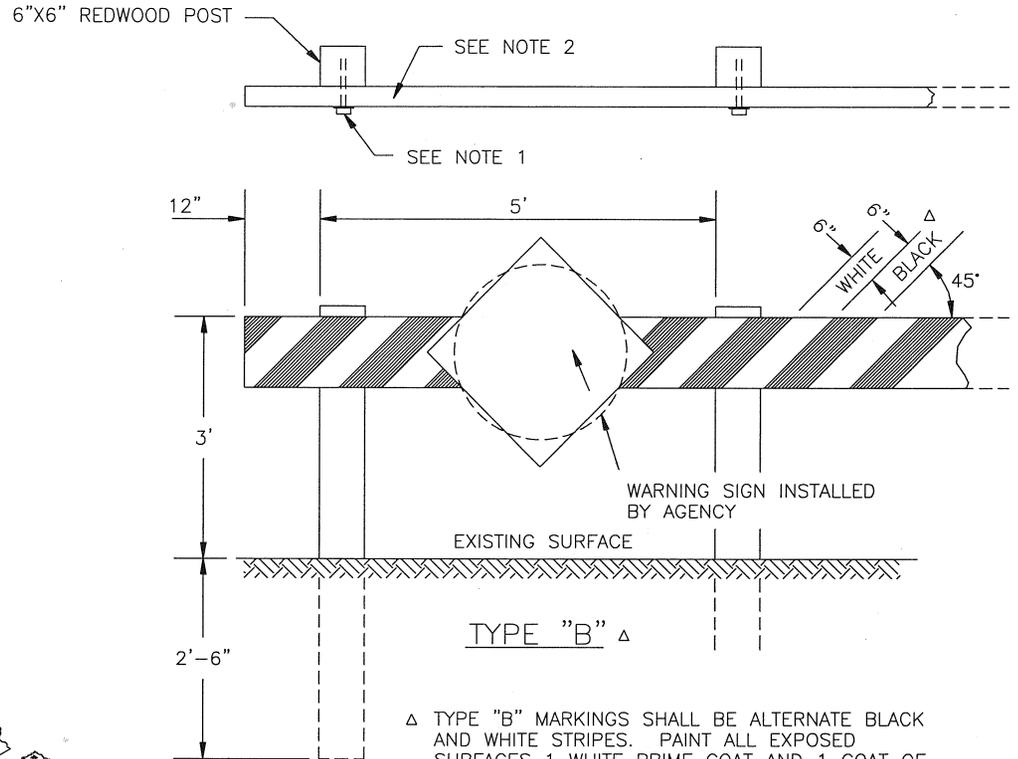
Kenny W. Han
CITY ENGINEER

07-09-92
DATE

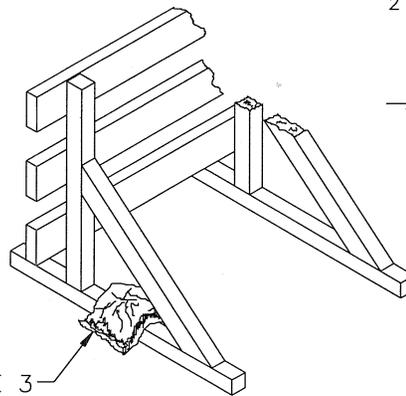
DETAIL NO.
P1024



△ TYPE "A" MARKINGS SHALL BE ALTERNATE BLACK AND WHITE REFLECTIVE STRIPES (SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS.)



△ TYPE "B" MARKINGS SHALL BE ALTERNATE BLACK AND WHITE STRIPES. PAINT ALL EXPOSED SURFACES 1 WHITE PRIME COAT AND 1 COAT OF WHITE EXTERIOR ENAMEL BLACK STRIPING, 1 COAT OF EXTERIOR BLACK ENAMEL.



SEE NOTE 3

NOTES:

1. FASTEN WITH 1/2"x8" LAG SCRWS WITH 2 FLAT WASHERS OR (2) 5/8" BOLTS, WITH 4 FLAT WASHERS.
2. 3"x10" DOUGLAS FIR PLANK (LENGTH TO BE DETERMINED ON PLANS).
3. WHEN BARRICADE (TYPE "A") IS CONSTRUCTED ON BASED IN-STEAD OF POSTS SET INTO THE GROUND, IT MAY BE DESIRABLE TO BALLAST THE BASES WITH SAND BAGS OR BY STAKING TO PROVIDE RESISTANCE TO OVERTURNING DURING PERIODS OF HIGH WINDS.

△ REVISED 6/2/82

DETAIL NO.
P1106



City of Phoenix
STANDARD DETAIL

BARRICADE

APPROVED

Kenny W. Hain
CITY ENGINEER

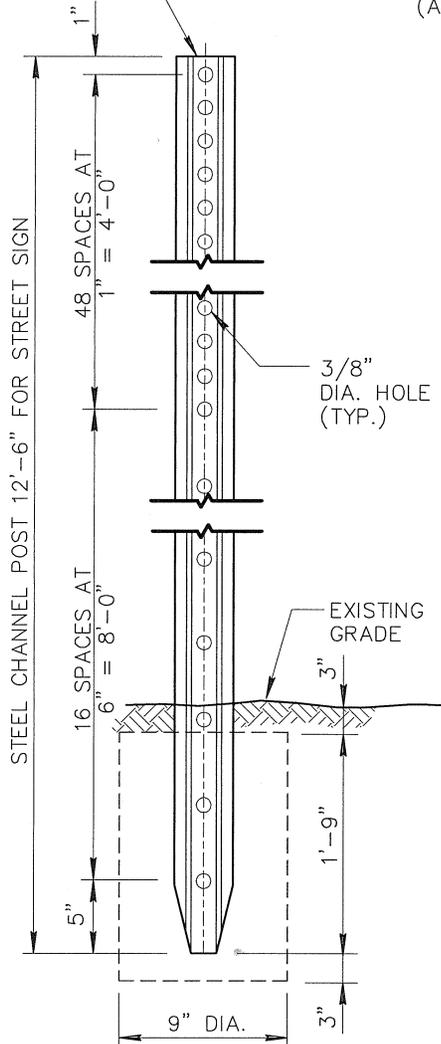
07-09-92
DATE

DETAIL NO.
P1106

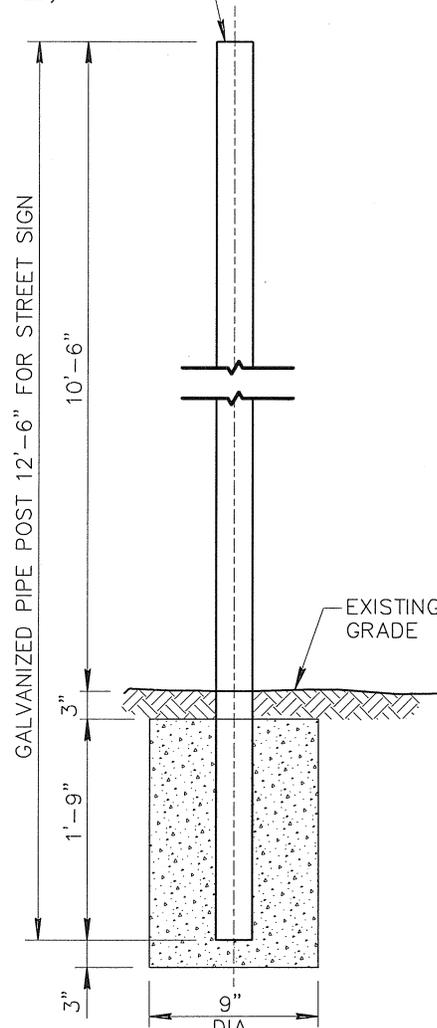
FLANGED STEEL 'U'
CHANNEL (2 LBS. OR 3 LBS.
PER SQUARE FOOT
AS SPECIFIED)

2-1/2" DIA. STANDARD
PIPE GALVANIZED OR
2-3/8" O.D. STANDARD
PIPE GALVANIZED
(AS SPECIFIED)

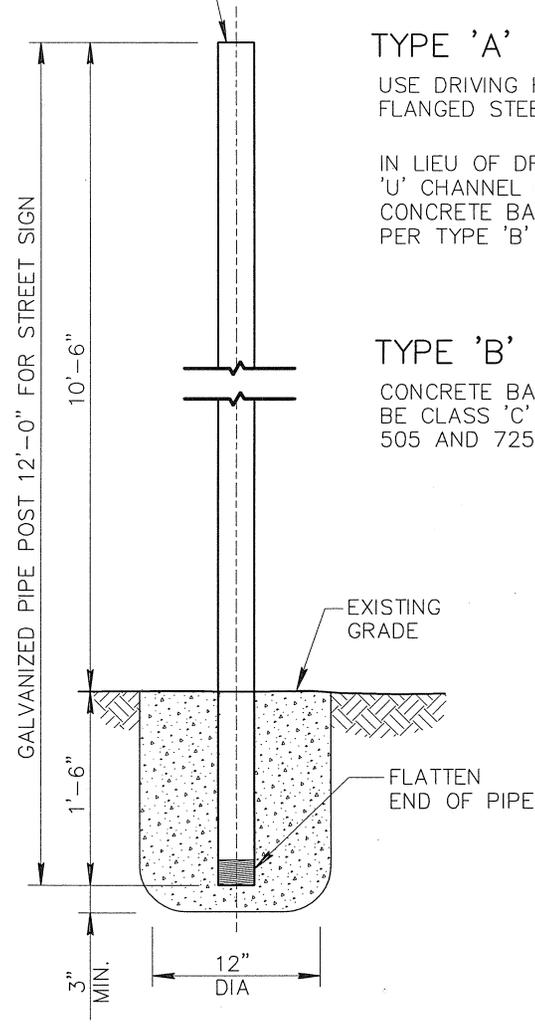
2" DIA.
STANDARD PIPE
GALVANIZED



TYPE 'A'



TYPE 'B'



TYPE 'C'

NOTES

TYPE 'A'

USE DRIVING HEAD FOR DRIVING ALL
FLANGED STEEL 'U' CHANNEL POSTS.

IN LIEU OF DRIVING FLANGED STEEL
'U' CHANNEL POSTS MAY BE SET IN
CONCRETE BASE FOUNDATION AS
PER TYPE 'B' BASE.

TYPE 'B' & TYPE 'C'

CONCRETE BASE FOUNDATIONS SHALL
BE CLASS 'C' CONCRETE AS PER SECT.
505 AND 725.

DETAIL NO.

131



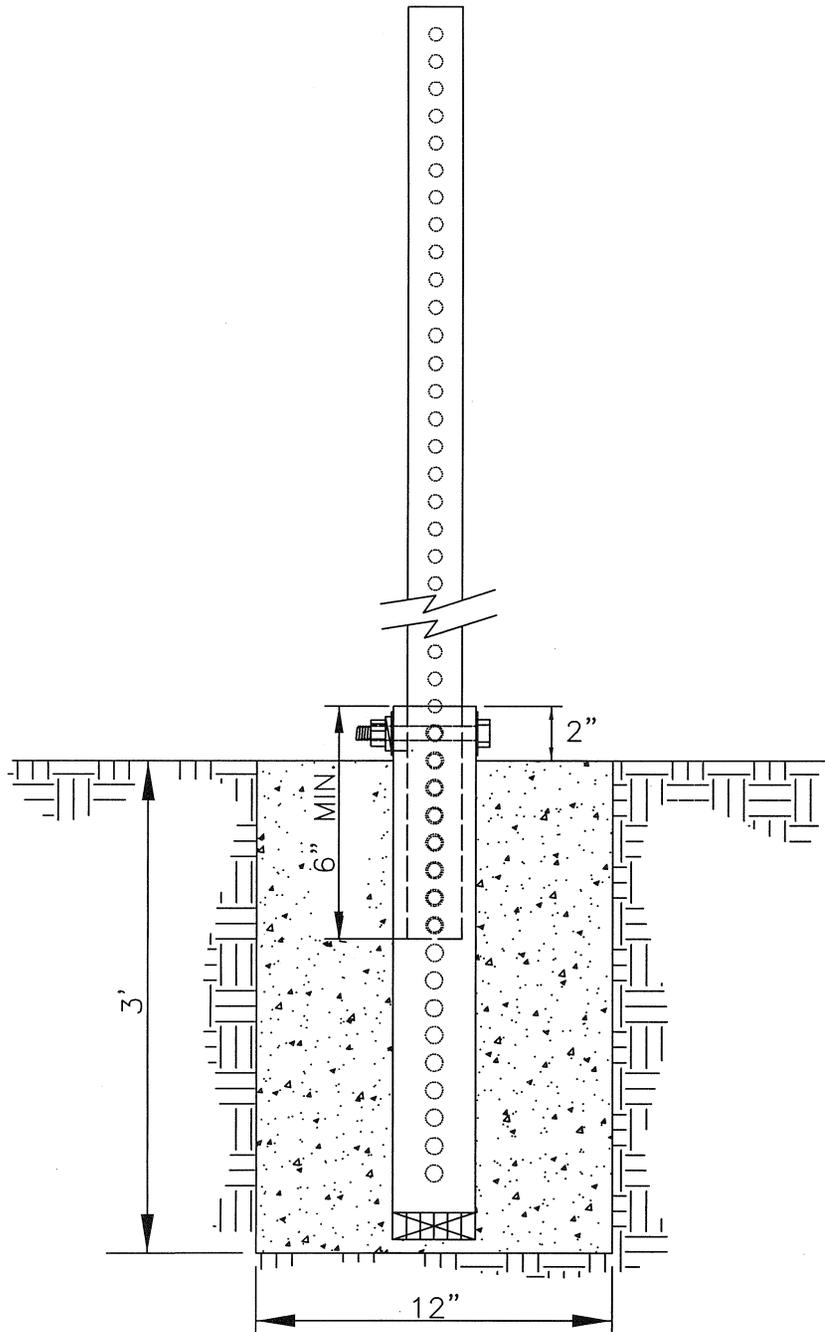
**STANDARD DETAIL
ENGLISH**

STREET SIGN BASE

REVISED

DETAIL NO.

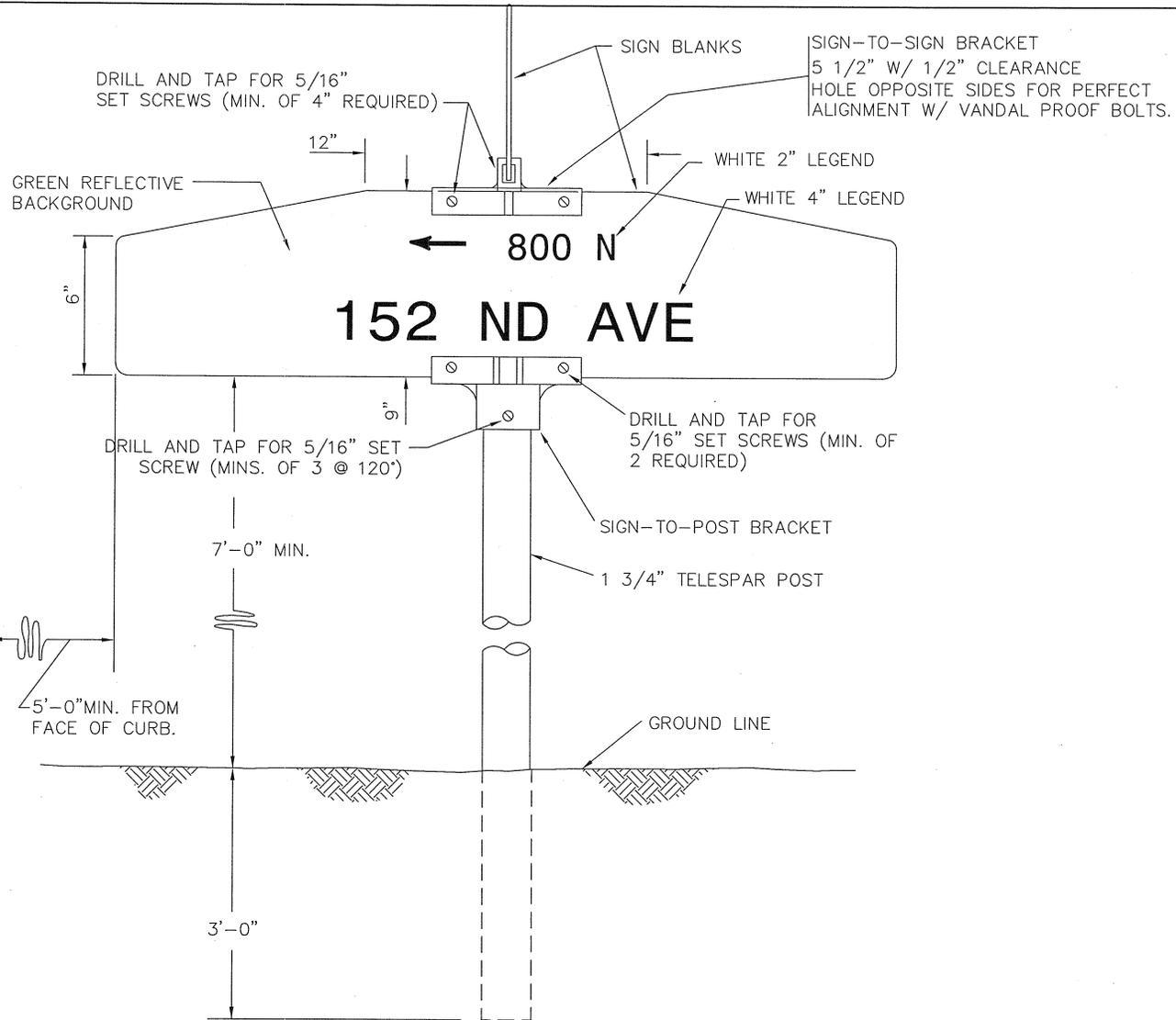
131



NOTES:

1. INSTALL ALL TRAFFIC SIGNS 1296 SQUARE INCHES OR LESS ON 12 GAUGE 1 3/4" SQUARE STEEL TUBING.
2. INSTALL ALL TRAFFIC SIGNS GREATER THAN 1296 SQUARE INCHES ON 12 GAUGE 2" SQUARE STEEL TUBING.
3. CONCRETE BASE 3'DEEP X 12" WIDE 2'2" LONG ANCHOR COMPLETELY TAPERED TO PREVENT SEAPAGE OF CONCRETE.
4. POST ANCHOR SHALL NOT PROTRUDE FROM THE GROUND MORE THAN 2".
5. ALL TRAFFIC SIGNS, WITH THE EXCEPTION OF DELINEATORS, SHALL HAVE A MIN. HEIGHT OF 7' TO BOTTOM OF SIGN. DELINEATORS SHALL BE MOUNTED AT A MINIMUM OF 4' TO THE BOTTOM OF THE SIGN.

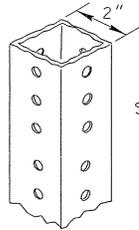
DETAIL NO. 79	TOWN OF GILBERT STANDARD DETAIL	SQUARE TUBING FOR TRAFFIC SIGNS	CREATED 10/01/99	DETAIL NO. 79
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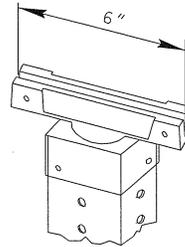
DETAIL NO. G-3140	CITY OF GOODYEAR STANDARD DETAIL	APPROVED BY: Goodyear Standards and Policies Committee 7/97	STREET NAMES SIGNS AND SUPPORT	DETAIL NO. G-3140
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DURANGO ST

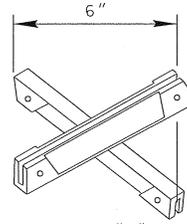
STREET NAME SIGN BLANK
 FOR SPEED LIMIT OF 25 MPH
 LETTER SIZE 4" CAPITAL LETTERS
 SERIES "C" LETTERING



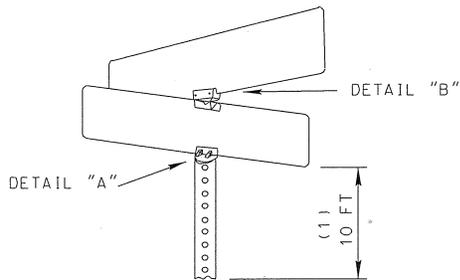
SQUARE TUBE POST
 (2.6 LB./FT)



DETAIL "A"
 STREET NAME SIGN BRACKET
 TO SQUARE TUBE POST
 (MCDOT DETAIL 2062-1)

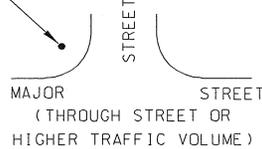


DETAIL "B"
 SIGN TO SIGN BRACKET
 (MCDOT DETAIL 2062-2)

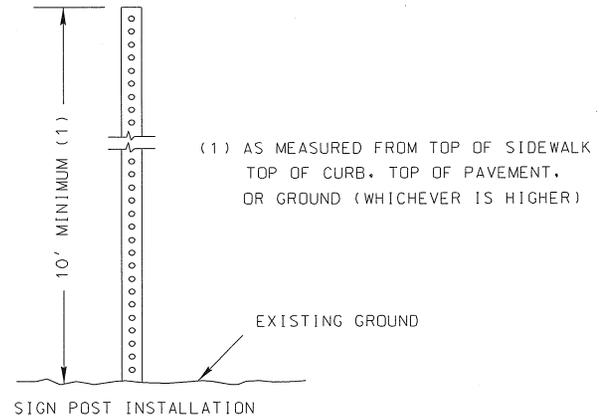


MINIMUM CLEAR HEIGHT
 TO BOTTOM OF SIGN

IF NO CURB/SIDEWALKS, MOUNT AT RADIUS RETURN
 8 FEET - 12 FEET FROM EDGE OF PAVEMENT.



STANDARD LOCATION OF
 STREET NAME SIGNS



(1) AS MEASURED FROM TOP OF SIDEWALK
 TOP OF CURB, TOP OF PAVEMENT,
 OR GROUND (WHICHEVER IS HIGHER)

NOTES

1. SIZE OF SIGNS TO BE 7 INCHES BY 24, 30, 36, 42, 48 INCHES OR AS REQUIRED BY THE NUMBER OF LETTERS.
2. ALL SIGNS TO HAVE 4 INCH REFLECTIVE WHITE OR SILVER LETTERING ON A REFLECTIVE BACKGROUND. BACKGROUND COLOR SHALL BE: BLUE - PRIVATE STREET
GREEN - OPEN & DECLARED PUBLIC ROADS
3. ALL SIGNS TO BE MOUNTED ON A 2.6 LB./FT SQUARE PERFORATED TUBE SIGN POST.
4. THICKNESS OF ALL SIGN BLANKS TO BE .125 INCHES.
5. ALUMINUM CHANNEL IS NOT ACCEPTABLE.
6. SQUARE TUBING SHALL BE ASSEMBLED AS SHOWN IN MCDOT STANDARD DETAIL 2058
7. SIGNS ARE TO BE INSTALLED PER STANDARD LOCATION SHOWN BELOW LEFT.
8. ALL DIMENSIONS IN INCHES, EXCEPT AS NOTED
9. REFER TO MCDOT STANDARD DETAIL 2061-10A, FOR SIGN BLANKS.
10. USE GRADE # 2, ZINC COATED, 18 NC THREAD, 3" X 3/16" BOLT WITH FLAT WASHER UNDER NUT AND FLAT WASHER UNDER HEAD, TO ATTACH SIGN TO BRACKET.

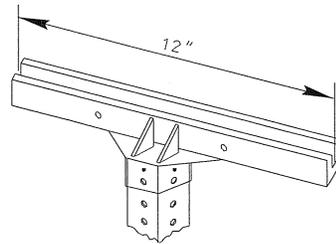
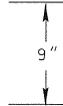
MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
 STANDARD DETAIL

STREET NAME SIGN INSTALLATION DETAILS
 POSTED SPEED LIMIT OF 25 MPH

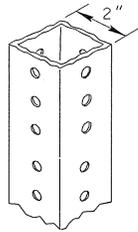
DATE: 04/2005
 DETAIL NO. 2054-1

Durango St

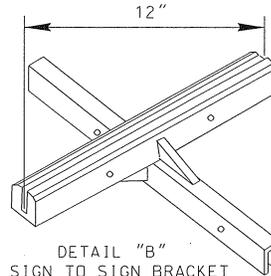
STREET NAME SIGN BLANK
 FOR SPEED LIMIT ABOVE 25 MPH
 LETTER SIZE 6 IN. CAPITAL LETTERS
 4 1/2 IN. LOWER CASE LETTERS
 SERIES "C" LETTERING



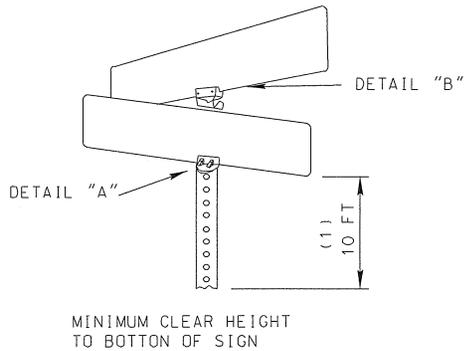
DETAIL "A"
 STREET NAME SIGN BRACKET
 TO SQUARE TUBE POST
 (MCDOT DETAIL 2062-5)



SQUARE TUBE POST
 (2.6 LB./FT)

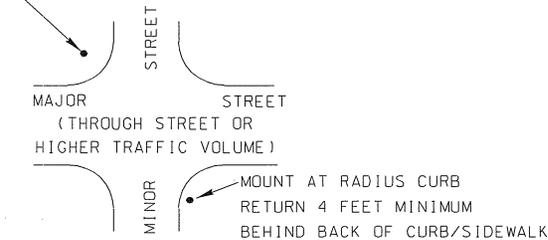


DETAIL "B"
 SIGN TO SIGN BRACKET
 (MCDOT DETAIL 2062-6)



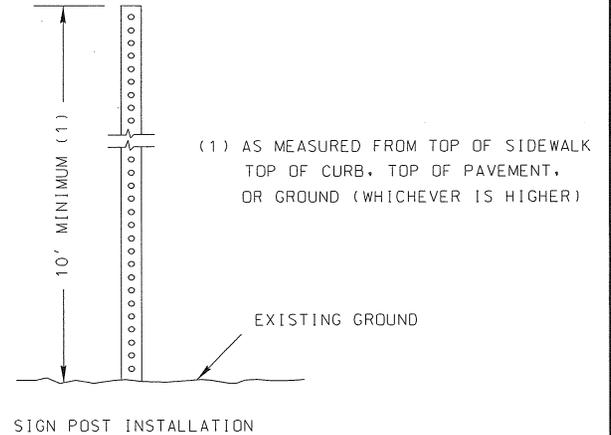
MINIMUM CLEAR HEIGHT
 TO BOTTOM OF SIGN

IF NO CURB/SIDEWALKS, MOUNT AT RADIUS RETURN
 8 FEET - 12 FEET FROM EDGE OF PAVEMENT.



STANDARD LOCATION OF
 STREET NAME SIGNS

- NOTES**
1. SIZE OF SIGNS TO BE 9 INCHES BY 24, 30, 36, 42, 48, 54, 60 INCHES OR AS REQUIRED BY THE NUMBER OF LETTERS.
 2. ALL SIGNS TO HAVE 6 INCH CAPITALS AND 4 1/2 INCH LOWER CASE WITH REFLECTIVE WHITE OR SILVER LETTERING ON A REFLECTIVE BACKGROUND. BACKGROUND COLOR SHALL BE: BLUE - PRIVATE STREET
GREEN - OPEN & DECLARED PUBLIC ROADS
 3. ALL SIGNS TO BE MOUNTED ON A 2.6 LB./FT SQUARE PERFORATED TUBE SIGN POST.
 4. THICKNESS OF ALL SIGN BLANKS TO BE .125 INCHES.
 5. ALUMINUM CHANNEL IS NOT ACCEPTABLE.
 6. SQUARE TUBING SHALL BE ASSEMBLED AS SHOWN IN MCDOT STANDARD DETAIL 2058
 7. SIGNS ARE TO BE INSTALLED PER STANDARD LOCATION SHOWN BELOW LEFT.
 8. ALL DIMENSIONS IN INCHES. EXCEPT AS NOTED
 9. REFER TO MCDOT STANDARD DETAIL 2061-10B AND 2061-10C. FOR SIGN BLANKS.
 10. USE GRADE # 2, ZINC COATED, 18 NC THREAD, 3" X 3/16" BOLT WITH FLAT WASHER UNDER NUT AND FLAT WASHER UNDER HEAD. TO ATTACH SIGN TO BRACKET.

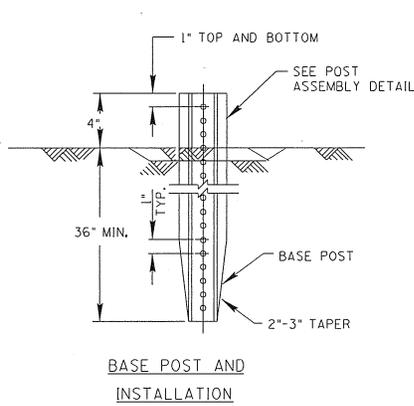


SIGN POST INSTALLATION

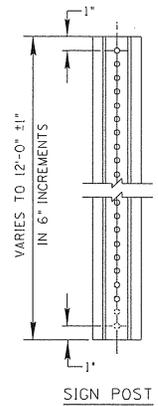
MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
 STANDARD DETAIL

STREET NAME SIGN INSTALLATION DETAILS POSTED SPEED LIMIT ABOVE 25 MPH

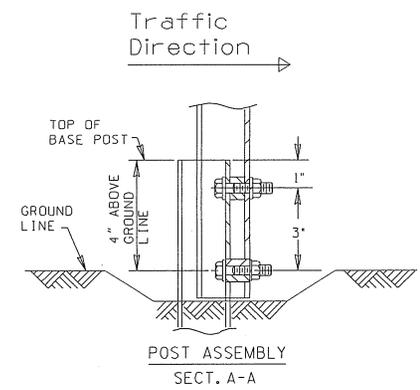
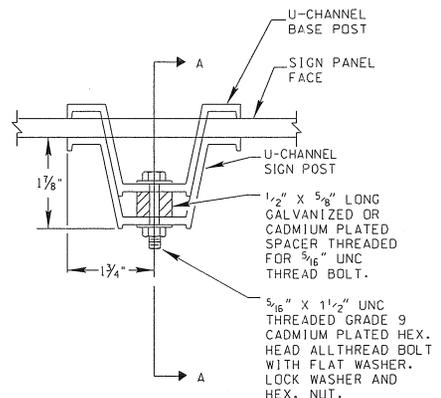
DATE: 04/2005
 DETAIL NO. 2054-2



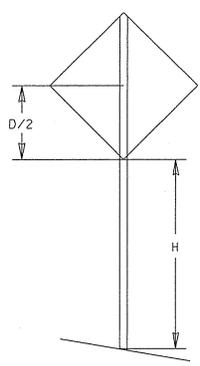
BASE POST AND
INSTALLATION



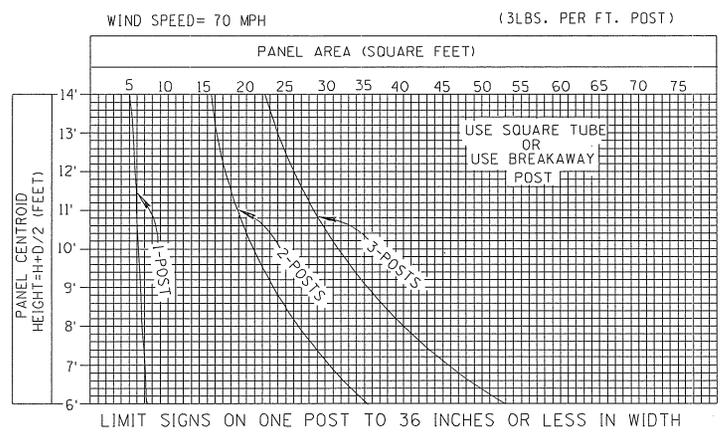
SIGN POST



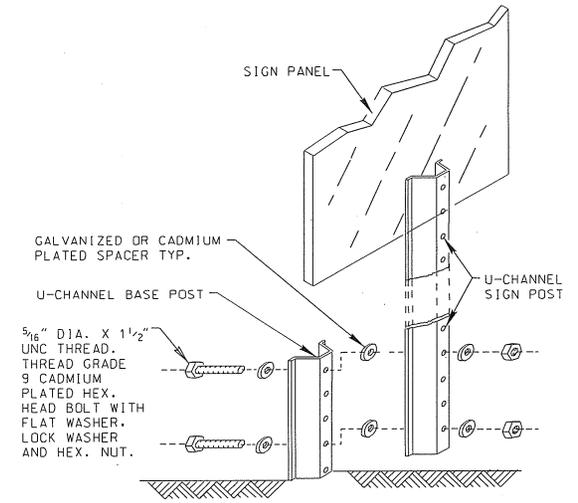
POST ASSEMBLY
SECT. A-A



U-CHANNEL SELECTION



NOTE: ALL DIMENSIONS IN INCHES EXCEPT AS NOTED.



INSTALLATION PICTORIAL

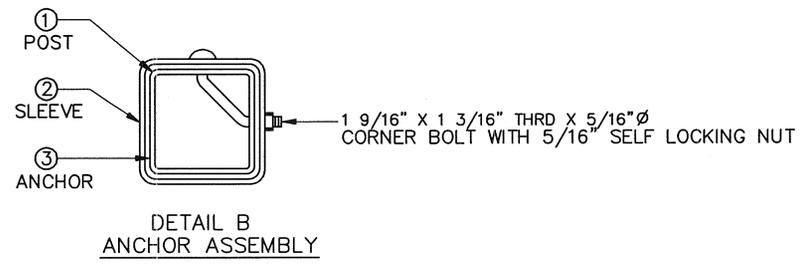
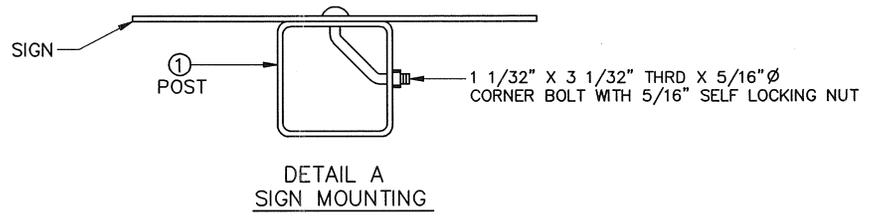
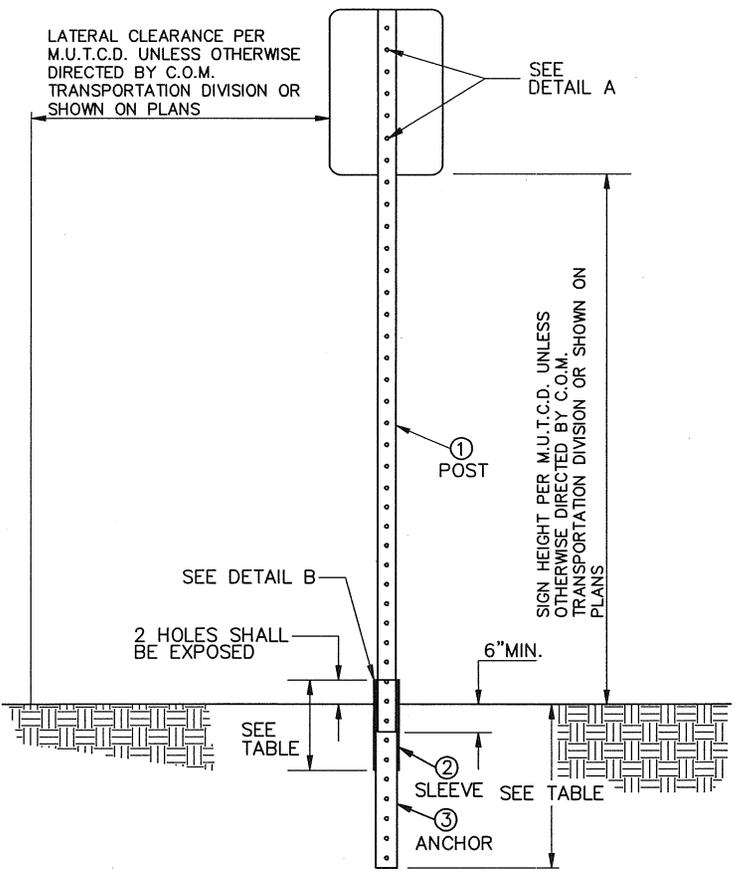
MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

U-CHANNEL POST SELECTION
AND INSTALLATION DETAILS

DATE: 05/2004
DETAIL NO. 2059

SIGN POST INSTALLATION (SQUARE TUBING)

DETAIL NO.
M-39



TABLE

POST, SLEEVE, & ANCHOR SHALL BE GALVANIZED STEEL	POST SIZE ①	SLEEVE SIZE ②	ANCHOR SIZE ③
UP TO 2000 SQ. IN. OF SIGN FACE	2" X 2" 12 GAUGE	2 1/2" X 2 1/2" X 18" 12 GAUGE	2 1/4" X 2 1/4" X 36" 12 GAUGE
>2000 SQ. IN. OF SIGN FACE (DOUBLE POST)	2 - 2" X 2" 12 GAUGE	2-2 1/2" X 2 1/2" X 18" 12 GAUGE	2-2 1/4" X 2 1/4" X 36" 12 GAUGE

* BASE EMBEDDED IN CONCRETE. SEE DETAIL M-22.3.

PEORIA DETAIL 132-1

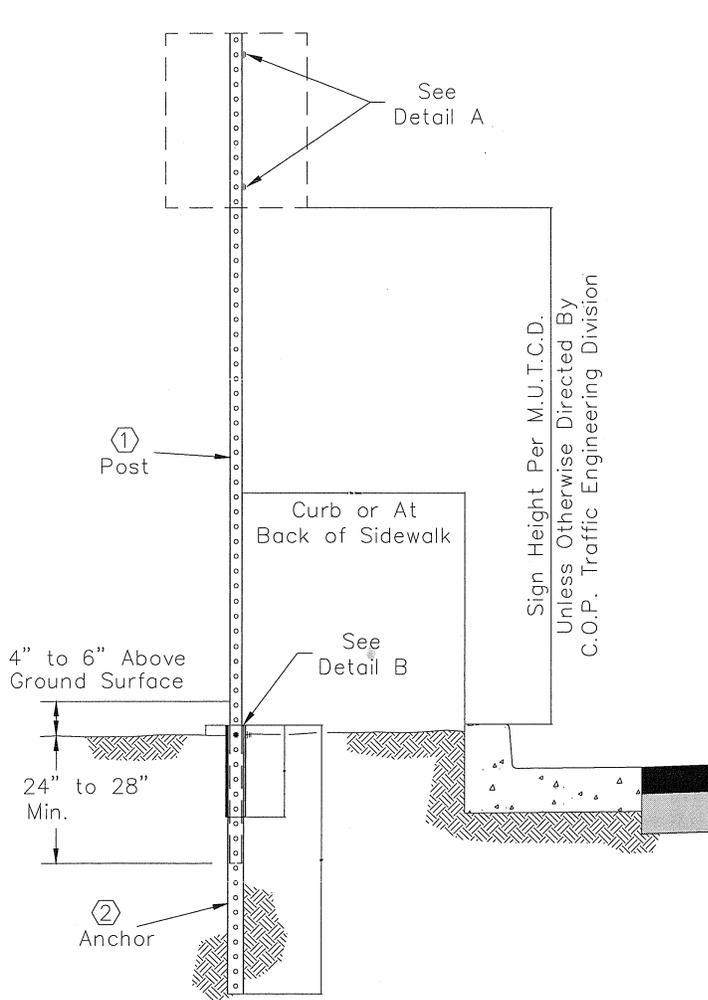
SIGN POST INSTALLATION



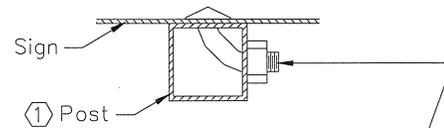
APPROVALS:

CITY ENGINEER

DATE

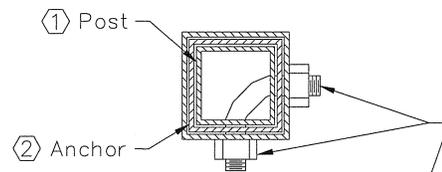


Detail A
Sign Mounting



$1\frac{11}{32}$ " x $1\frac{31}{32}$ " Thrd x $\frac{5}{16}$ "
Corner Bolt With $\frac{5}{16}$ " Self
Locking Nut

Detail B
Anchor Assembly



$1\frac{11}{32}$ " x $1\frac{31}{32}$ " Thrd Each End
x $\frac{5}{16}$ " \emptyset Corner Bolt With $\frac{5}{16}$ "
Self Locking Nuts

Legend

① Post - $1\frac{3}{4}$ " x $1\frac{3}{4}$ " Square Perforated 0.105"
Galvanized Steel Tubing (Galvanized Finish)

② Anchor - 2" x 2" x 30", Square Perforated 0.105" Galvanized
Steel Tubing (Galvanized Finish)

NOTE:

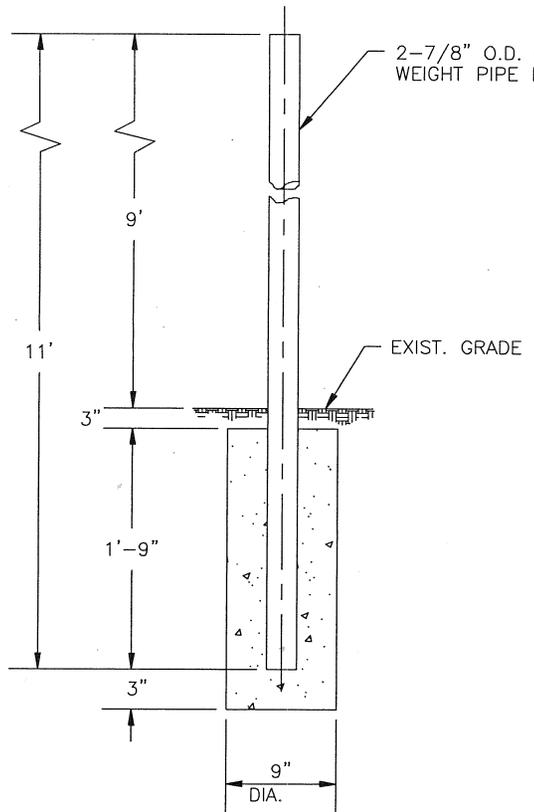
1. Sign Post and Anchor Per COP Specs

PEORIA DETAIL 132-2

SIGN POST SPECIFICATIONS

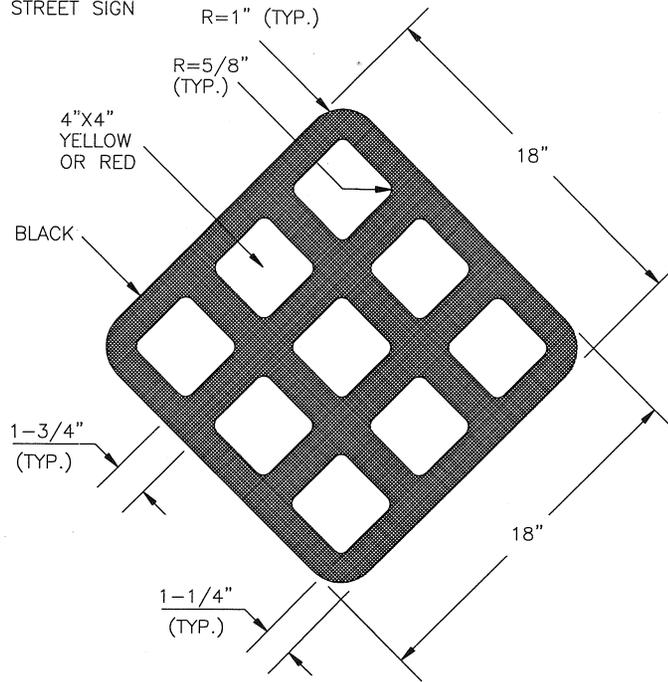


THE CITY OF PEORIA REQUIRES SQUARE TUBING FOR POST MOUNTED SIGN INSTALLATIONS. TUBING SHALL HAVE A GALVANIZED FINISH AND BE ROLL FORMED FROM 12 GAGE (.105 U.S.S. GAGE) COLD ROLLED STEEL, BE PERFORATED, AND HAVE A HOLE SIZE OF $\frac{7}{16}$ " IN DIAMETER AND 1" ON CENTER ON ALL SIDES. ALL POSTS REQUIRE A 2" x 2" x 30" ANCHOR TO BE DRIVEN INTO ANY GROUND SURFACES AT A DEPTH OF 24" TO 28". FOR SINGULAR SIGNS A $1\frac{3}{4}$ " x $1\frac{3}{4}$ " x 10' POST IS REQUIRED. FOR DUAL SIGNS A $1\frac{3}{4}$ " x $1\frac{3}{4}$ " x 12' POST IS REQUIRED. ALSO, FOR SIGNS THAT EXCEED 42" IN WIDTH, DUAL POSTS AND ANCHORS ARE REQUIRED. ATTACHMENT OF THE POST TO ANCHOR REQUIRES A $1\frac{1}{32}$ " x $\frac{3}{32}$ " x $\frac{5}{16}$ " CORNER BOLT (THREADED AT EACH END) WITH $\frac{5}{16}$ " SELF LOCKING NUTS. ATTACHMENT OF THE SIGN TO POST REQUIRES A $1\frac{1}{32}$ " x $\frac{3}{32}$ " x $\frac{5}{16}$ " CORNER BOLT WITH A $\frac{5}{16}$ " SELF LOCKING NUT.



STREET SIGN BASE

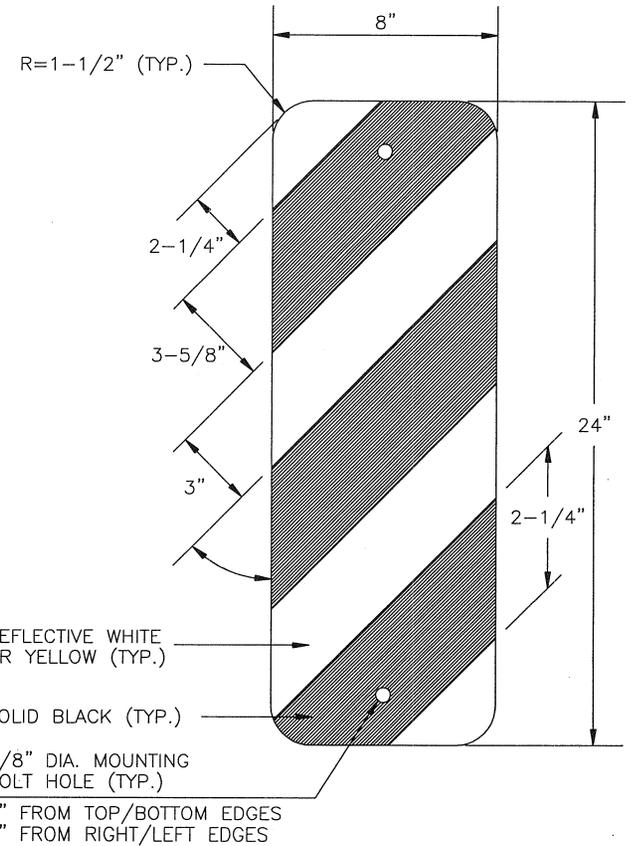
NOTE:
CONCRETE BASE FOUNDATIONS SHALL BE CLASS "C" CONCRETE AS PER MAG SECT. 505 & 725.



OBJECT MARKER

NOTES:

1. RED USED TO INDICATE A TOTAL CLOSURE CONDITION WHEREBY TRAFFIC CAN PROCEED NO FURTHER. (RED BALL)
2. YELLOW USED TO INDICATE OBJECTS WITHIN OR IMMEDIATELY ADJACENT TO THE ROADWAY CAUSING A PARTIAL CLOSURE OR SERIOUS INTERFERENCE WITH TRAFFIC. (YELLOW BALL)



DELINEATOR

NOTES:

1. STRIPES TO SLOPE DOWNWARD TO THE SIDE ON WHICH TRAFFIC IS TO PASS.
2. DELINEATOR TO BE BLACK AND WHITE WHEN USED ON THE RIGHT SIDE OF THE ROADWAY - AND BLACK AND YELLOW WHEN USED ON THE LEFT SIDE.

DETAIL NO.

P1023



City of Phoenix
STANDARD DETAIL

STREET SIGN BASE, OBJECT MARKER,
AND DELINEATOR

APPROVED

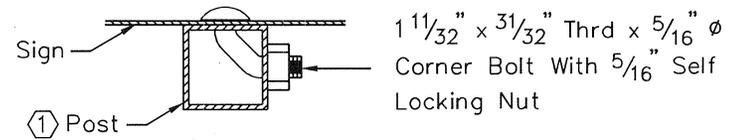
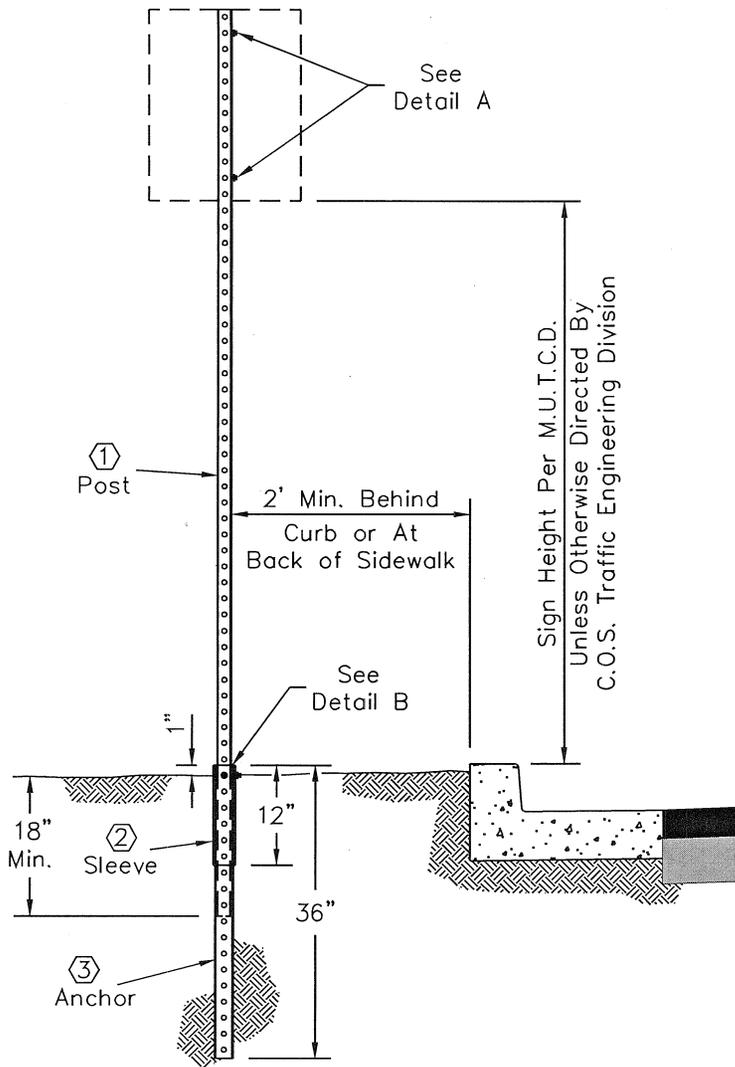
Kenny W. Han
CITY ENGINEER

07-09-92
DATE

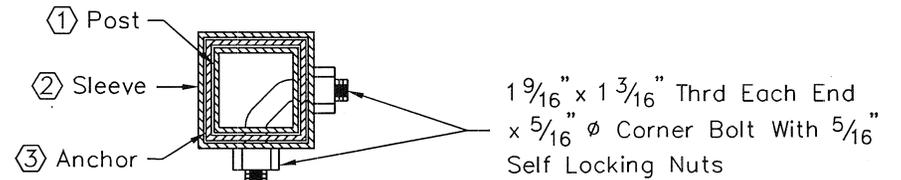
DETAIL NO.

P1023

REVISED 1/3/94



**Detail A
Sign Mounting**



**Detail B
Anchor Assembly**

Legend

- ① Post - 1-3/4" x 1-3/4" Square Perforated 0.105" Galvanized Steel Tubing (Green Finish)
- ② Sleeve - 2-1/4" x 2-1/4" x 12", Square Perforated 0.105 Galvanized Steel Tubing (Green Finish)
- ③ Anchor - 2" x 2" x 36", Square Perforated 0.105" Galvanized Steel Tubing (Green Finish)

NOTE:

1. Sign Post, Sleeve And Anchor Per COS Supplemental Spec. Section 402.3

DETAIL NO.
2131

**City of Scottsdale
Standard Details**

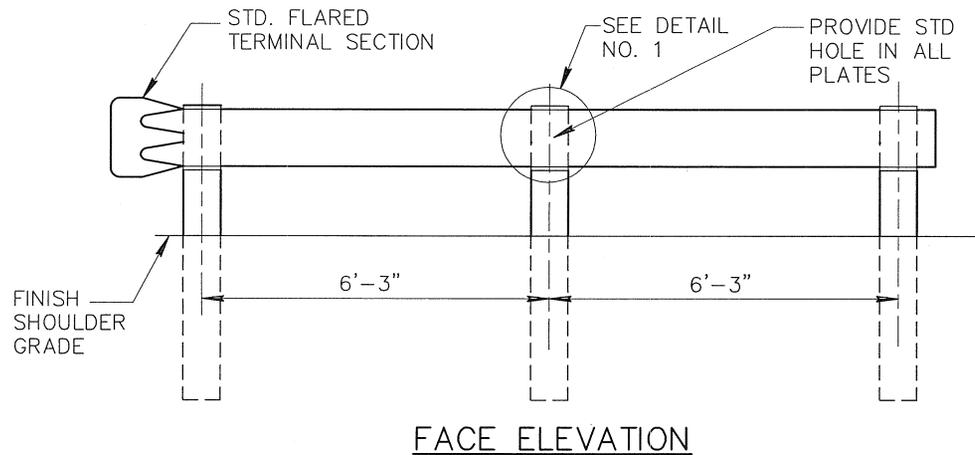
APPROVED BY:
**Scottsdale Standards &
Specifications Committee**

SIGN POST INSTALLATION

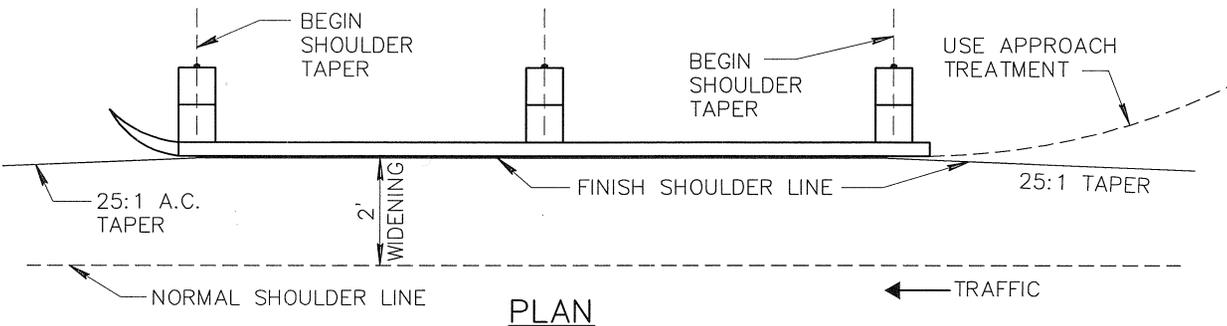
DETAIL NO.
2131

NOTES

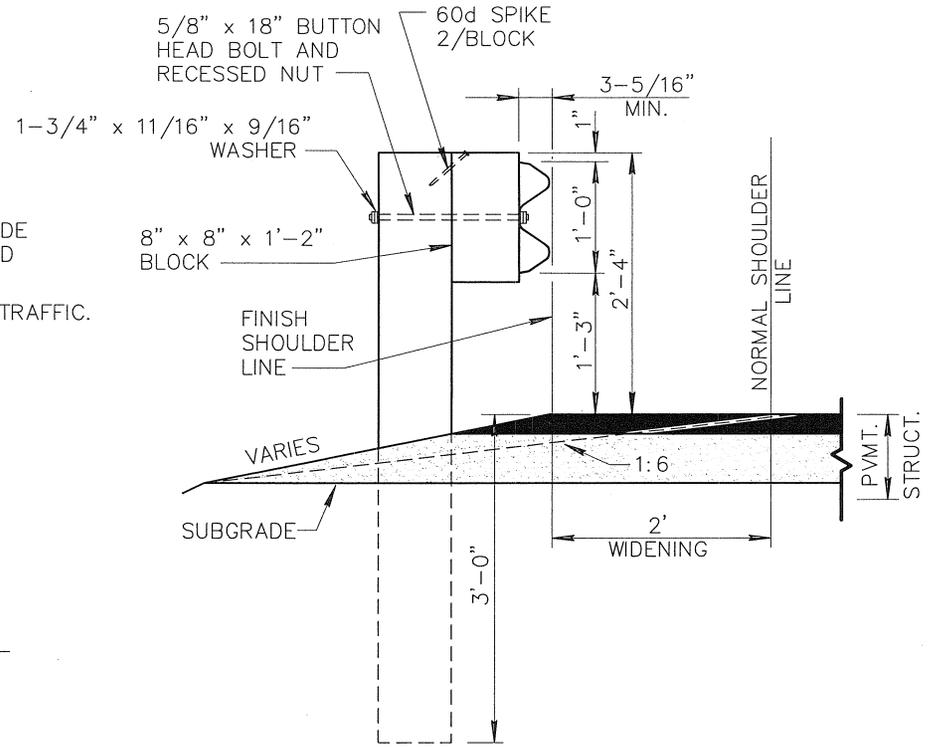
1. POSTS AND BLOCKS SHALL BE 8" x 8" ROUGH WOOD, PRESSURE TREATED AND UNPAINTED. HOLES SHALL BE BORED BEFORE TREATMENT. SEE SECT. 415
2. ALL GUARD RAIL PLATE, FITTINGS, HARDWARE, ETC. SHALL BE GALVANIZED.
3. TYPE 'A' GUARD RAIL INSTALLED ON NORMAL SHOULDER LINE.
4. TYPE 'B' GUARD RAIL INSTALLED ON WIDENED ROADWAY SHOULDER LINE.
5. TYPE 'B' INSTALLATION SHOWN. TYPE 'A' INSTALLATION SAME EXCEPT THAT INSIDE FACE OF GUARD RAIL SHALL FALL ON THE NORMAL SHOULDER LINE AS INDICATED BY PLAN DRAWING.
6. INSTALL LAP PLATES SO THAT EXPOSED EDGES ARE AWAY FROM APPROACHING TRAFFIC.



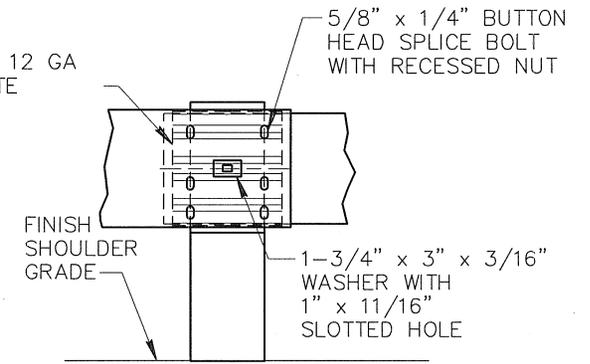
FACE ELEVATION



PLAN



SIDE ELEVATION



DETAIL NO. 1

DETAIL NO.
135-1

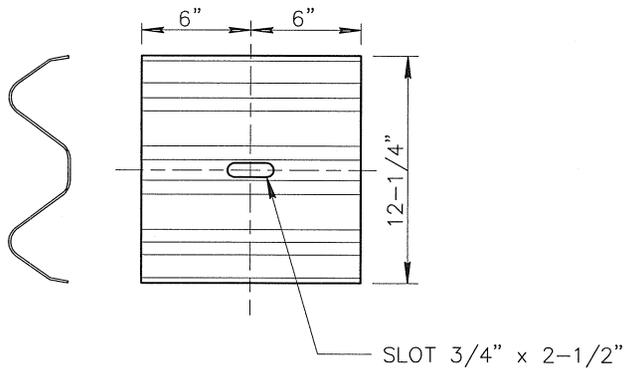


STANDARD DETAIL
ENGLISH

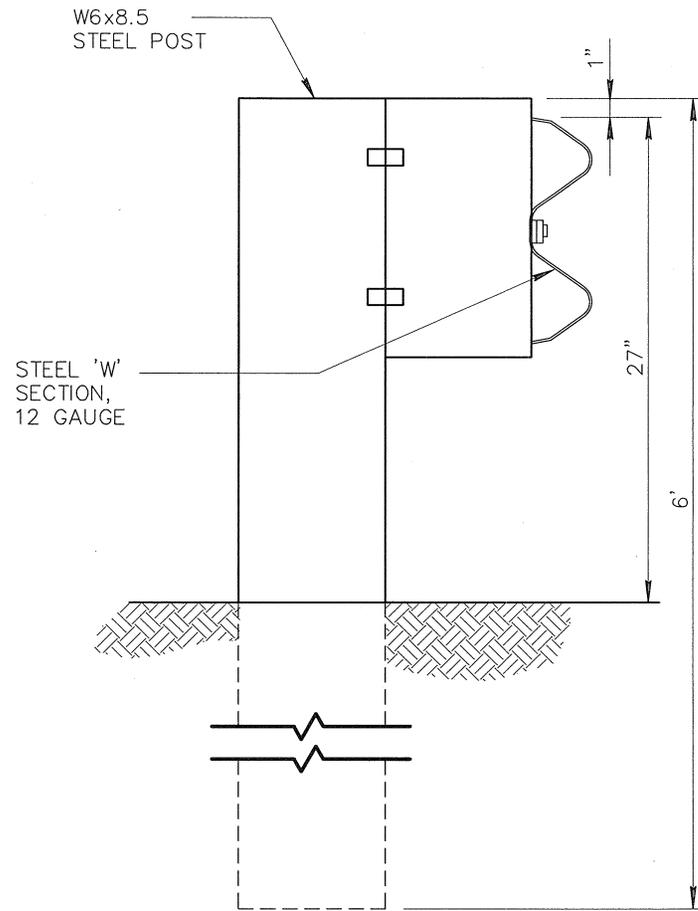
STEEL GUARD RAIL

REVISED

DETAIL NO.
135-1



'W' SECTION BACK-UP PLATE FOR STEEL POSTS



DETAIL NO.

135-2



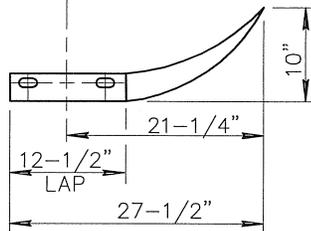
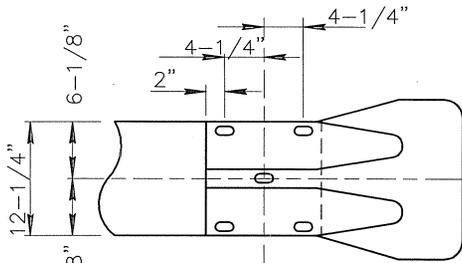
STANDARD DETAIL ENGLISH

STEEL GUARD RAIL

REVISED

DETAIL NO.

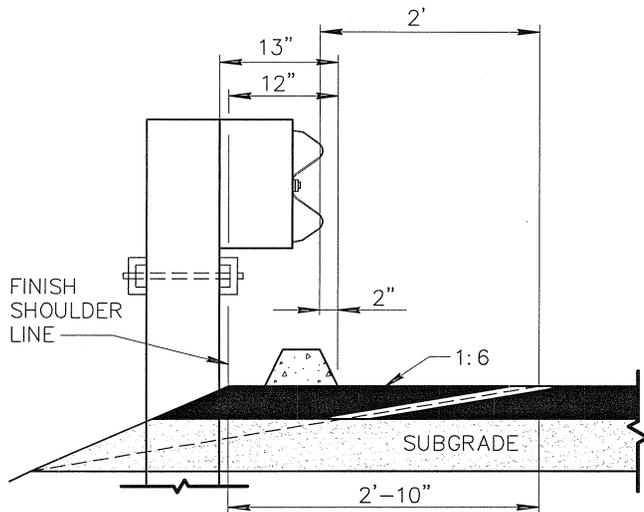
135-2



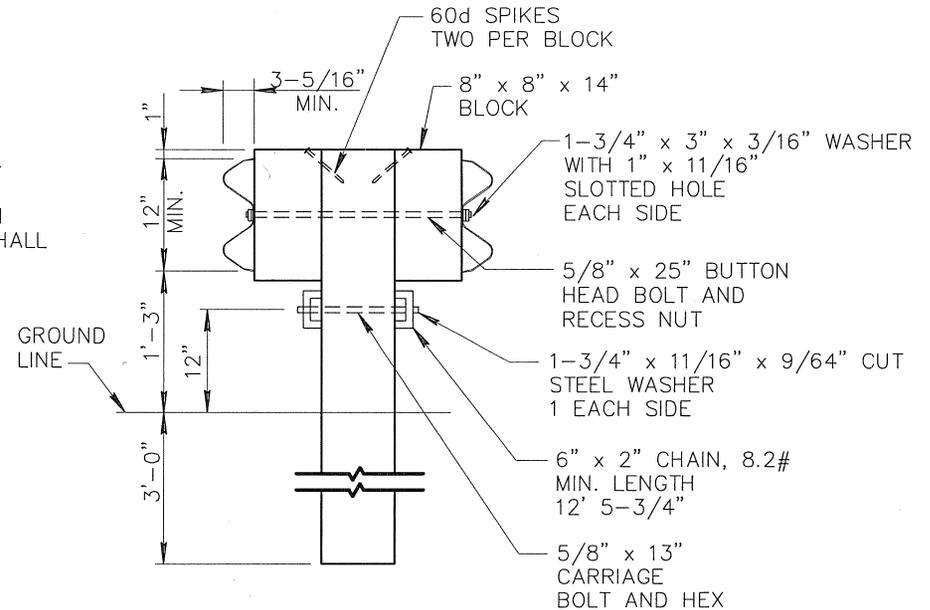
**STANDARD FLARED
TERMINAL SECTION**

NOTES:

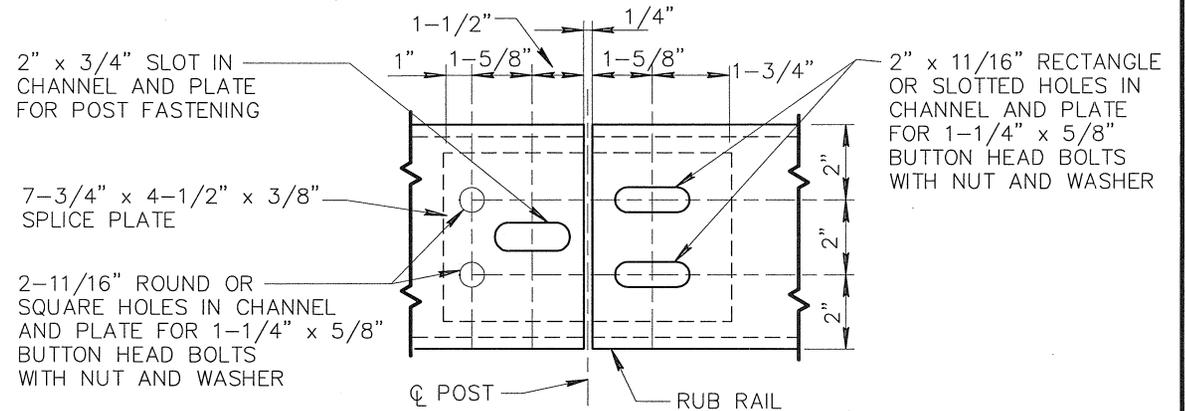
1. TOP AND RUB RAIL SHALL NOT PROJECT MORE THAN 1" IF ADJUSTMENT SHORTENING IS REQUIRED, THREADS SHALL BE LEFT IN FUNCTIONAL CONDITION.
2. HORIZONTAL DISTANCE BETWEEN TOP RAIL AND MEDIAN CURB SHALL NOT EXCEED 12"



**INSTALLATION OF GUARD RAIL
IN EMBANKMENT CURB SECTION**



DETAIL NO. 2 - MEDIAN BARRIER



**DETAIL NO. 3 - RUB RAIL SPLICE
(SPLICE AT POSTS ONLY)**

DETAIL NO.
135-3

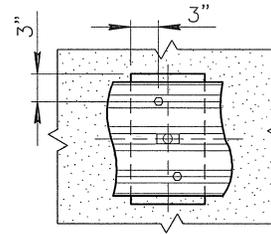
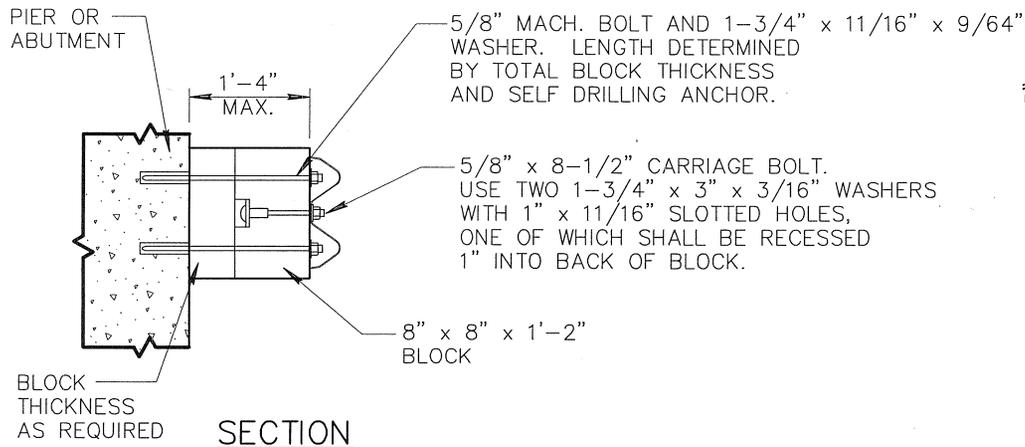


**STANDARD DETAIL
ENGLISH**

STEEL GUARD RAIL

REVISED

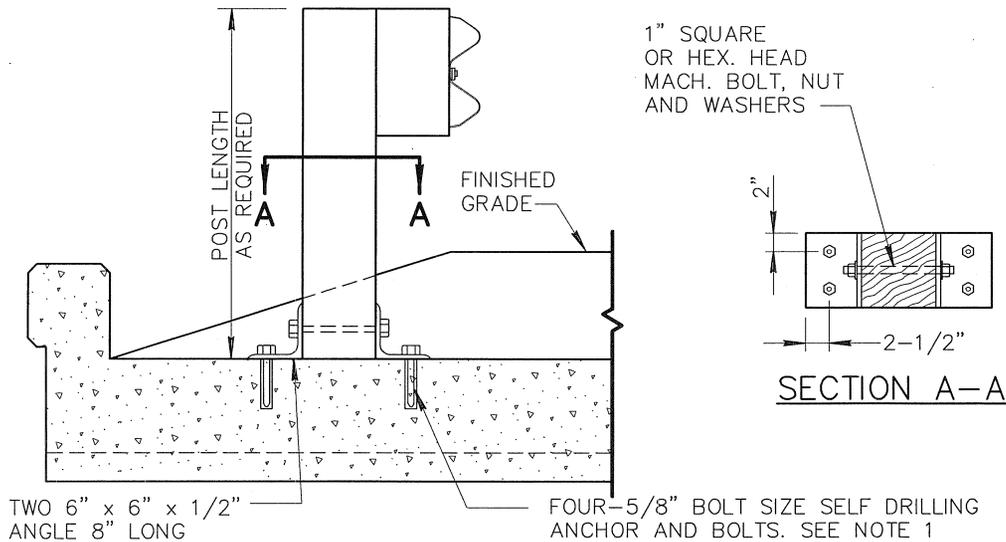
DETAIL NO.
135-3



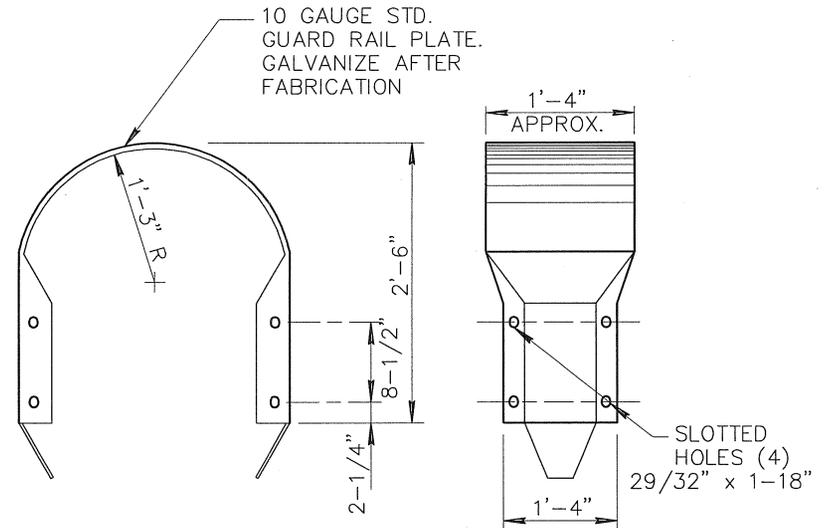
NOTE

1. 5/8" BOLT SIZE SELF DRILLING ANCHOR SHALL HAVE A MINIMUM 1500# PULL OUT STRENGTH IN 2500 P.S.I. CONCRETE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

DETAIL NO. 4
ATTACHMENT OF GUARD RAIL TO STRUCTURES



DETAIL NO. 1
GUARD RAIL POST INSTALLATION ON STRUCTURES



DETAIL NO. 5
BUFFER END SECTION

DETAIL NO.

135-4



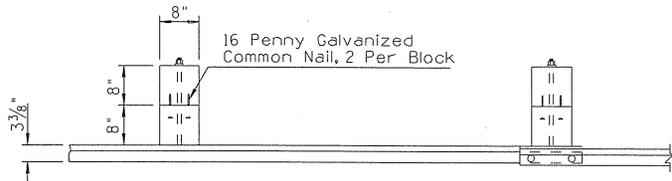
STANDARD DETAIL
ENGLISH

STEEL GUARD RAIL

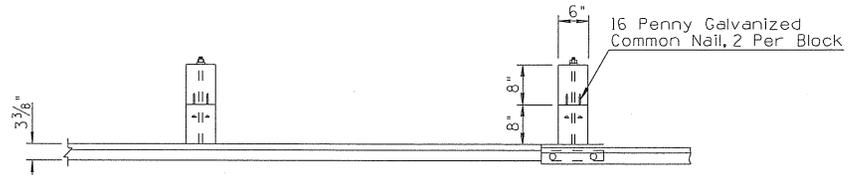
REVISED

DETAIL NO.

135-4



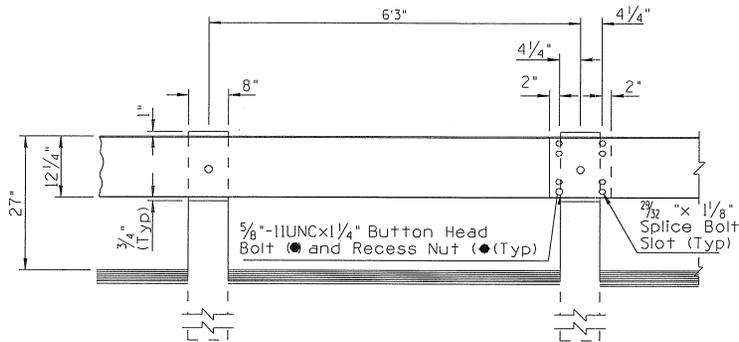
PLAN
G4 (1W) SYSTEM



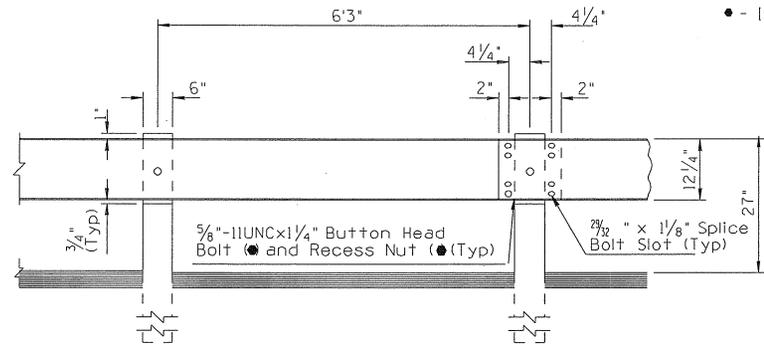
PLAN
G4 (2W) SYSTEM

GENERAL NOTES

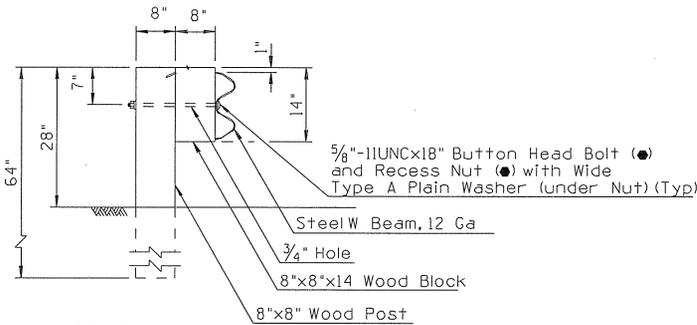
• - Indicates ARTBA designation



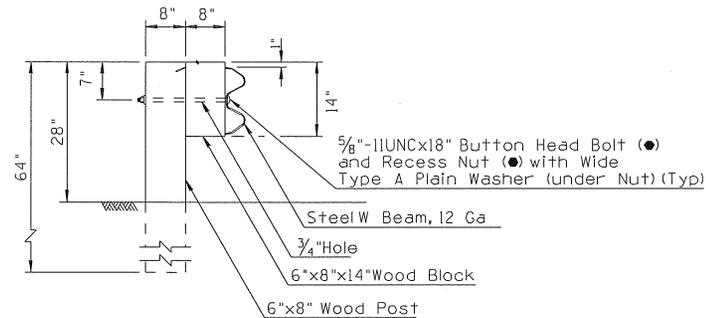
ELEVATION
G4 (1W) SYSTEM



ELEVATION
G4 (2W) SYSTEM



SECTION G4(1W)



SECTION G4(2W)

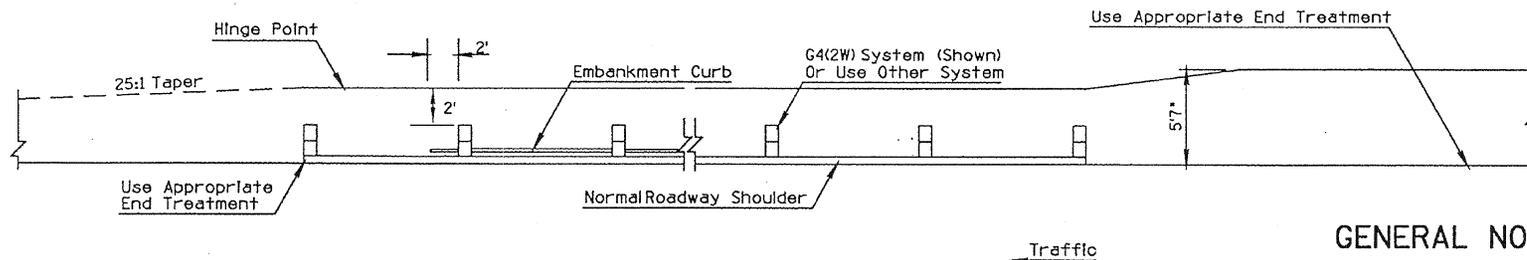
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

TYPICAL GUARDRAIL

DATE:
4/30/01

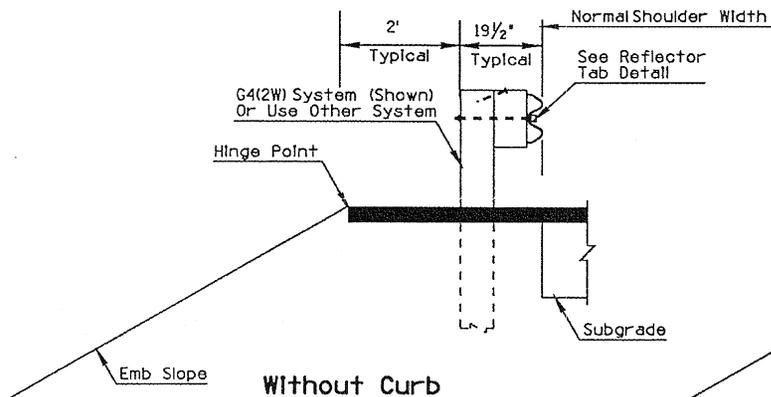
DETAIL NO.
3001



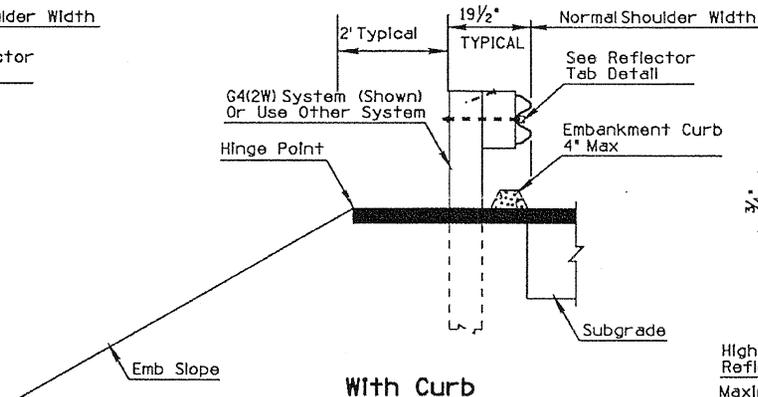
PLAN

GENERAL NOTES

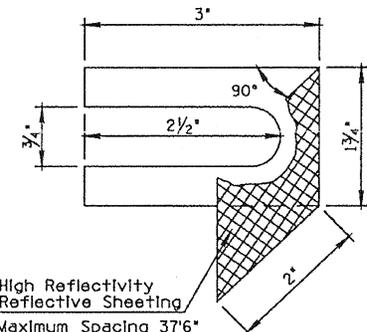
1. All embankment curb shall be protected by guard rail.
2. Guard rail shall extend beyond the limits of embankment curb.
3. See Std. 3016 for measurement limits.



Without Curb



With Curb



REFLECTOR TAB DETAIL

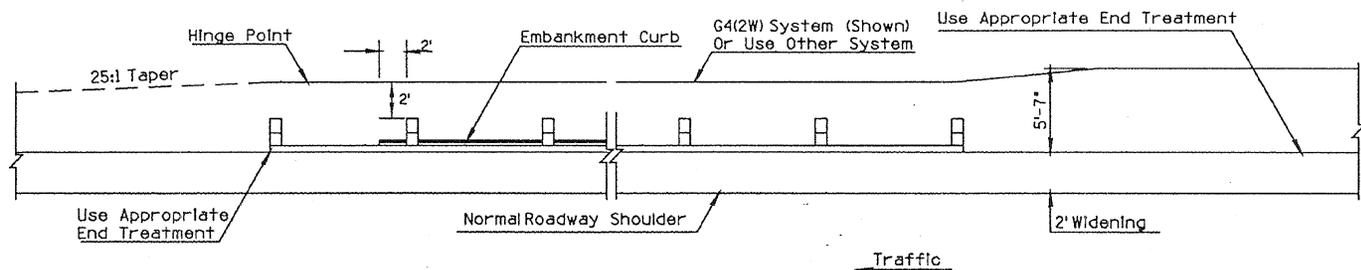
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

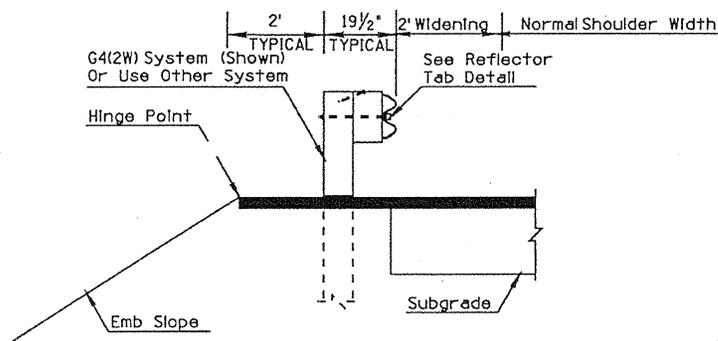
**TYPE A GUARDRAIL
INSTALLATION**

DATE:
6/09/04

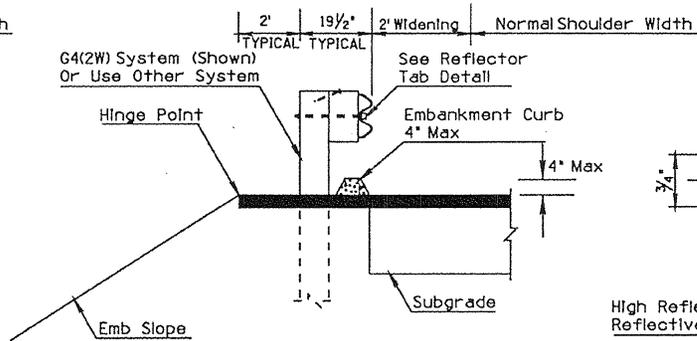
DETAIL NO.
3002



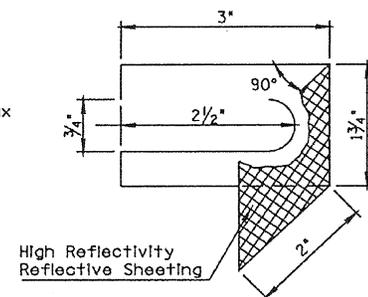
PLAN



Without Curb



With Curb



REFLECTOR TAB DETAIL

SECTION

GENERAL NOTES

1. All embankment curb shall be protected by guard rail.
2. Guard rail shall extend beyond the limits of embankment curb.
3. See Std. 3016 for measurement limits.

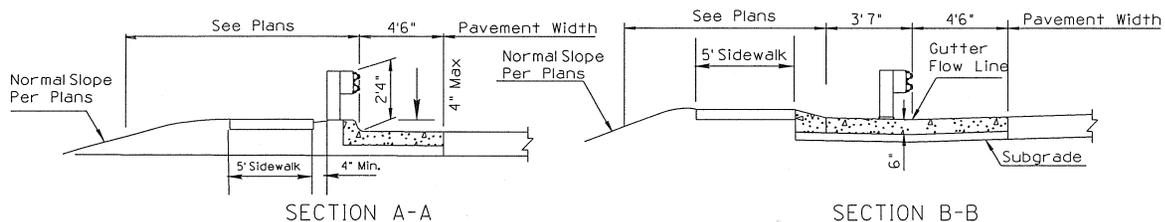
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

TYPE B GUARDRAIL
INSTALLATION

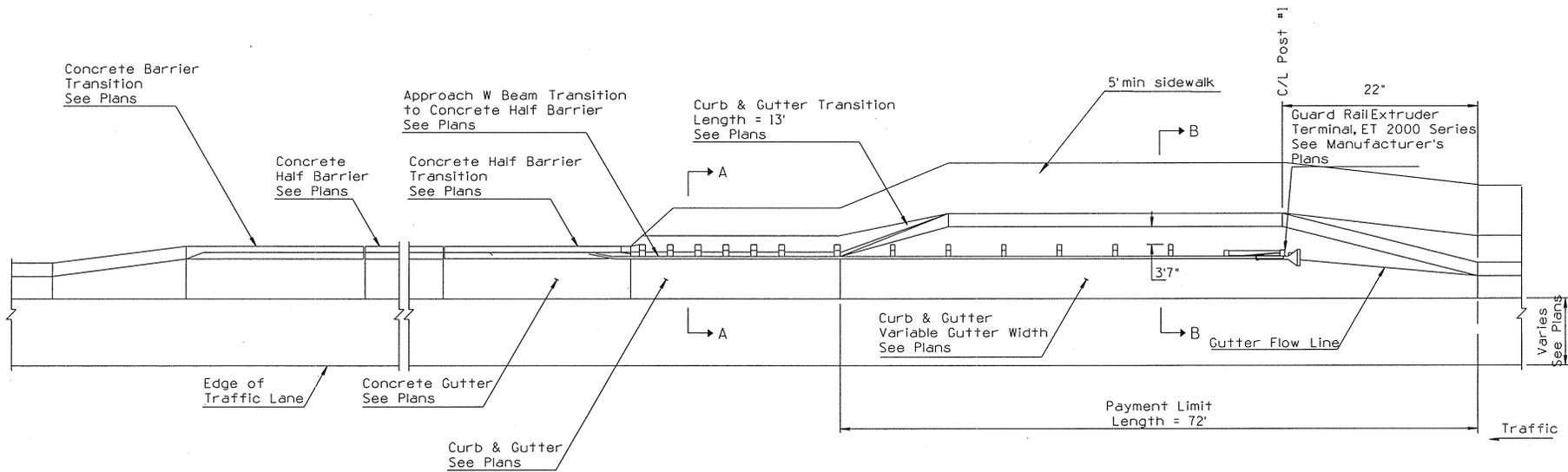
DATE:
6/09/04

DETAIL NO.
3003



GENERAL NOTES

1. See plan sheets for location and type of guardrail.
2. Flare the Guard Rail Extruder Terminal as per Manufacturer's Detail
3. See Plans for type and location of drainage facilities.



PLAN
TYPICAL HALF BARRIER TERMINAL

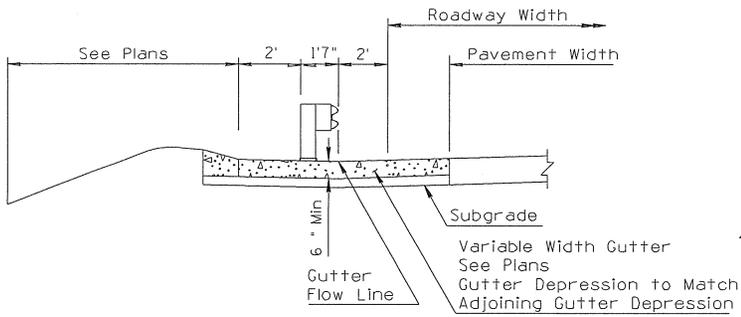
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

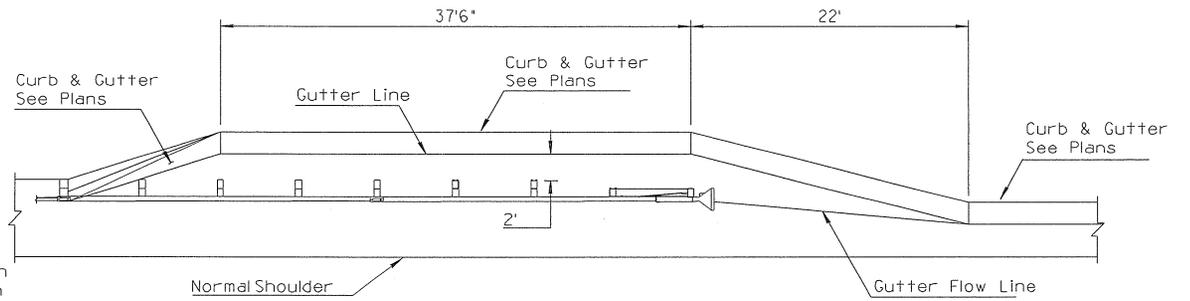
END TERMINAL LAYOUT AT
HALF BARRIER TERMINAL

DATE:
6/29/04

DETAIL NO.
3004

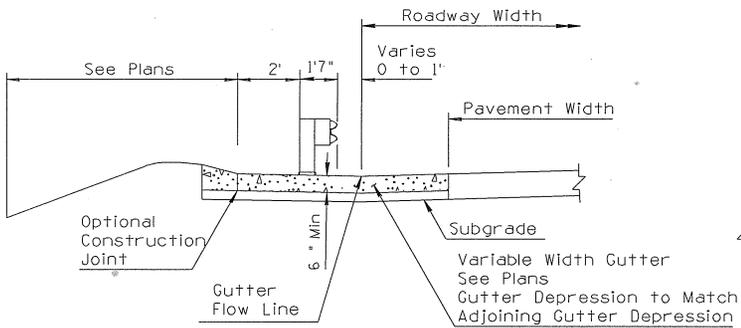


SECTION

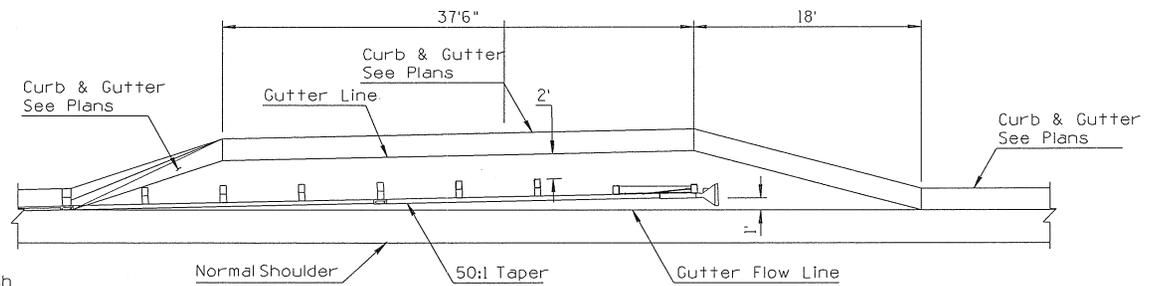


PLAN

TYPE B GUARD RAIL INSTALLATION



SECTION



PLAN

TYPE A GUARD RAIL INSTALLATION

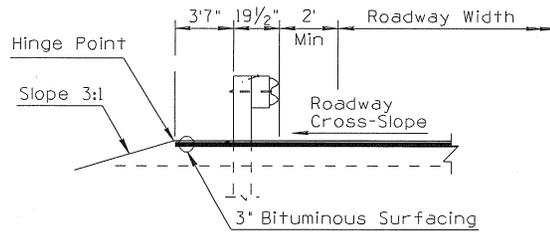
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

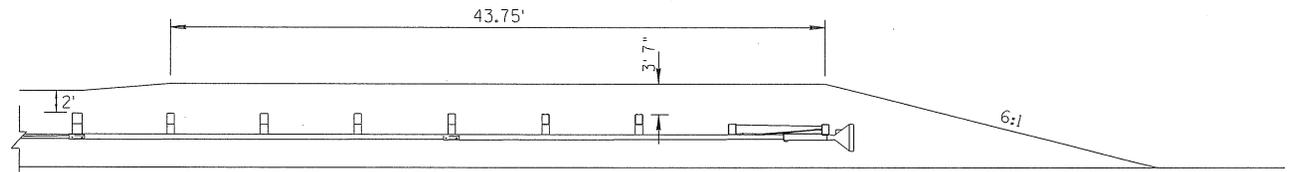
**END TERMINAL LAYOUT
WITH CURB AND GUTTER**

DATE:
50104

DETAIL NO.
3005

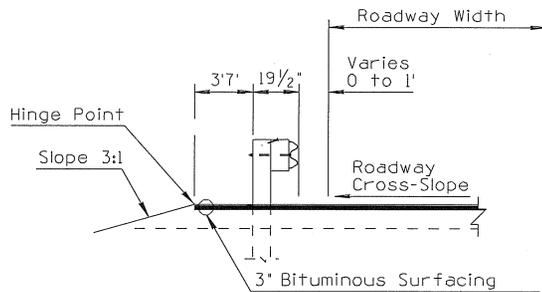


SECTION

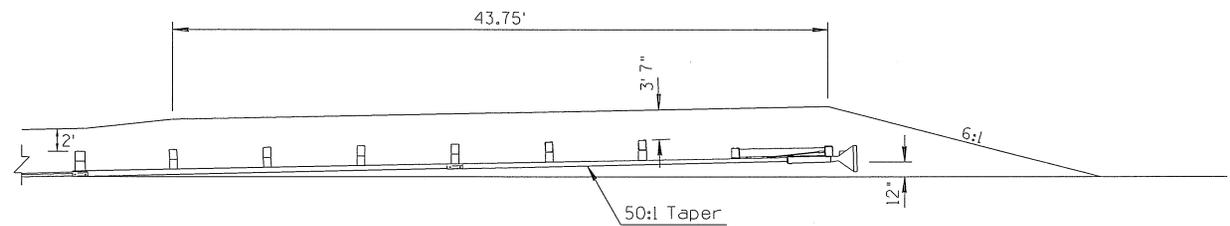


PLAN

TYPE B GUARD RAIL INSTALLATION



SECTION



PLAN

TYPE A GUARD RAIL INSTALLATION

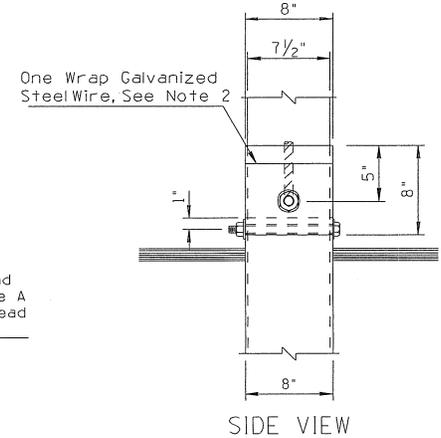
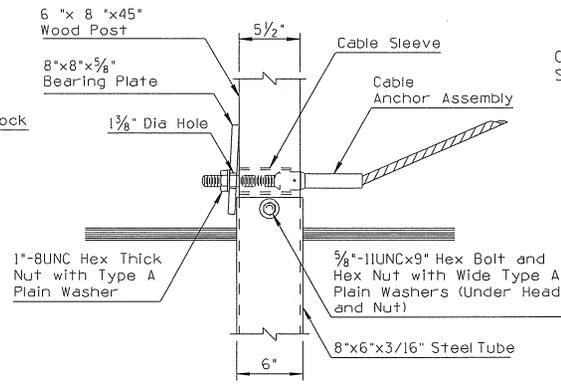
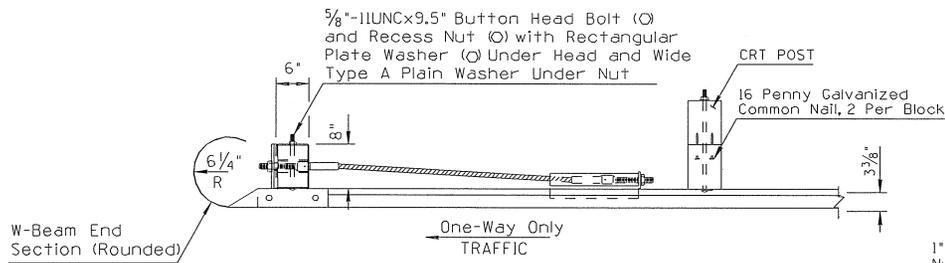
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

**END TERMINAL LAYOUT
WITHOUT CURB AND GUTTER**

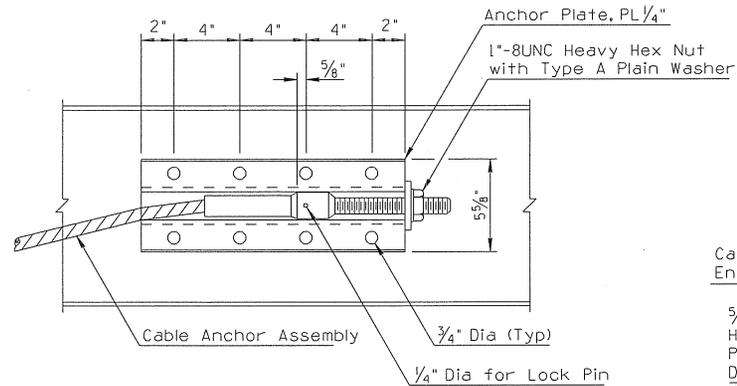
DATE:
50104

DETAIL NO.
3006

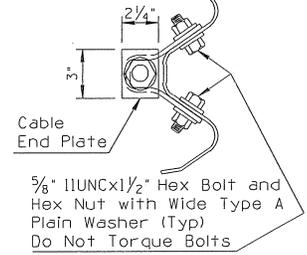


FRONT VIEW

BEARING PLATE DETAIL



Steel W Beam Section, 12 Gauge

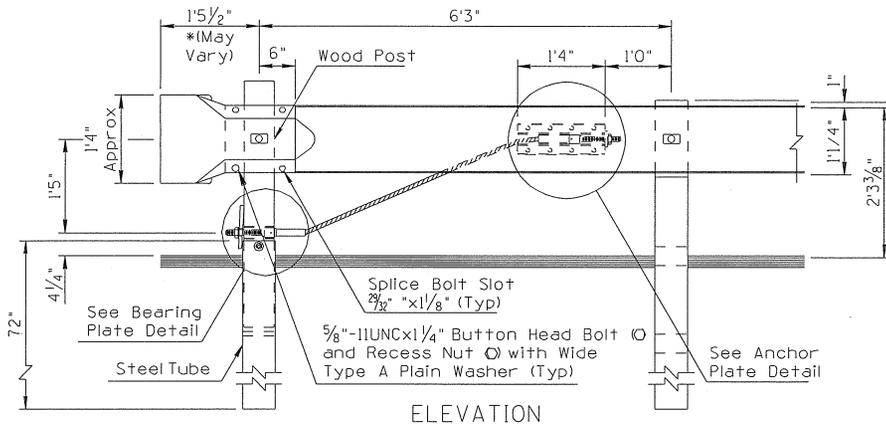


FRONT VIEW

ANCHOR PLATE DETAIL

SIDE VIEW

PLAN



ELEVATION

GENERAL NOTES

1. The cable assembly shall be tightened to remove slack.
 2. To ensure that the bearing plate remains in position, one wrap of 14 gauge galvanized steelwire shall be wrapped around the terminal post near the top of the plate.
 3. See W-Beam End Section (Rounded), ARTBA Std. RE-6-79, for dimension variables.
- * See Std. 3016 for measurement limits.
 o Indicates ARTBA designation

Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

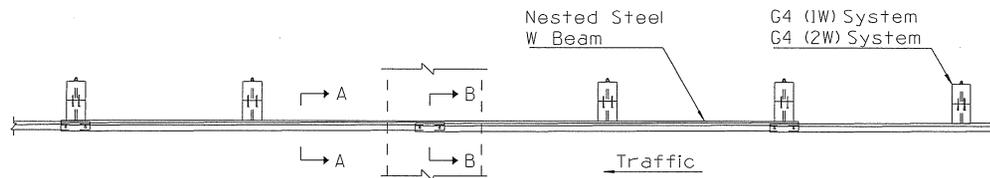
DEPARTURE END TERMINAL

DATE:
 6/20/01

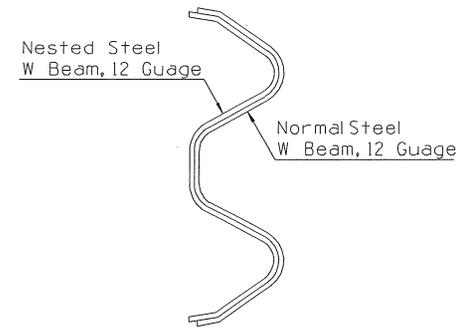
DETAIL NO.
3007

GENERAL NOTES

- 1. ● - Indicates ARTBA designation.

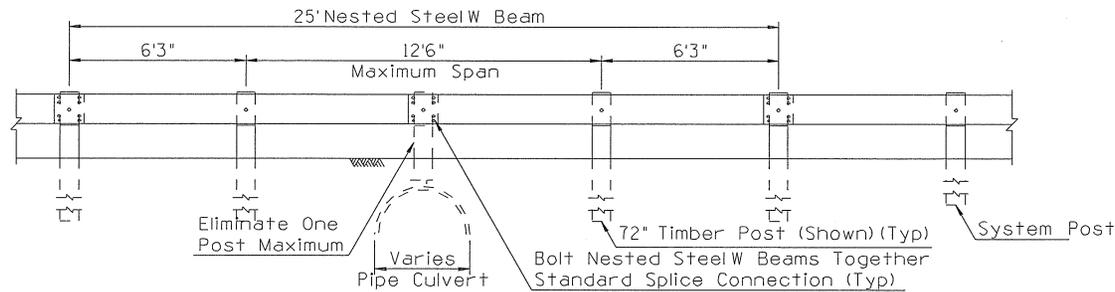


PLAN



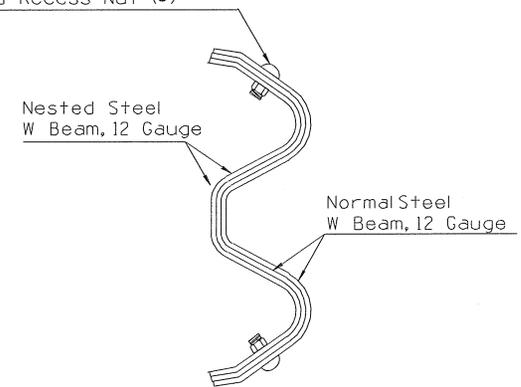
SECTION A-A

Bolt Nested Steel W Beam Together
 $\frac{5}{8}$ "-11UNC x $\frac{1}{4}$ " Button Head Bolt (●)
 and Recess Nut (●)



NESTED STEEL W BEAM - TYPE 1 - SHORT SPAN
 (Splice Connection Inside Span) Length = 25'

ELEVATION



SECTION B-B

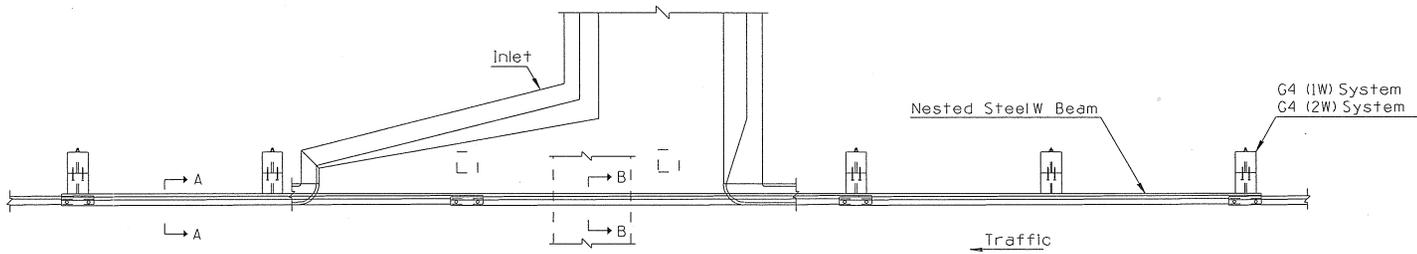
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
 STANDARD DETAIL

NESTED GUARDRAIL
 TYPE 1

DATE:
 5/02/01

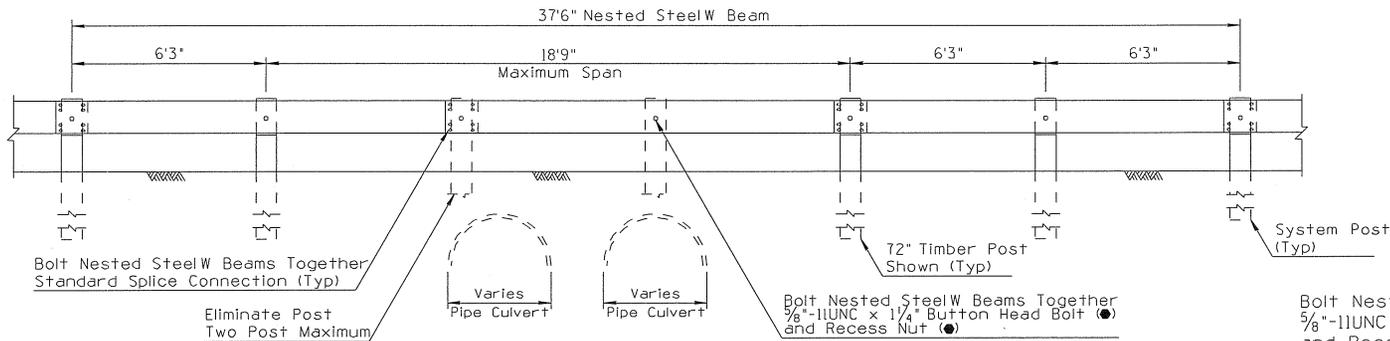
DETAIL NO.
 3008-1



GENERAL NOTES

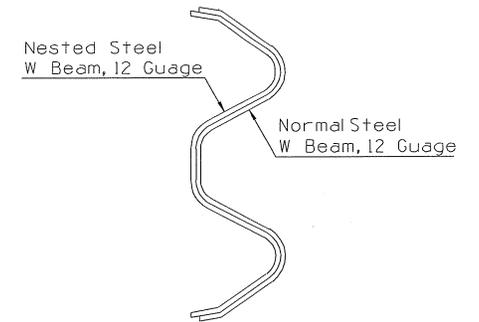
1. Use Type 3 Nested Steel W Beam to span downdrain or spillway inlets as shown in the plan view.
2. Use Type 3 to span multiple obstructions as shown in the elevation view.
3. See Std 3008-1 for additional information and dimensions

PLAN



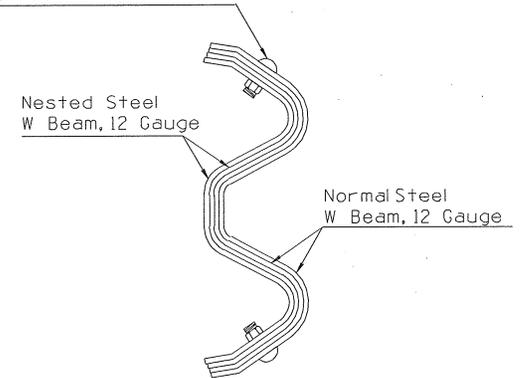
NESTED STEEL W BEAM - TYPE 3 - LONG SPAN
Length = 37'6"

ELEVATION



SECTION A-A

Bolt Nested Steel W Beam Together 5/8"-11UNC x 1/4" Button Head Bolt (●) and Recess Nut (●)



SECTION B-B

Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

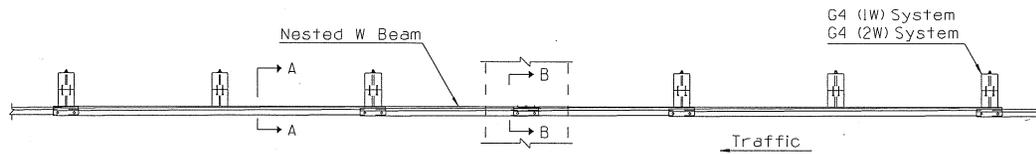
NESTED GUARDRAIL
TYPE 3

DATE:
5/01/01

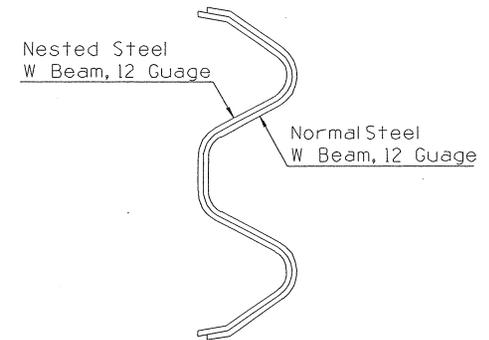
DETAIL NO.
3008-3

GENERAL NOTES

1. ● - Indicates ARTBA designation.

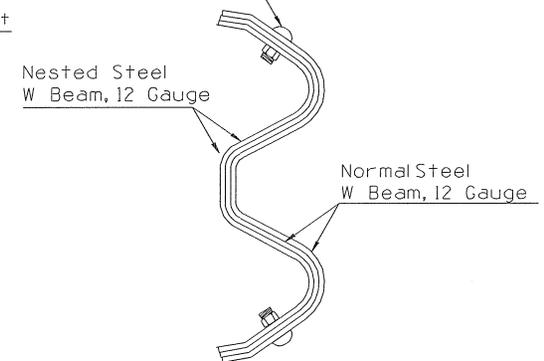


PLAN

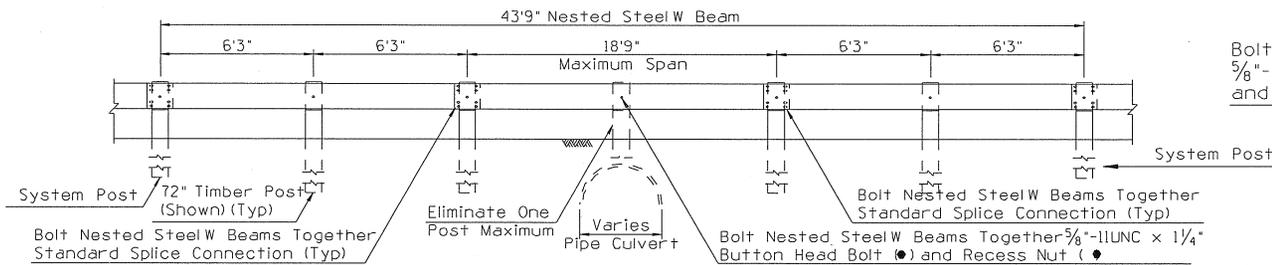


SECTION A-A

Bolt Nested Steel W Beam Together
 $\frac{5}{8}$ "-11UNC x $\frac{1}{4}$ " Button Head Bolt (●)
and Recess Nut (●)



SECTION B-B



NESTED STEEL W BEAM - TYPE 2 - LONG SPAN
(Splice Connection Outside Span) Length = 43'9"

ELEVATION

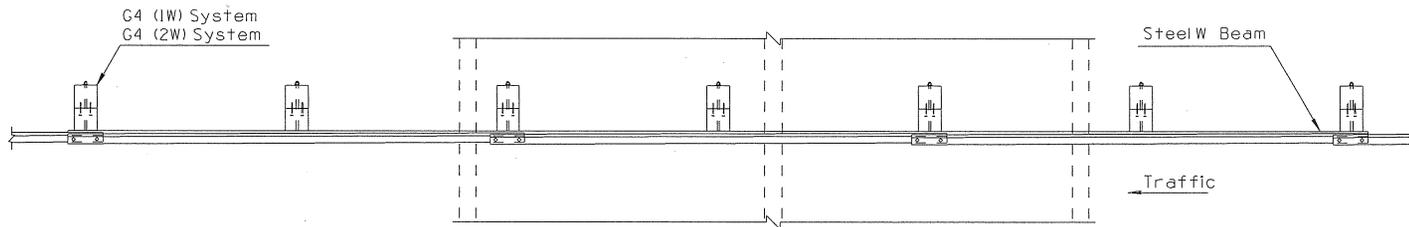
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

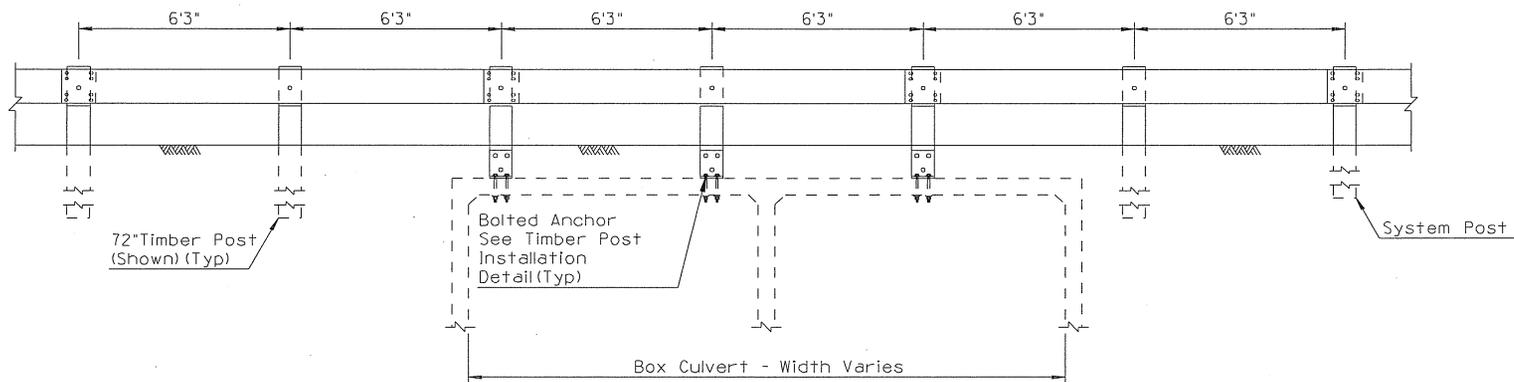
NESTED GUARDRAIL
TYPE 2

DATE:
6/27/01

DETAIL NO.
3008-2



PLAN



ELEVATION

BOLTED ANCHOR
BOX CULVERT INSTALLATION

Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

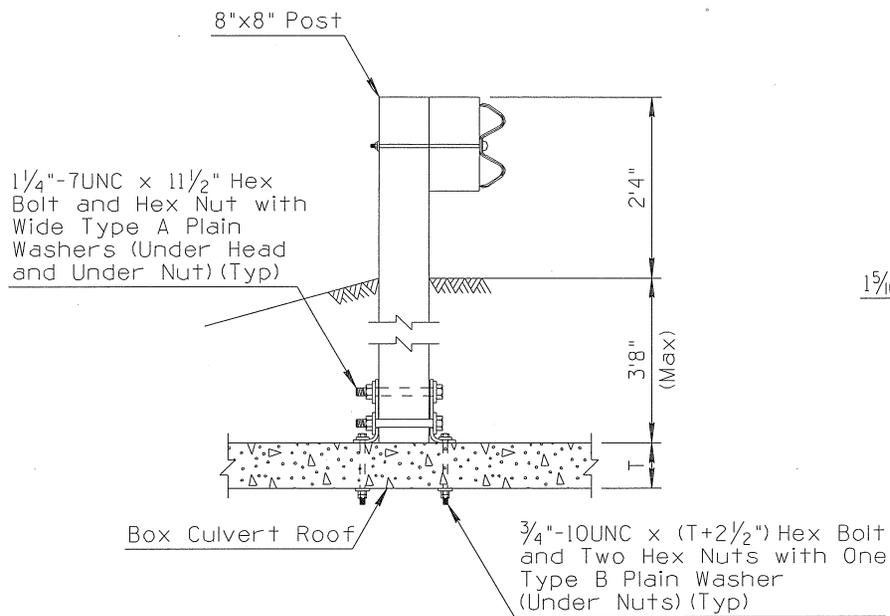
**BOLTED GUARDRAIL
ANCHORS**

DATE:
5/02/01

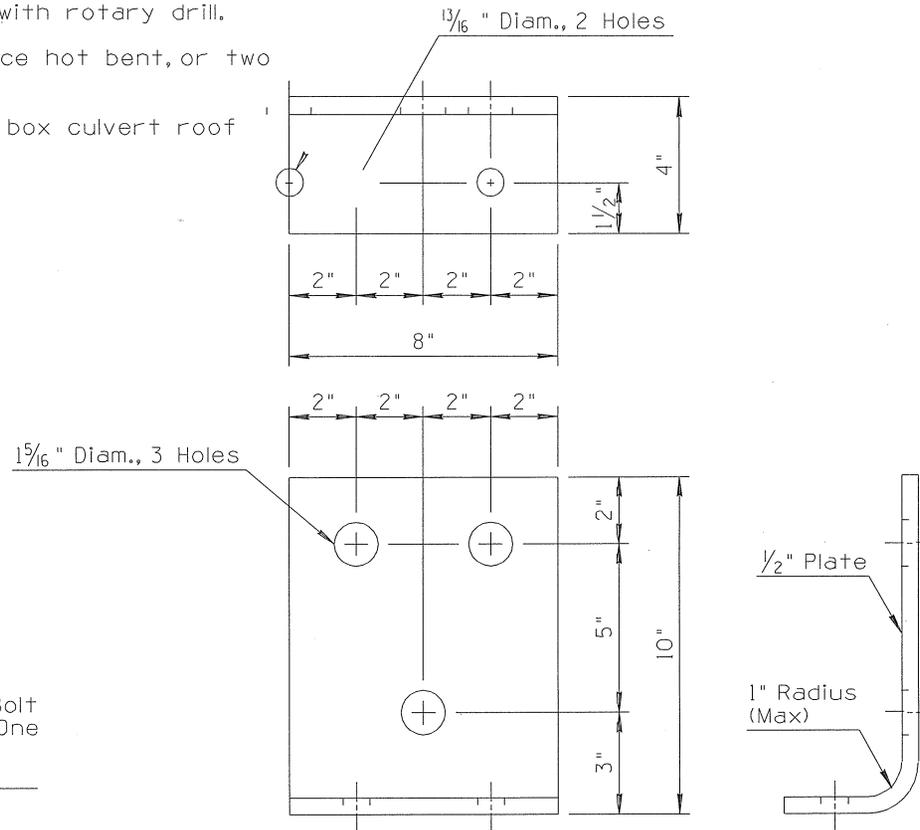
DETAIL NO.
3010-1

GENERAL NOTES

1. Drill through top of box culvert with rotary drill.
2. Bracket may be made of one piece hot bent, or two pieces welded together.
3. Short timber posts anchored to box culvert roof shall be 8" x 8" only.



INSTALLATION DETAIL



BRACKET DETAIL

BOLTED ANCHOR TIMBER POST INSTALLATION DETAIL

Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

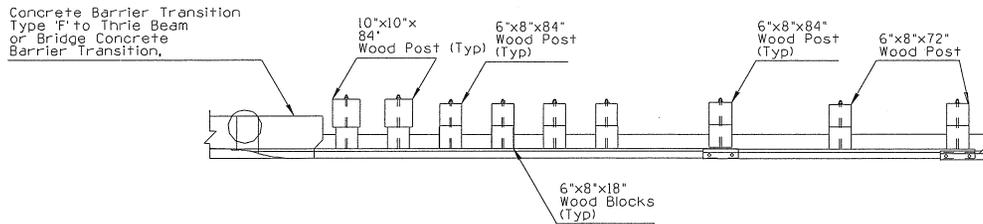
**BOLTED GUARDRAIL
ANCHORS**

DATE:
5/02/01

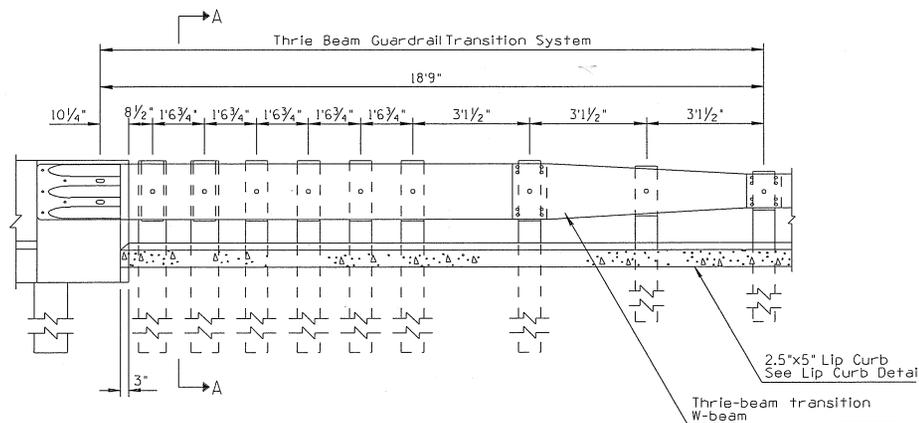
DETAIL NO.
3010-2

GENERAL NOTES

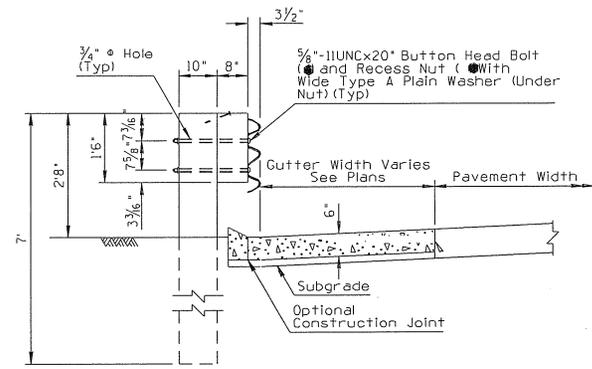
- - Indicate ARTBA designation.



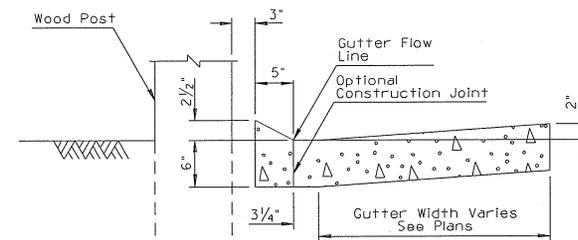
PLAN



ELEVATION



SECTION A-A



LIP CURB DETAIL

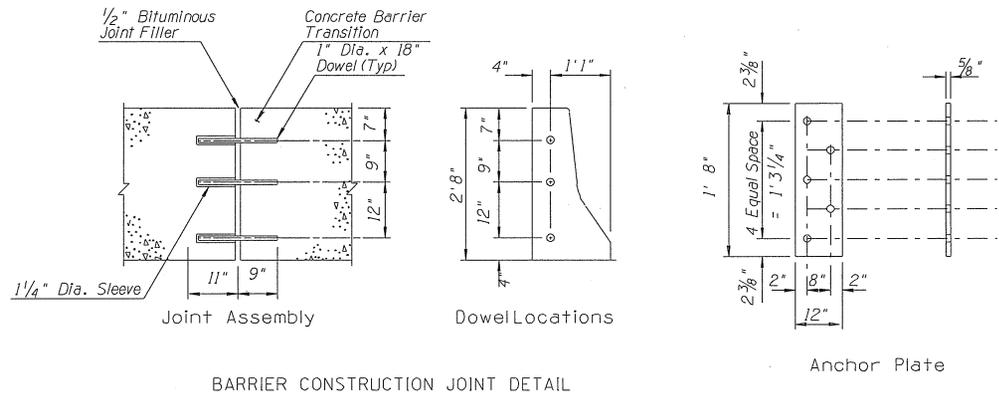
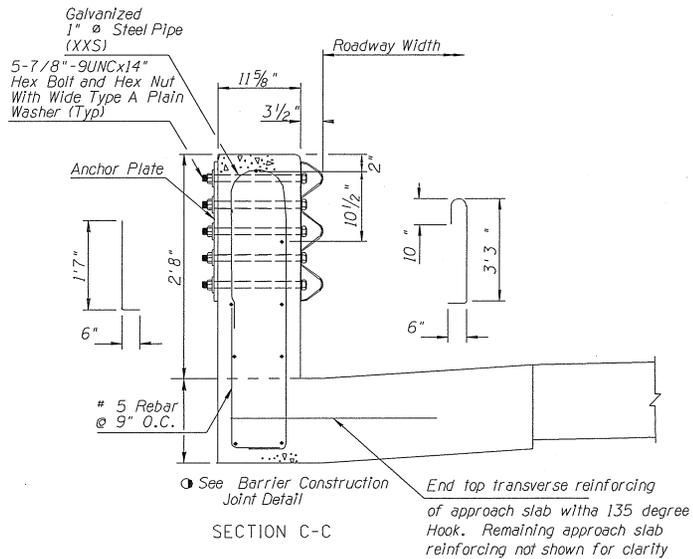
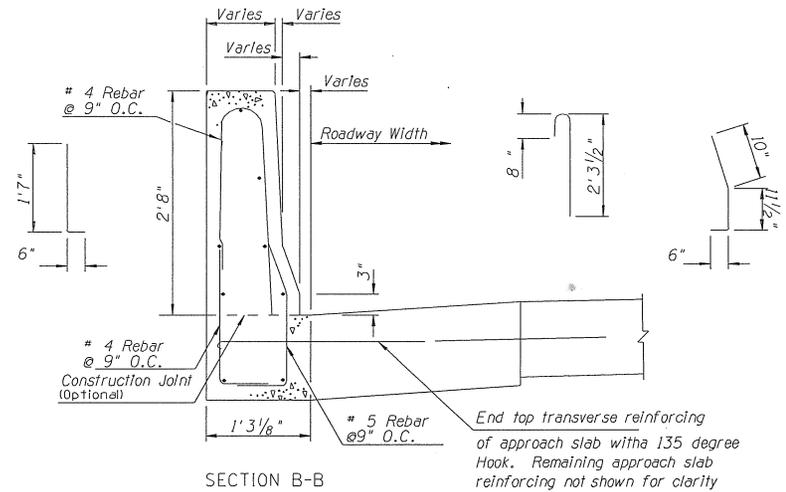
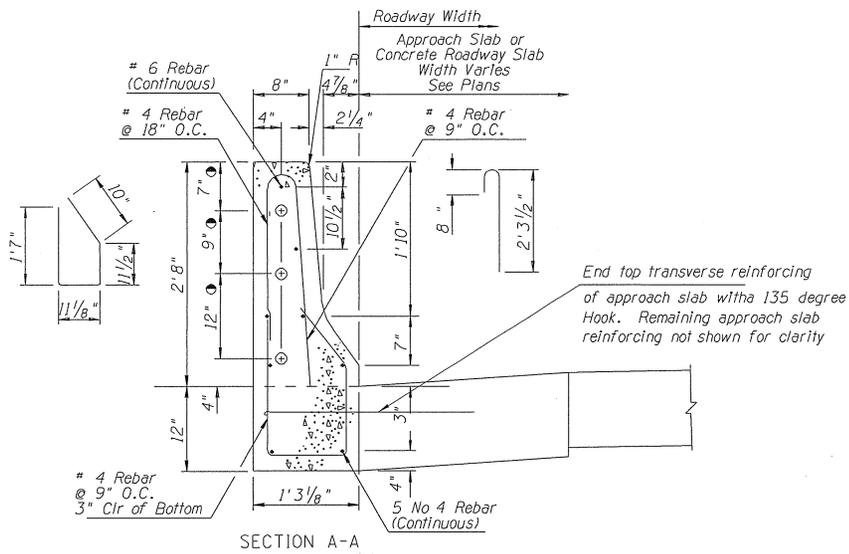
Base Drawing Courtesy of ADOT 2/05/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

GUARDRAIL TRANSITION

DATE:
6/27/01

DETAIL NO.
3012-1



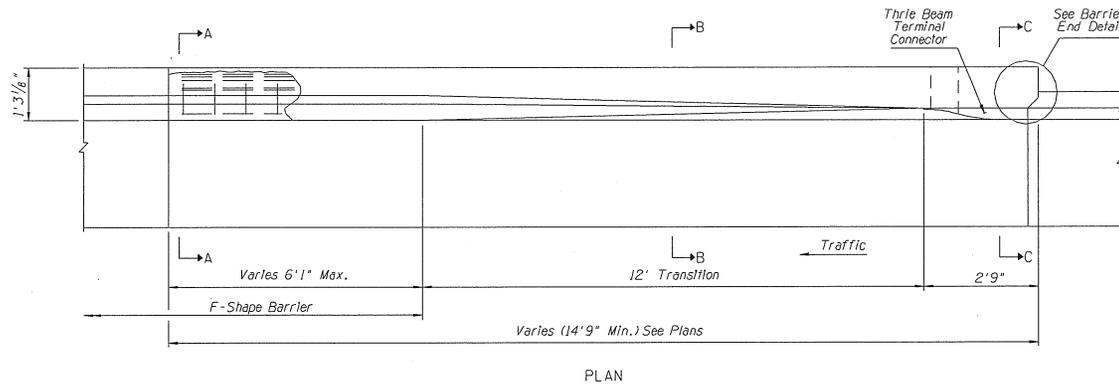
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

BARRIER DETAIL

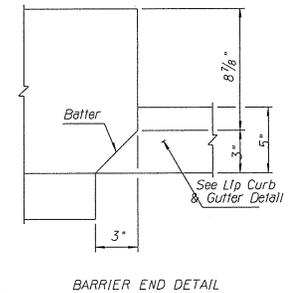
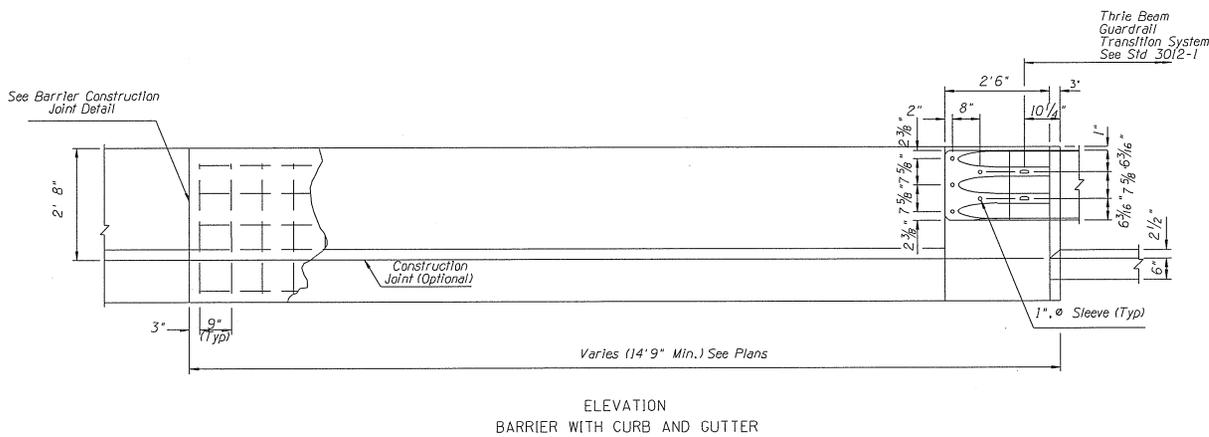
DATE:
8/06/01

DETAIL NO.
3012-3



GENERAL NOTES

1. Concrete shall be constructed by the Fixed Form Cast-In-Place method.
2. Concrete shall be Class A, design strength $< = 3000$ psi.
3. All reinforcing steel shall have 2" minimum clear cover unless otherwise noted.
4. All bend dimensions for reinforcing steel shall out-to-out of bars.
5. See Plans for approach slab details



BARRIER END DETAIL

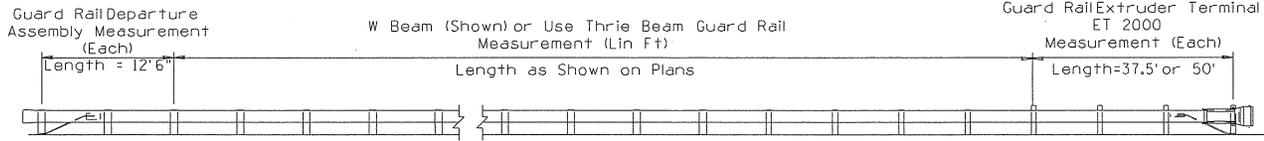
Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
STANDARD DETAIL

CONCRETE HALF BARRIER TRANSITION

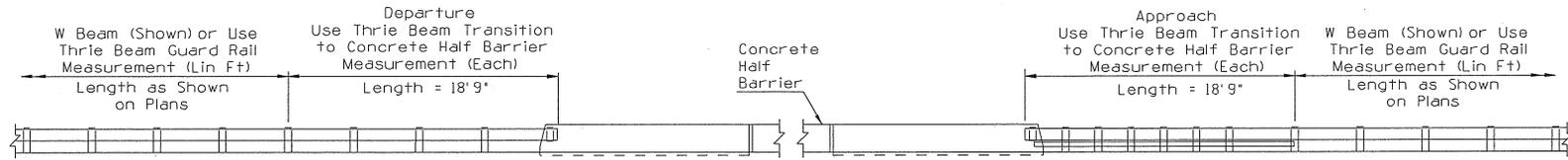
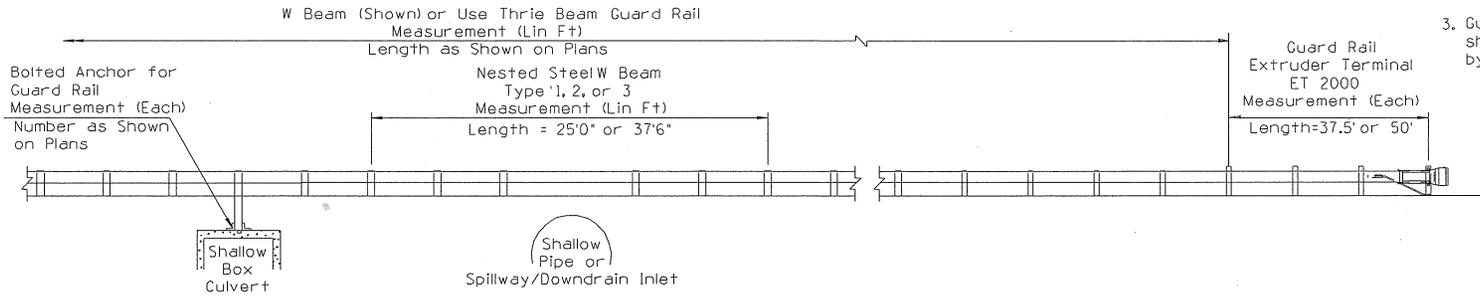
DATE:
5/02/01

DETAIL NO.
3012-2

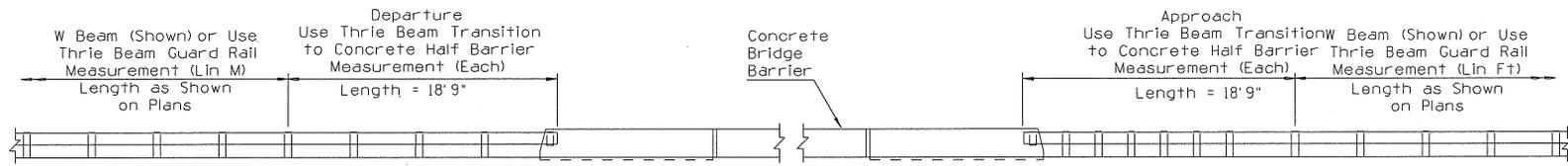


GENERAL NOTES

1. Length shall be as shown unless otherwise indicated on project plans.
2. Post type for transitions shall match post type of adjoining guardrail.
3. Guardrail Extruder Terminals may be shortened to 37'5" as approved by the Engineer.



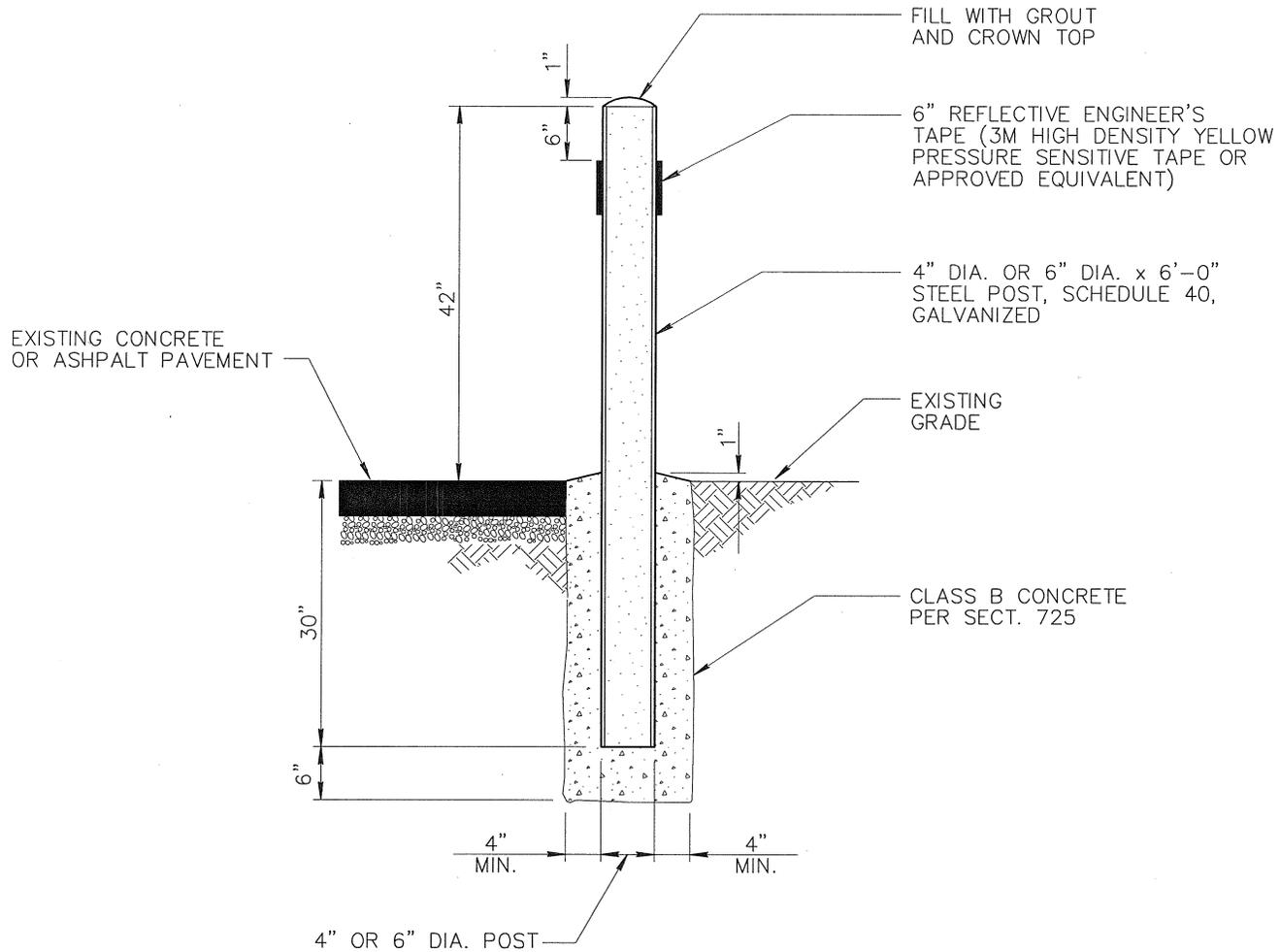
HALF BARRIER TRANSITIONS



BRIDGE BARRIER TRANSITIONS

Base Drawing Courtesy of ADOT 2/25/00

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION STANDARD DETAIL	GUARDRAIL MEASUREMENT	DATE: 4/15/04	DETAIL NO. 3016
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SAFETY POST SECTION

DETAIL NO.

140



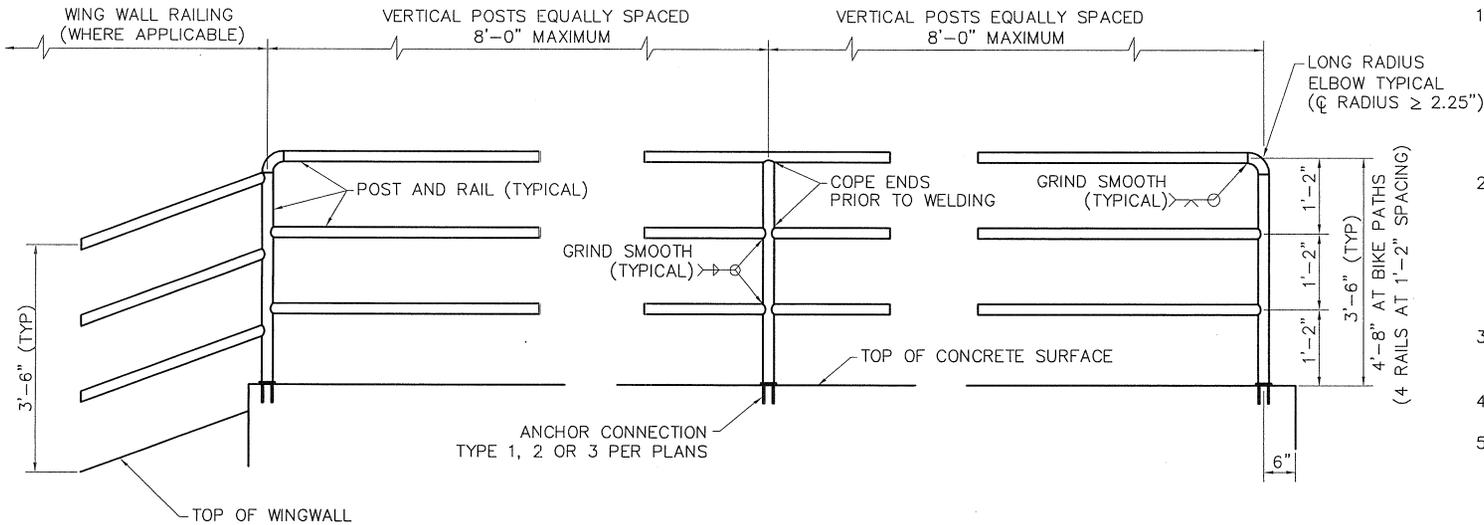
STANDARD DETAIL
ENGLISH

SAFETY POST

REVISED

DETAIL NO.

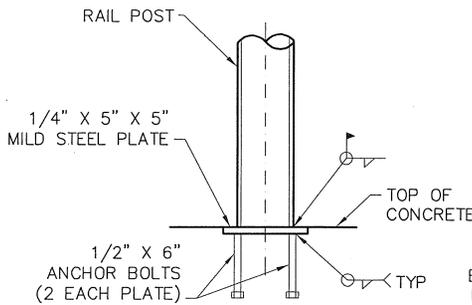
140



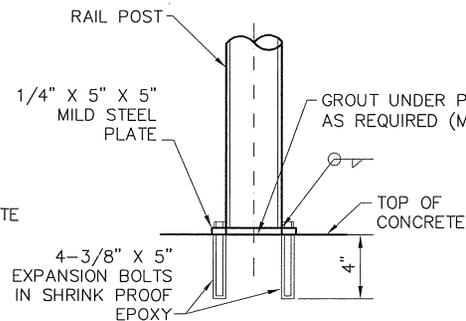
NOTES:

1. POSTS AND RAILS SHALL BE 1.5" SCHEDULE 40 HOT-DIPPED GALVANIZED STEEL PIPE ASTM A 53, GRADE A (2.72 #/LF, 1.9" O.D.). GALVANIZING SHALL BE IN ACCORDANCE WITH SECTION 771.
2. PAINT RAIL PER MAG SPECIFICATIONS SECTION 530 WHEN REQUIRED BY PLANS. SHOP PRIME WITH RUST INHIBITING PRIMER (FIELD REPAIR PRIMER AS NEEDED). COLOR PER PLANS.
3. VERTICAL POSTS TO BE EVENLY SPACED.
4. REMOVE ALL SHARP EDGES.
5. INSTALL SAFETY RAIL AS REQUIRED BY PLANS OR SPECIFICATIONS.

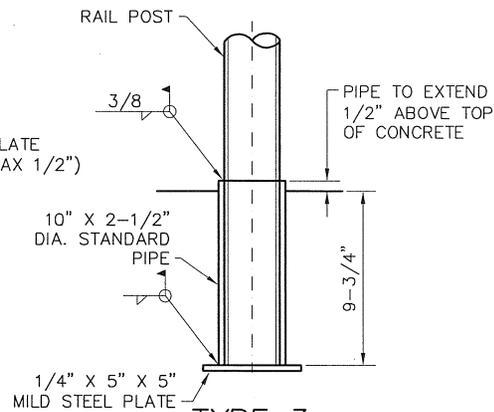
ELEVATION



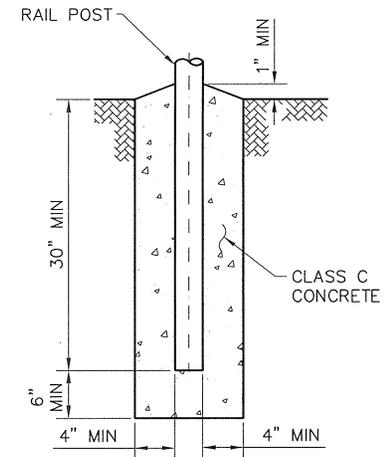
TYPE 1
ANCHOR PLATE DETAIL



TYPE 2
EXPANSION BOLT DETAIL



TYPE 3
PIPE SLEEVE DETAIL



TYPE 4
GROUND INSTALLATION DETAIL

DETAIL NO.

145



MARICOPA
ASSOCIATION of
GOVERNMENTS

STANDARD DETAIL
ENGLISH

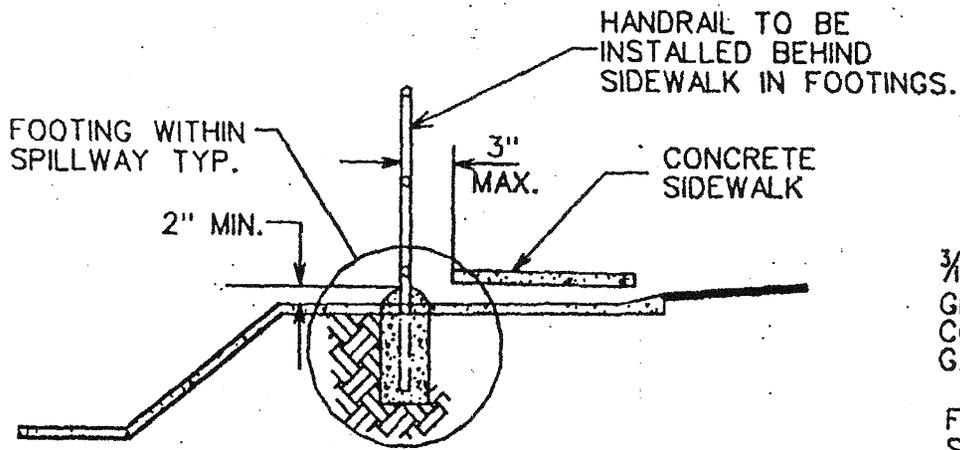
SAFETY RAIL

REVISED

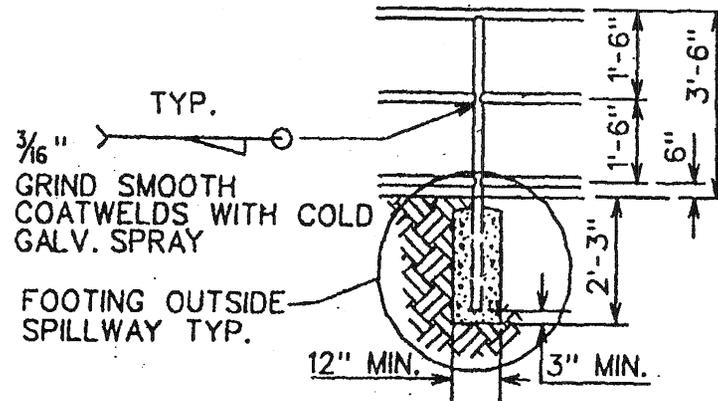
01-01-2005

DETAIL NO.

145

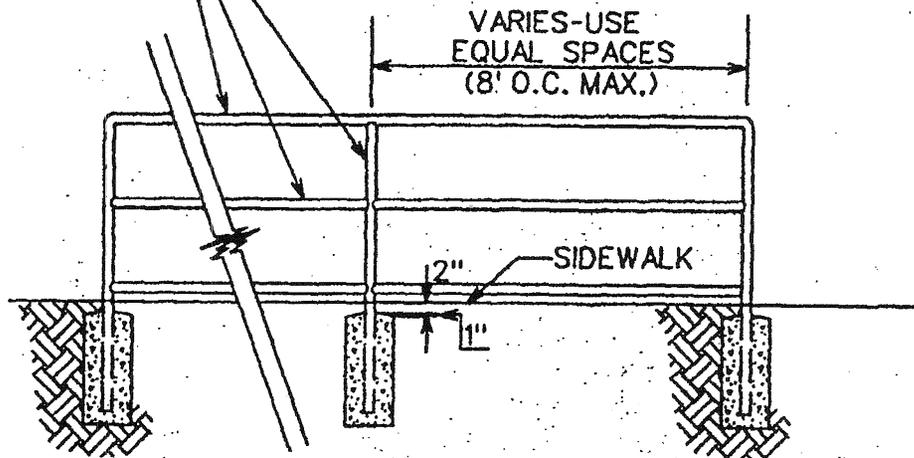


SECTION
NTS

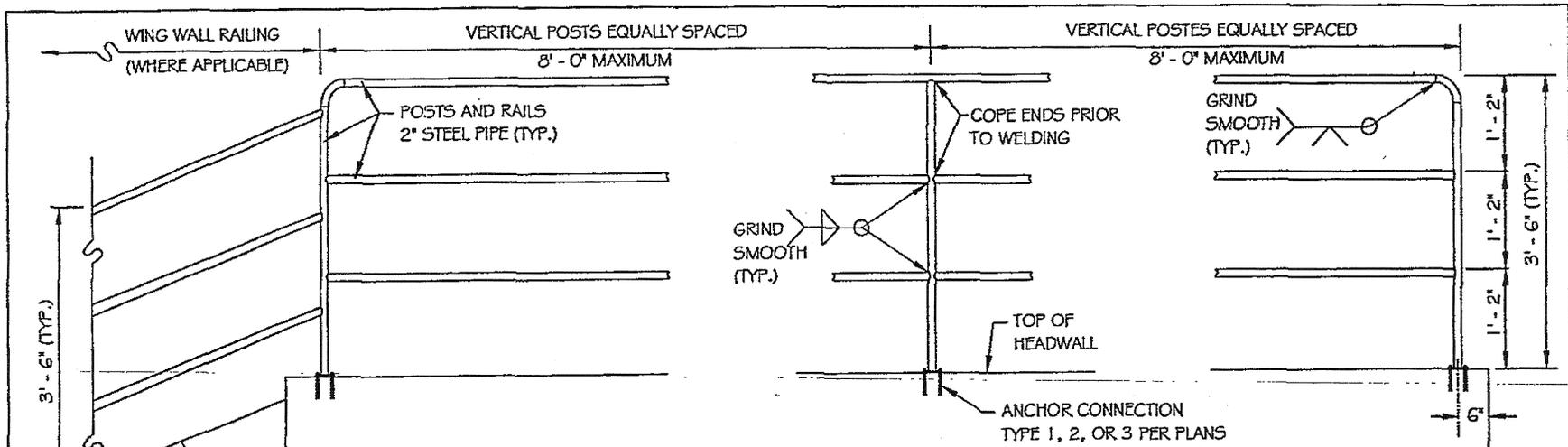


DETAIL
NTS

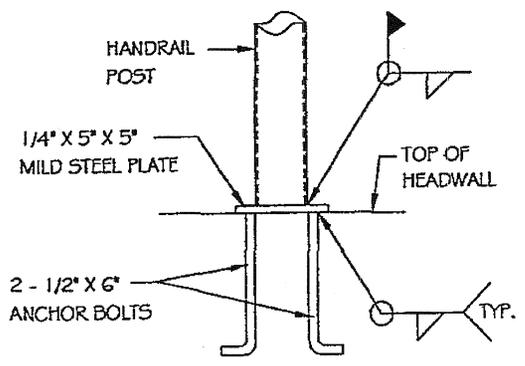
2"X2"X1/8" SQ. STEEL TUBING,
SCH. 40 (ASTM 53)-GRIND WELDS
SMOOTH. SHOP PRIME W/RUST
INHIBITING PRIMER. FIELD REPAIR
PRIMER AS NEEDED. FINISH PAINT
TO BE DESERT BEIGE COLOR.
(SUBMITTALS REQUIRED)



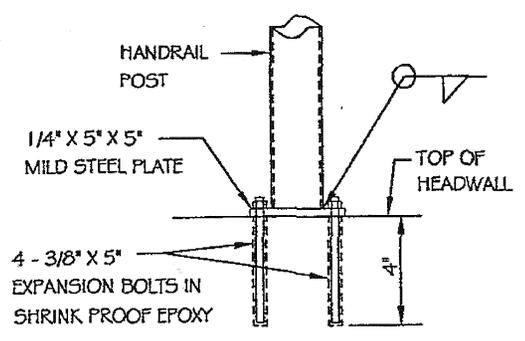
HANDRAIL ELEVATION
NTS



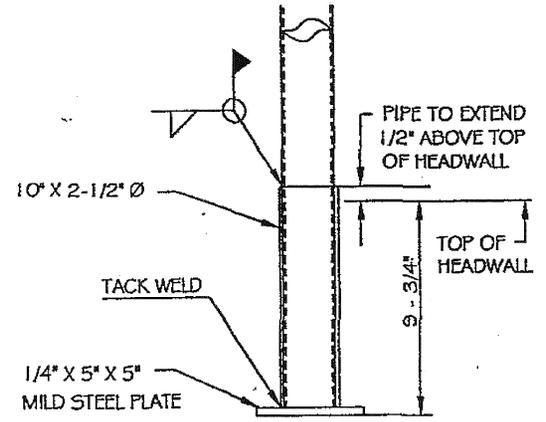
ELEVATION



TYPE 1
ANCHOR PLATE DETAIL



TYPE 2
EXPANSION BOLT DETAIL



TYPE 3
PIPE SLEEVE DETAIL

NOTES:

1. PAINT HANDRAIL PER ADOT SPECIFICATIONS. COLOR PER PLANS.
2. VERTICAL POSTS TO BE EVENLY SPACED.

DETAIL NO.
C-107
NTS

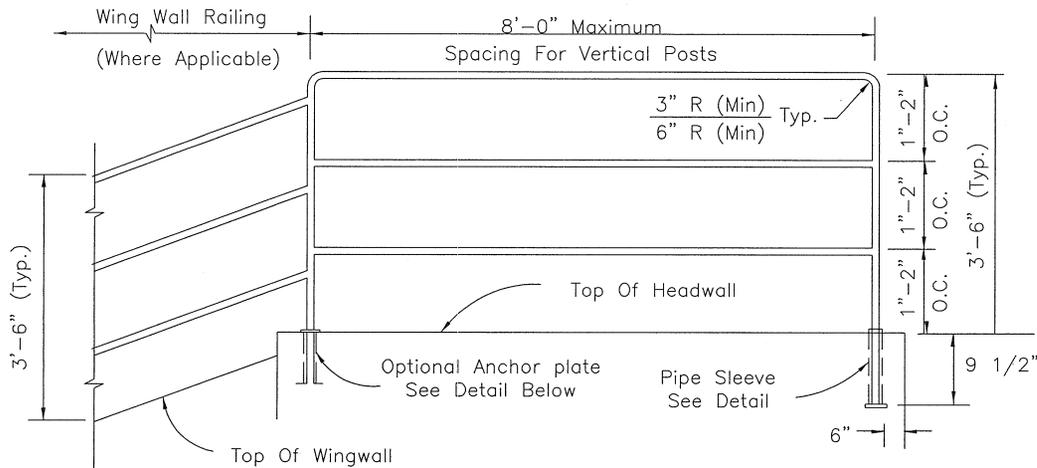


CITY OF
CHANDLER
STANDARD
DETAIL

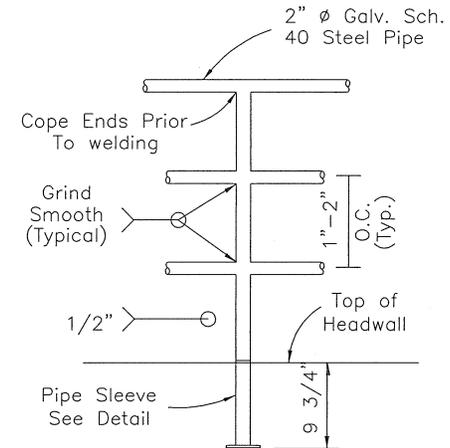
GALVANIZED HANDRAIL

APPROVED: *D. D. Patton*
CITY ENGINEER
DATE: 11-19-99

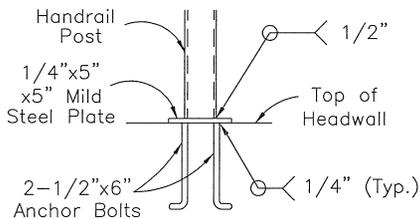
DETAIL NO.
C-107
NTS



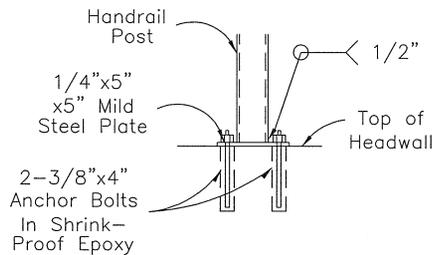
ELEVATION



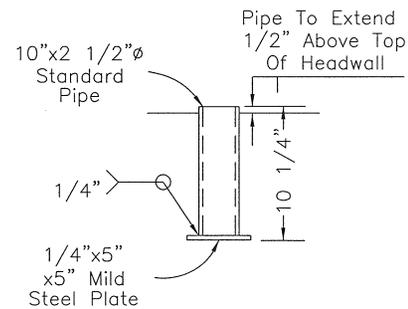
**VERTICAL POST
DETAIL**



**OPTIONAL ANCHOR
PLATE DETAIL #1**



**OPTIONAL ANCHOR
PLATE DETAIL #2**



PIPE SLEEVE DETAIL

**CONSTRUCTION
NOTES**

1. Paint handrail per ADOT Specifications. Color: Beige or as per plans.
2. Vertical posts to be evenly spaced.

DETAIL NO.
G-3560

CITY OF GOODYEAR
STANDARD DETAIL

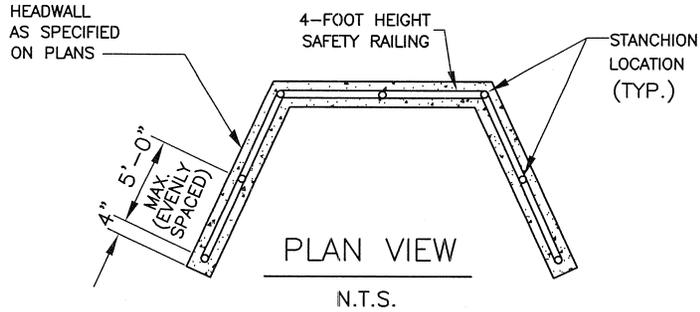
APPROVED BY:
Goodyear Standards and
Policies Committee

7/97

HANDRAIL DETAIL

DETAIL NO.
G-3560

NOTE
 ALL PIPE SHALL BE 1 1/2 SCHEDULE 40
 GALVANIZED PIPE (1.9" O.D., 2.72#/L.F.).

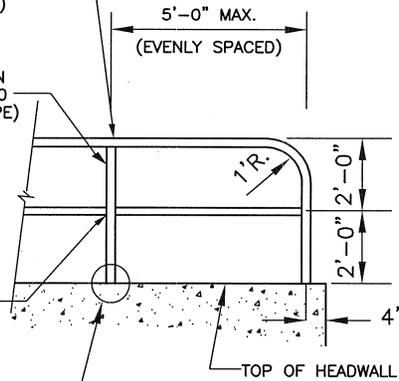


CONSTRUCT 4-FOOT HEIGHT SAFETY
 RAILING (1 1/2" SCHEDULE 40
 GALVANIZED STEEL PIPE)

CONSTRUCT STANCHION
 (1 1/2" SCHEDULE 40
 GALVANIZED STEEL PIPE)

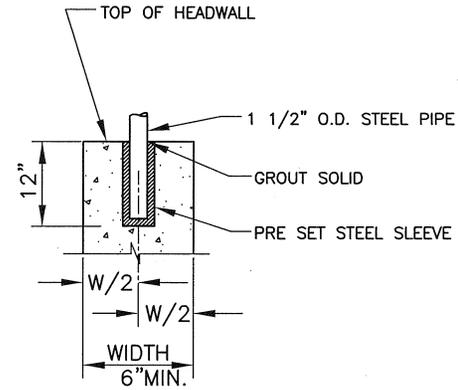
CUT STANCHION SO
 THAT RAILS FIT FLUSH.
 WELD ALL SEAMS AND
 GRIND SMOOTH. COAT
 ALL EXPOSED WELDS
 WITH (1) COAT OF
 PRIMER AND (1) COAT
 OF INDUSTRIAL
 ENAMEL (LIGHT GRAY) PER
 M.A.G. SPEC. SEC. 530

INSTALL PER ATTACHMENT
 DETAIL #1 OR #2
 (CONTRACTOR'S OPTION
 UNLESS OTHERWISE NOTED)



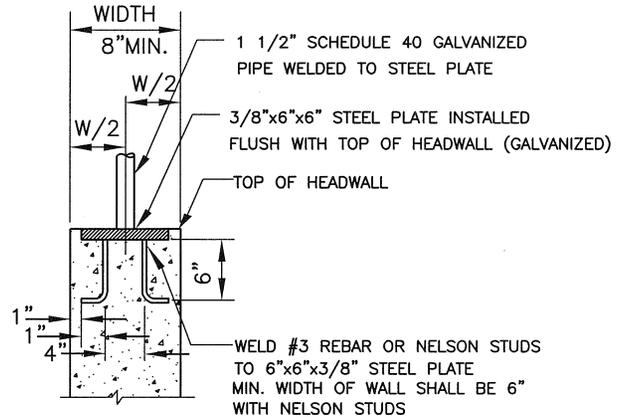
PROFILE VIEW

N.T.S.



ATTACHMENT DETAIL NO. 1

N.T.S.

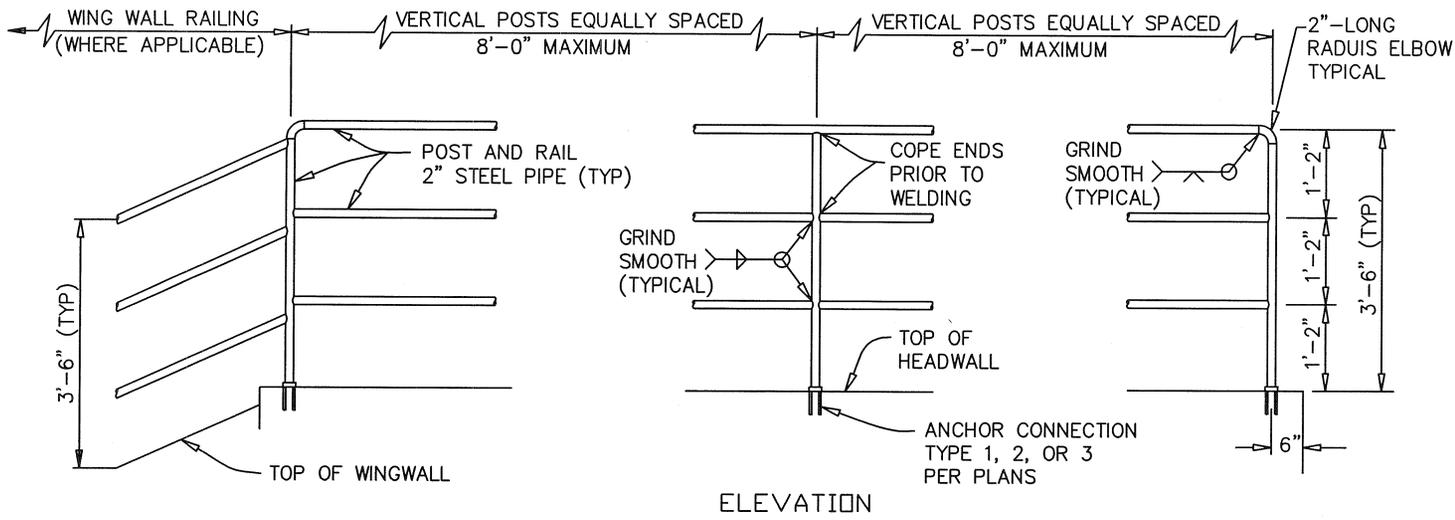


ATTACHMENT DETAIL NO. 2

N.T.S.

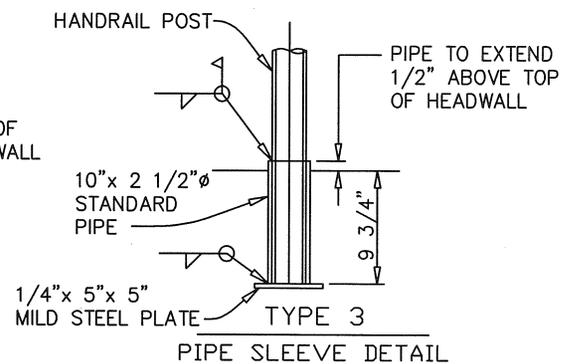
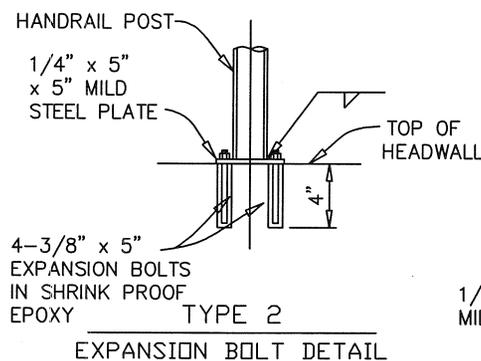
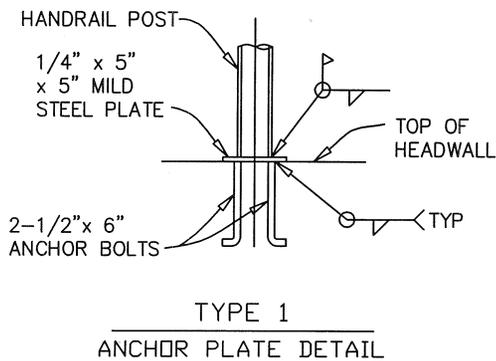
SAFETY RAILING DETAILS

DETAIL NO.
 M-65



CONSTRUCTION NOTES

1. 2" ROUND TUBE STEEL (ASTM 500 GRADE B1 GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 WELD 3/8" THICK ALL AROUND. SHOP PRIME WITH RUST INHIBITING PRIMER (FIELD REPAIR PRIMER AS NEEDED).
2. PAINT HANDRAIL PER MAG SPECIFICATIONS SECTION 530. COLOR PER PLANS.
3. VERTICAL POSTS TO BE EVENLY SPACED.
4. HANDRAILS TO BE PLACED ON ALL HEADWALLS AND AT THE BACK OF SCUPPERS.



DETAIL NO.

P1173



City of Phoenix
STANDARD DETAIL

HANDRAIL DETAIL

APPROVED

Mario Saldamando
CITY ENGINEER

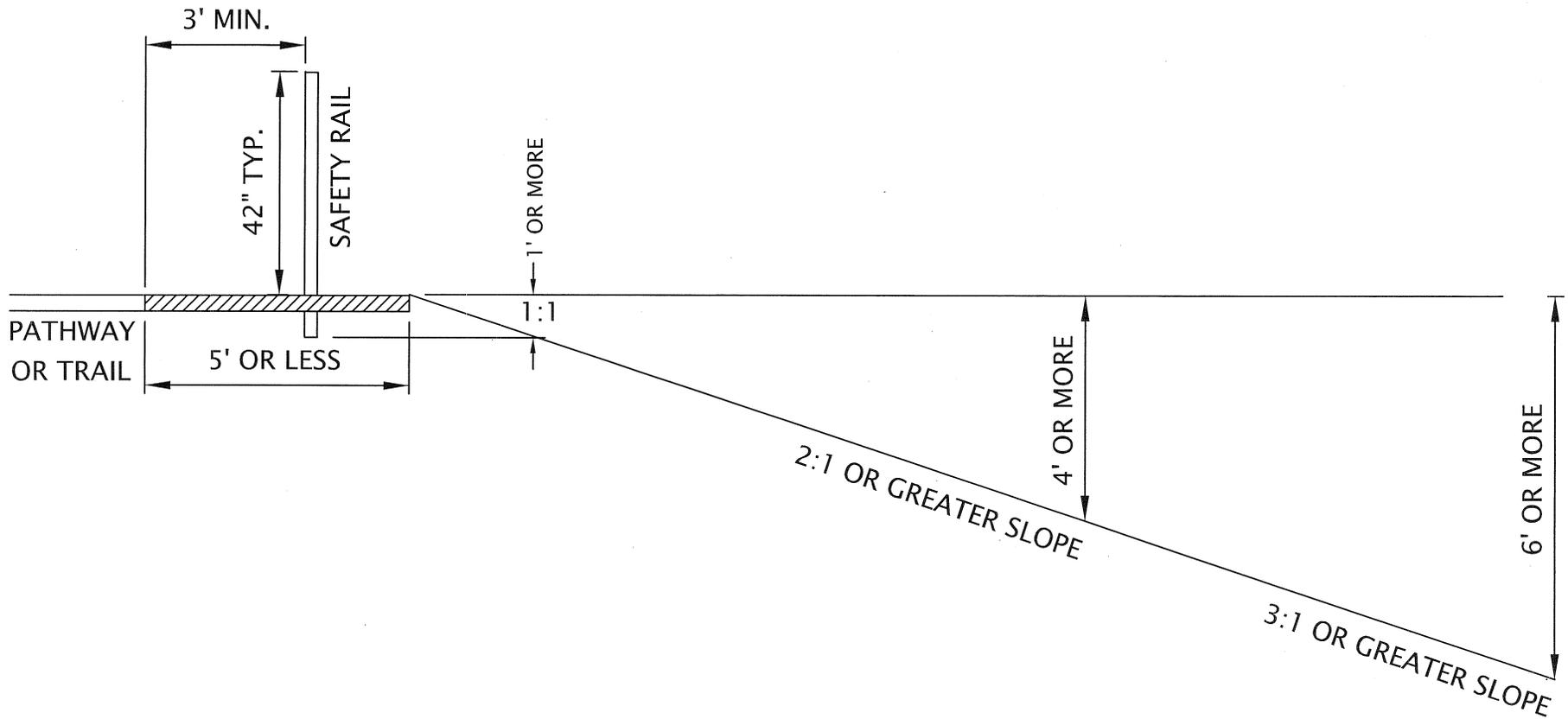
07-19-04
DATE

DETAIL NO.

P1173

CONDITIONS WHERE SAFETY RAILINGS ARE REQUIRED

(REFER TO HANDRAIL DETAIL P1173 FOR ATTACHMENT TO THE GROUND)

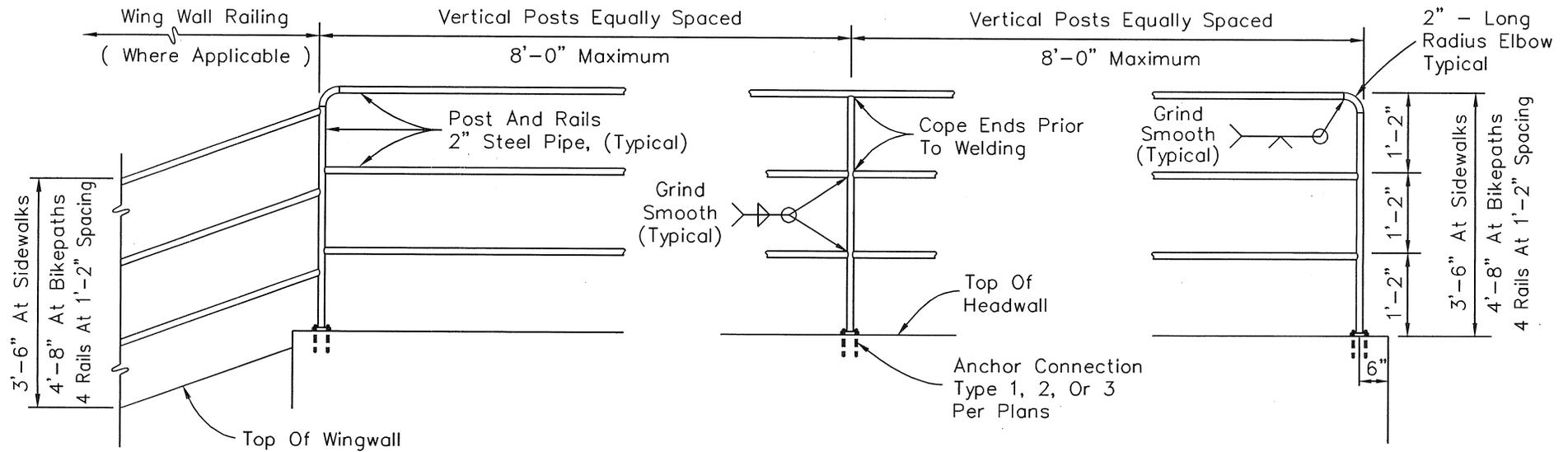


NOTE:

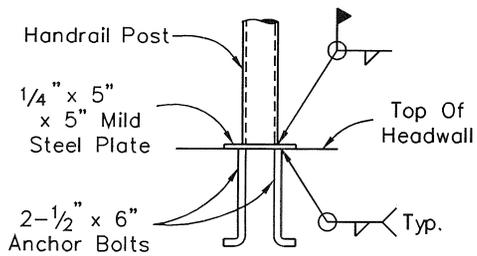
- 1) SAFETY RAILS CAN BE PLACED ANYWHERE BETWEEN THE SLOPE AND THE TRAIL EDGE.
- 2) SAFETY RAILS ARE NEEDED WHERE THE CONDITIONS WILL EXCEED THE ABOVE DEPICTED LIMITS

NOT TO SCALE

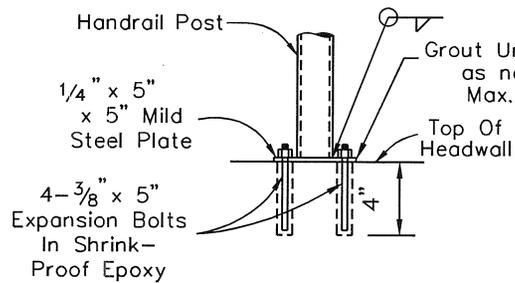
REVISED 3/28/02



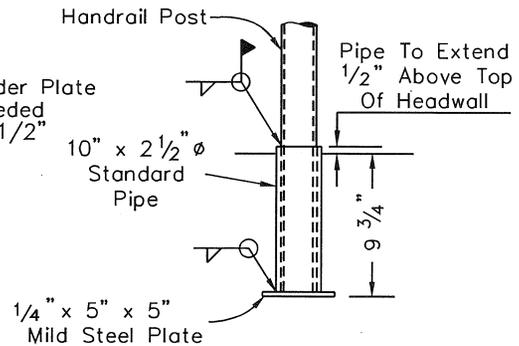
ELEVATION



TYPE 1
ANCHOR PLATE DETAIL



TYPE 2
EXPANSION BOLT DETAIL



TYPE 3
PIPE SLEEVE DETAIL

CONSTRUCTION NOTES

1. Paint handrail per MAG Specifications Section 530. Color per plans.
2. Vertical posts to be evenly spaced.

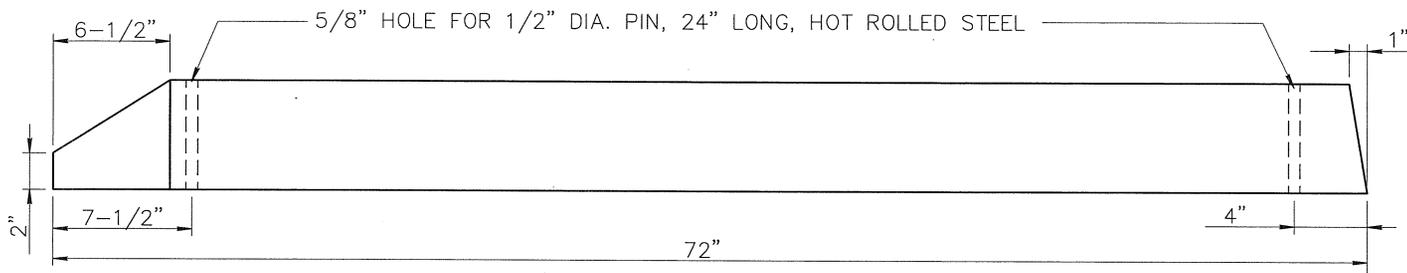
DETAIL NO.
2508

City of Scottsdale
Standard Details

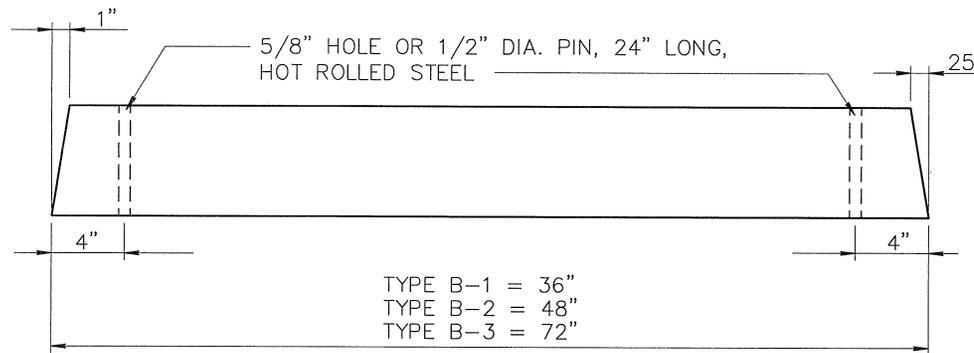
APPROVED BY:
Scottsdale Standards & Specifications Committee

HANDRAIL DETAIL

DETAIL NO.
2508



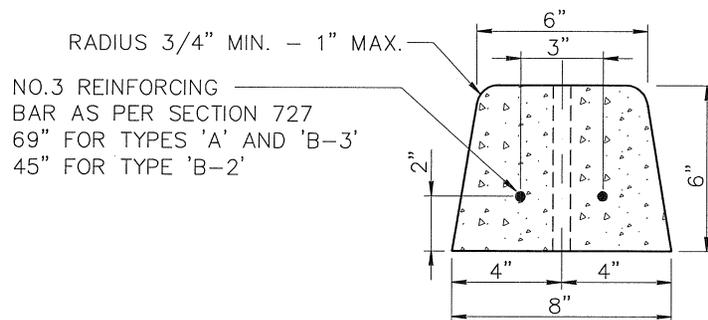
TYPE A



TYPE B-1, B-2, AND B-3

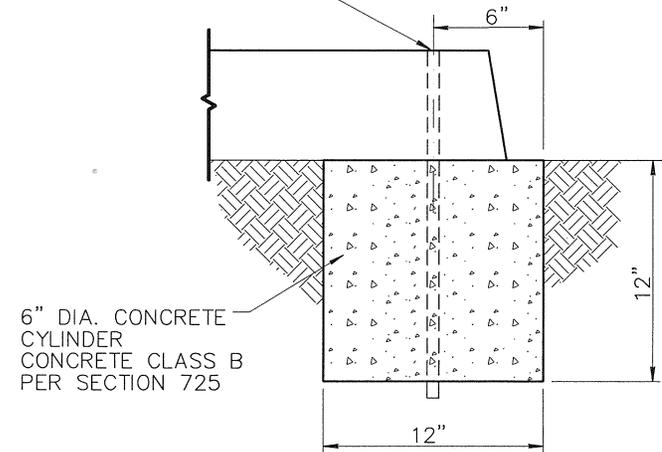
NOTES:

1. DIMENSIONAL AND REINFORCEMENT CHANGES WILL BE PERMITTED UPON PRIOR WRITTEN APPROVAL OF THE ENGINEER.
2. UNLESS OTHERWISE NOTED, CONCRETE SHALL BE CLASS 'A' PER SECTION 725.



TYPICAL SECTION

1/2" DIA. PINS -
24" LONG, HOT
ROLLED STEEL



SAFETY CURB
INSTALLATION ON DIRT

DETAIL NO.

150



**STANDARD DETAIL
ENGLISH**

PRECAST SAFETY CURB

REVISED

DETAIL NO.

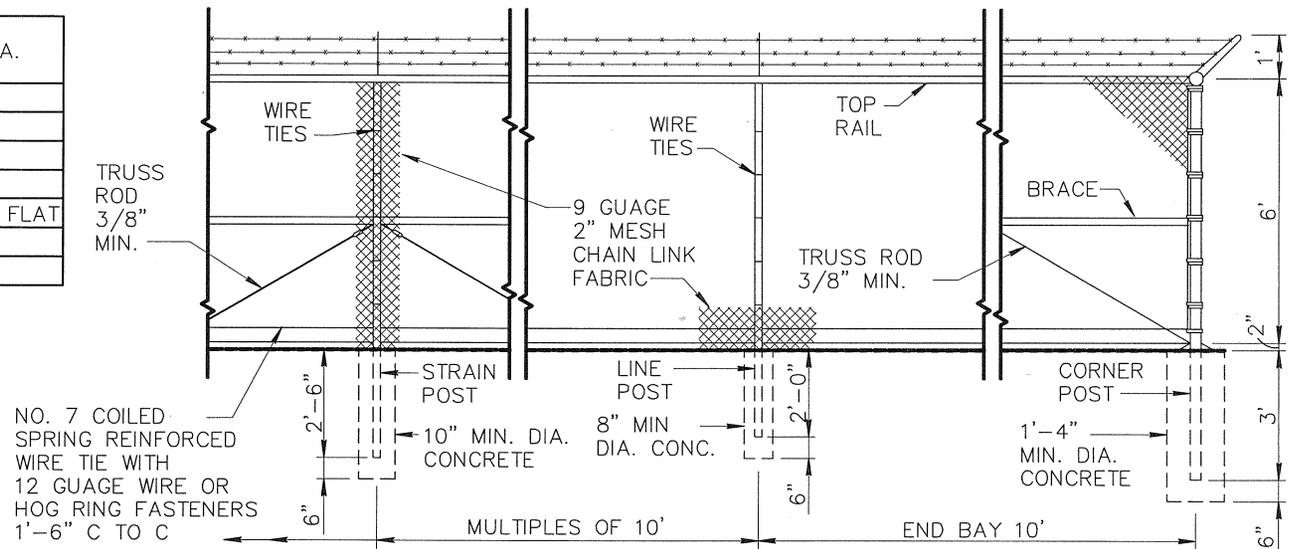
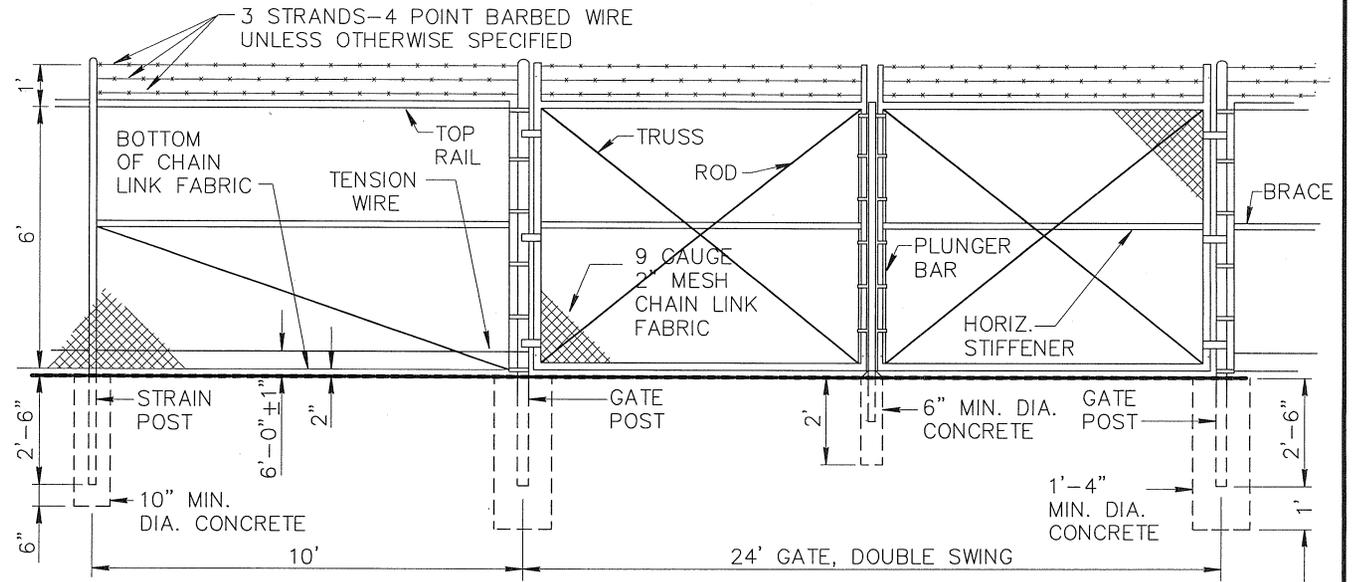
150

NOTES

1. ALL CONCRETE SHALL BE CLASS 'C' PER SECT. 725.
2. FITTINGS NOT SPECIFICALLY DETAILED SHALL BE HEAVY DUTY DESIGN.
3. STRAIN POSTS SHALL BE SPACED AT 500' MAXIMUM SPACING.
4. BOTH CORNER AND STRAIN POSTS SHALL HAVE STRAIN PANELS.
5. ALL POSTS SHALL BE CAPPED.
6. MEMBER SIZES SHALL BE THE FOLLOWING:

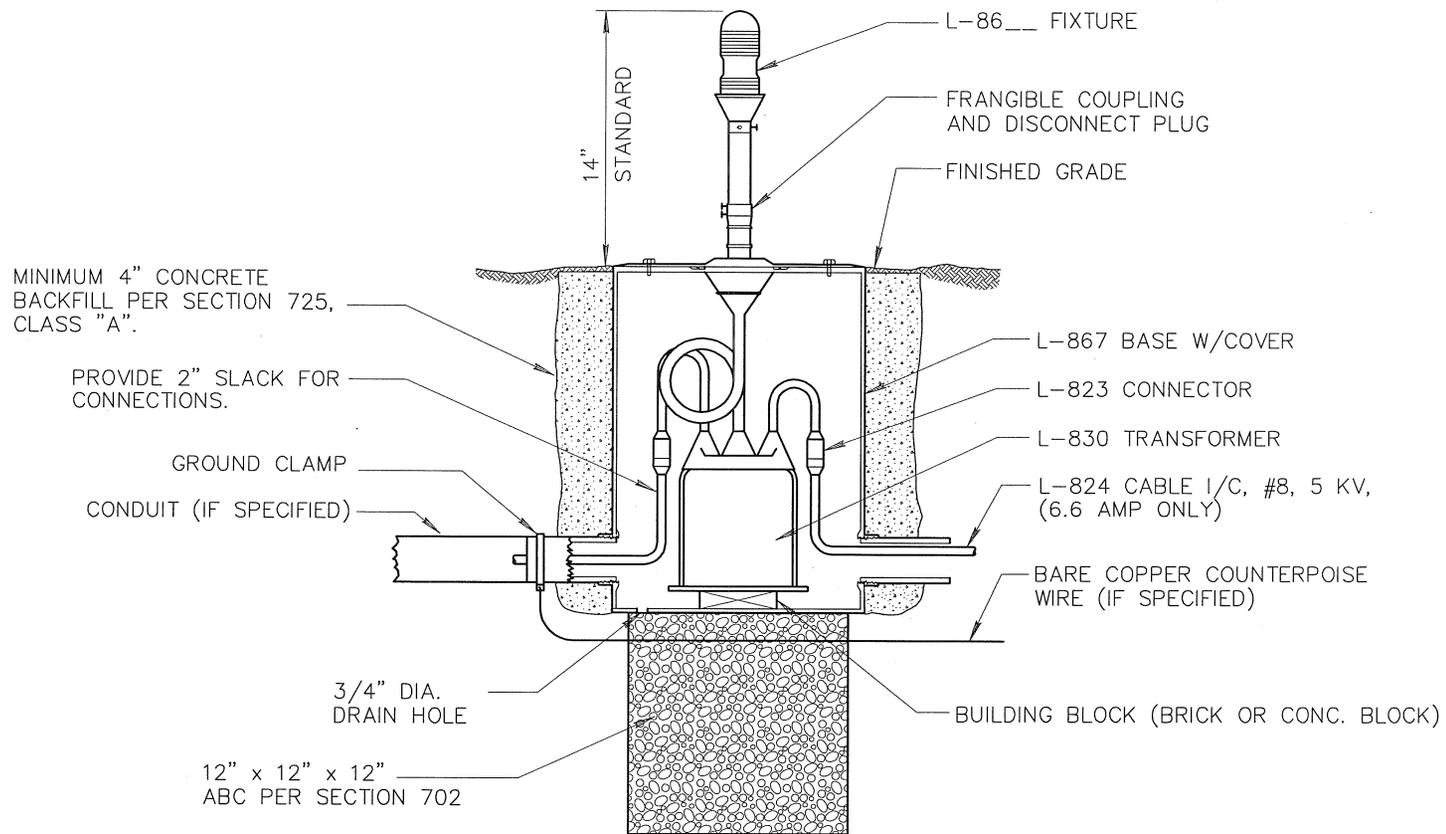
MEMBER	AISC SIZE	OUTSIDE DIA.
CORNER POST	2-1/2"	2.875"
LINE POST	1-1/2"	1.900"
STRAIN POST	1-1/2"	1.900"
BRACE	1-1/4"	1.666"
STRETCH BAR	3/16"x3/4" FLAT	3/16"x3/4" FLAT
GATE POST	3-1/2"	4.000"
TOP RAIL	1-1/4"	1.666"

7. CONSTRUCTION AND MATERIALS SHALL CONFORM TO SECT. 420 AND 722, RESPECTIVELY. SEE TABLE 722 FOR WEIGHTS OF MEMBERS.



NOTE:

L-xxx NUMBERS DESIGNATES FAA SPECIFICATION NO.



DETAIL NO.

170



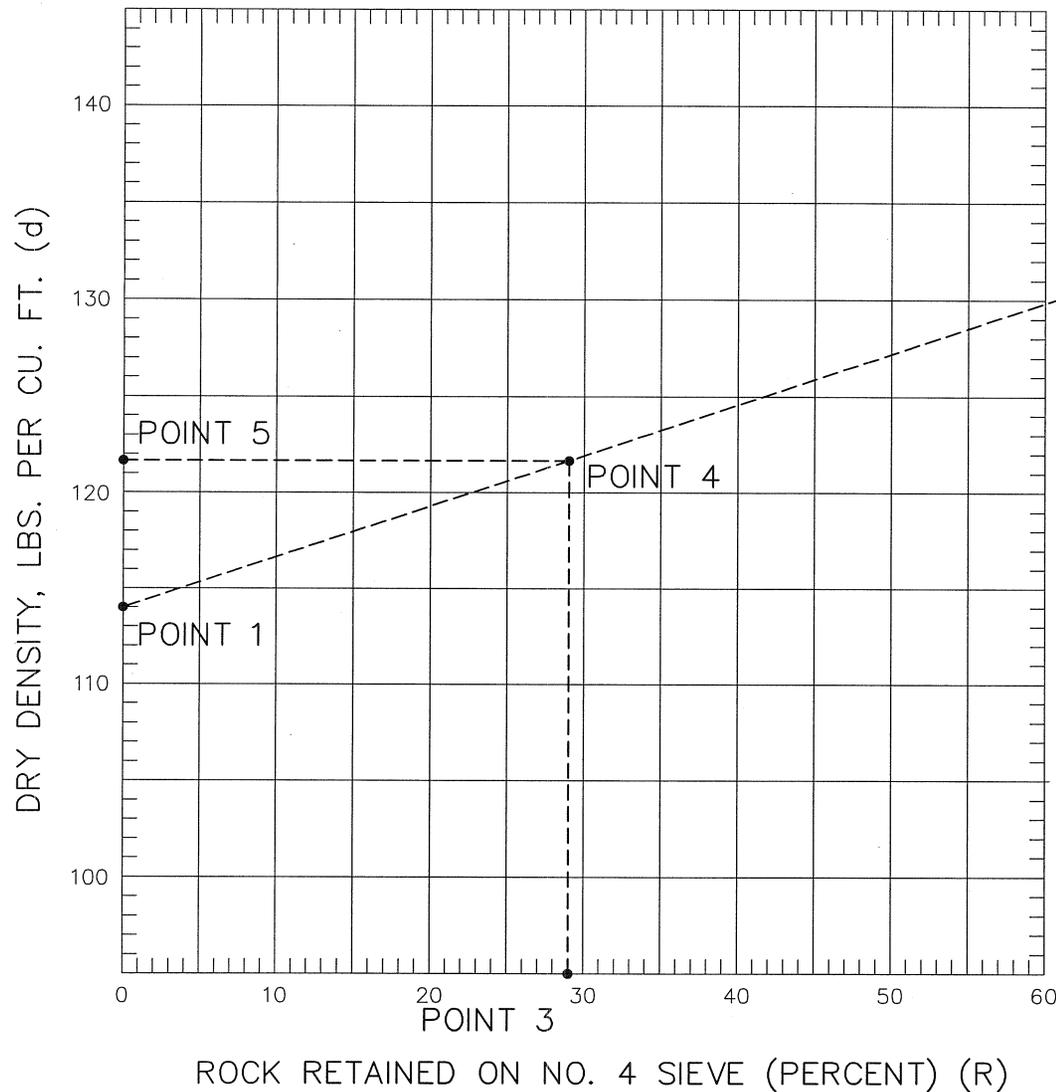
STANDARD DETAIL
ENGLISH

TYPICAL RUNWAY OR TAXIWAY
EDGE LIGHTING DETAIL

REVISED

DETAIL NO.

170



USE THE FOLLOWING FORMULA TO

DETERMINE MAXIMUM DENSITY:

$$D = \frac{(100-R)d + 0.9RS \times 62.4}{100}$$

OR USE THE GRAPH

AS SHOWN BELOW:

WHERE:

D = DRY DENSITY OF SAMPLE CONTAINING R PERCENT ROCK, LBS. PER CU. FT.

R = PERCENT ROCK RETAINED ON A NO. 4 SIEVE.

d = DRY DENSITY OF PORTION PASSING NO. 4 SIEVE LBS. PER CU. FT.

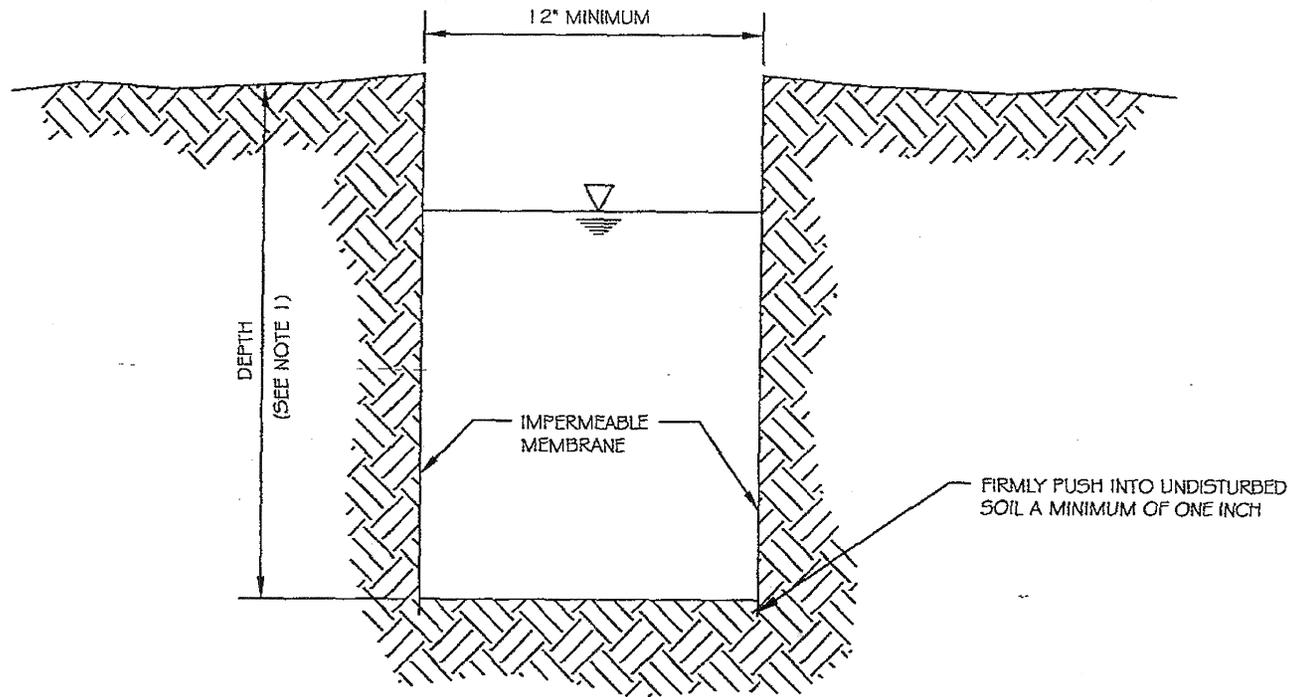
S = BULK SPECIFIC GRAVITY OF ROCK.

EXAMPLE:

GIVEN A MATERIAL THAT HAS A DRY DENSITY OF 114 LBS PER CU. FT., A SPECIFIC GRAVITY OF 2.5, AND GIVEN THAT ONLY 29% OF A PORTION PASSES THROUGH A NO. 4 SIEVE, WHAT IS THE DRY DENSITY OF THE SAMPLE ?

SOLUTION:

- STEP 1: PLOT THE DRY DENSITY OF MATERIAL PASSING A NO. 4 SIEVE (d) ON LEFT SIDE OF GRAPH (POINT 1) (EXAMPLE: POINT 1 SHOWS d = 114 LBS. PER. CU.FT.);
- STEP 2: PLOT THE BULK SPECIFIC GRAVITY OF ROCK (S) ON RIGHT MONOBAR (POINT 2) (EXAMPLE POINT 2 SHOWS S = 2.5);
- STEP 3: CONNECT POINTS 1 AND 2 TO FORM LINE 1-2;
- STEP 4: PLOT THE PERCENT OF ROCK RETAINED ON A NO. 4 SIEVE ON THE BOTTOM OF THE GRAPH (POINT 3); (EXAMPLE: POINT 3 SHOWS R = 29 PERCENT)
- STEP 5: DRAW HORIZONTAL LINE FROM POINT 4 TO LEFT SIDE OF GRAPH (POINT 5);
- STEP 6: READ POINT 5 FOR THE VALUE OF THE DRY DENSITY (D). (EXAMPLE: POINT 5 SHOWS D = 121.6 LBS. PER CU.FT.)



NOTES:

1. THE TEST SHALL BE PERFORMED THREE FEET BELOW NATURAL GROUND OR AT THE ELEVATION OF THE BOTTOM OF THE RETENTION BASIN, WHICHEVER IS LOWER.
2. THE TEST HOLE SHALL BE PREWETTED FOR 24 HOURS, OR UNTIL A STABILIZED PERCOLATION RATE IS ACHIEVED.
3. THE TEST HOLE SHALL BE REFILLED DURING THE PREWETTING PERIOD AS NECESSARY TO MAINTAIN A FREE WATER SURFACE. IF AT ANY TIME A FREE WATER SURFACE IS NOT MAINTAINED, THE PREWETTING PROCESS SHALL BE RESTARTED.
4. THE TEST RESULTS ARE TO BE EXPRESSED IN THE UNITS OF CUBIC FEET PER HOUR PER SQUARE FOOT OF PERCOLATION AREA.

DETAIL NO.

C-109



CITY OF
CHANDLER
STANDARD
DETAIL

**SHALLOW PIT
PERCOLATION TEST REQUIREMENTS**

APPROVED:

Byron D. Keller
CITY ENGINEER

DATE:

11-19-99

DETAIL NO.

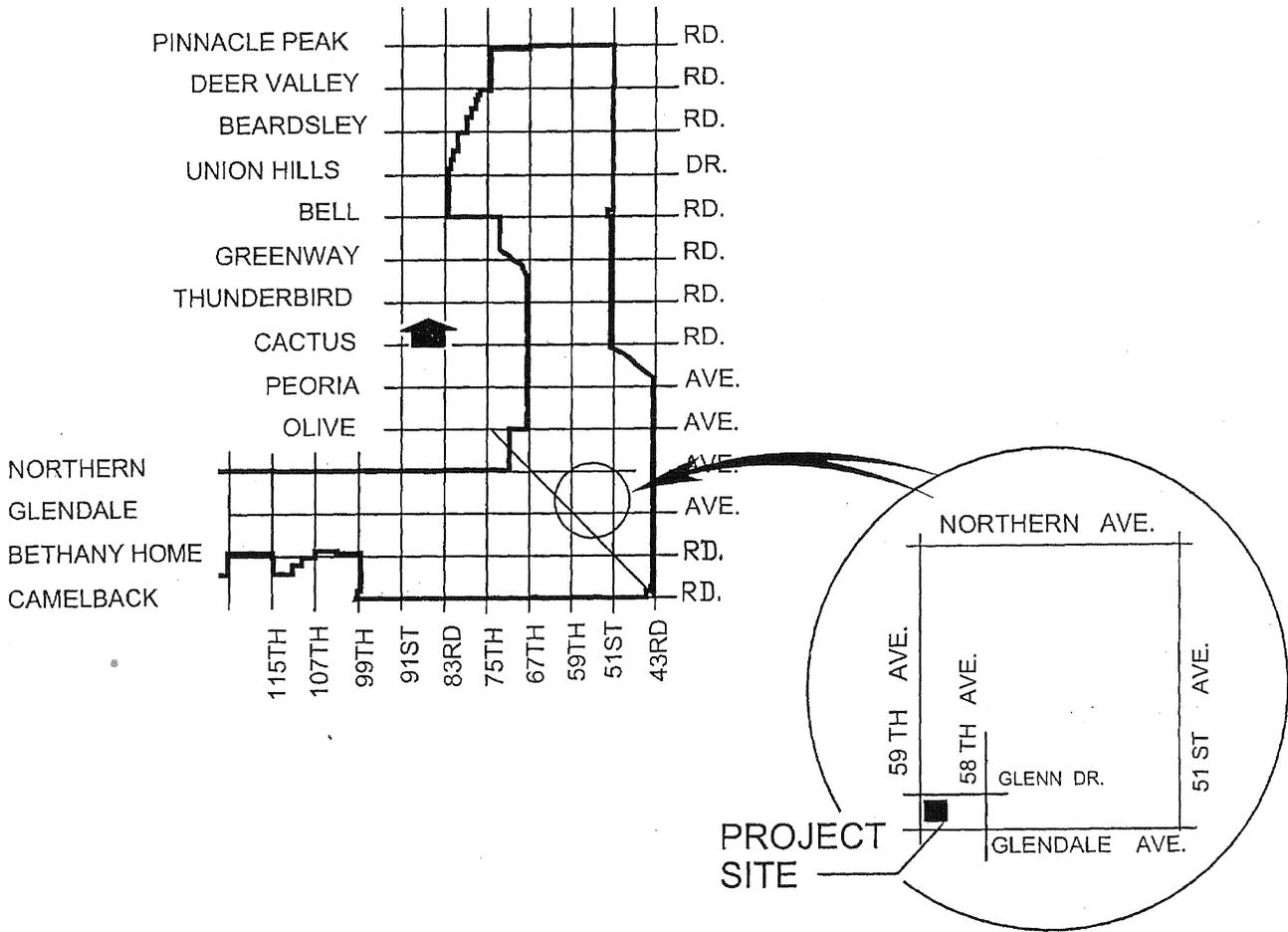
C-109

STANDARD DETAIL G-201

CITY OF GLENDALE
ENGINEERING



TYPICAL VICINITY MAP



REVISED: JUNE 2002

PREVIOUS:

STANDARD DETAIL G-202

CITY OF GLENDALE
ENGINEERING



TYPICAL APPROVAL BLOCKS

REQUIRED ON: C.I.P. COVER SHEET	APPROVED: _____ DATE _____ CITY ENGINEER			
APPROVED: _____ DATE _____ TRANSPORTATION DIRECTOR				
APPROVED: _____ DATE _____ LANDSCAPE ARCHITECT				
REQUIRED ON: STORM WATER POLLUTION PREVENTION PLANS COVER SHEET	REVD. BY: _____ DATE _____ LAND DEVELOPMENT ENGINEER			
REQUIRED ON: ALL PRIVATE COVER SHEETS. (1) NOT REQUIRED ON UTILITIES, GRADING & DRAINAGE PLANS	BY: _____ DATE _____ LAND DEVELOPMENT ENGINEER			
(1) _____ DATE _____ CITY TRAFFIC ENGINEER				
REQUIRED ON: ALL COVER SHEETS AS-BUILT CERTIFICATION: FOR PUBLIC AND PRIVATE PLANS	<u>AS-BUILT CERTIFICATION</u> I CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. NAME _____ DATE _____ REGISTRATION NO. _____ DATE _____ REVD. BY: _____ CONSTRUCTION ENGINEERING (GRADING & DRAINAGE) REVD. BY: _____ CONSTRUCTION ENGINEERING			
REQUIRED ON: WATER & SEWER, COVER SHEETS FOR PUBLIC & PRIVATE PLANS	BY: _____ DATE _____ MARICOPA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES			
DRYWELL CERTIFICATION: REQUIRED ON PRIVATE GRADING & DRAINAGE COVER SHEET	<u>DRYWELL CERTIFICATION</u> I CERTIFY THAT ALL DRYWELLS HAVE BEEN REGISTERED WITH AND CONFORM TO ALL REQUIREMENTS OF THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THAT A COPY OF ALL DRILLING LOGS HAVE BEEN SUBMITTED TO THE CITY OF GLENDALE. NAME _____ DATE _____ REVD. BY: _____ CONSTRUCTION ENGINEERING (GRADING & DRAINAGE)			
REQUIRED ON: ALL PRIVATE PLAN COVER SHEETS	ARIZONA PUBLIC SERVICE - ELECTRICAL SOUTHWEST GAS CORPORATION - GAS SALT RIVER PROJECT - IRRIGATION SALT RIVER PROJECT - ELECTRICAL U. S. WEST COMMUNICATION TELE. CO. CABLE TV (OTHER) * * AGENCIES ALSO REQUIRING PERMITS WHEN INVOLVED ARE: MARICOPA COUNTY HIGHWAY DEPT., A.D.O.T., CITY OF PHOENIX, CITY OF PEORIA, SANTA FE RAILROAD, EL PASO NATURAL GAS, & MARICOPA COUNTY FLOOD CONTROL DISTRICT.	PLANS SUBMITTED TO (NAME)	PLANS REVIEWED BY (NAME)	PERMIT RECEIVED DATE

STANDARD DETAIL G-203

CITY OF GLENDALE ENGINEERING

PERMIT FEE FORMS (PRIVATE DEVELOPMENT PLANS)



(To Be Placed On The Cover Sheet Of Utility Plan).

UTILITY PERMIT FEE FOR (1)

TRENCH:	<u> (2) </u>	LF AT \$	_____	/ LF	= \$	_____
WET TAPS:	<u> (2) </u>	EA AT \$	_____	/ EA	= \$	_____
BASE FEE:		EACH PERMIT AT \$	_____	/ EA	= \$	_____
TOTAL PERMIT FEE						= \$ _____

(To Be Placed On The Cover Sheet Of Paving Plan).

STREET IMPROVEMENT PERMIT FEE (PAVING)

PAVING	<u> (2) </u>	SY AT \$	_____	/ SY	= \$	_____
MANHOLE / WATER VALVE ADJUST.	<u> (2) </u>	EA AT \$	_____	/ EA	= \$	_____
STREET LIGHTS	<u> (2) </u>	EA AT \$	_____	/ EA	= \$	_____
BASE FEE:		EACH PERMIT AT \$	_____	/ EA	= \$	_____
TOTAL PERMIT FEE						= \$ _____

(To Be Placed On The Cover Sheet Of Paving Plan).

STREET IMPROVEMENT PERMIT FEE (CONCRETE)

PAVEMENT / BUS BAY	<u> (2) </u>	SY AT \$	_____	/ SY	= \$	_____
CURB & GUTTER	<u> (2) </u>	LF AT \$	_____	/ LF	= \$	_____
SIDEWALK	<u> (2) </u>	SF AT \$	_____	/ SF	= \$	_____
VALLEY GUTTER	<u> (2) </u>	SF AT \$	_____	/ SF	= \$	_____
SIDEWALK RAMPS	<u> (2) </u>	SF AT \$	_____	/ SF	= \$	_____
DRIVEWAY	<u> (2) </u>	SF AT \$	_____	/ SF	= \$	_____
CATCH BASIN/SCUPPER	<u> (2) </u>	EA AT \$	_____	/ SF	= \$	_____
SAW CUTS IN EXIST. CURB	<u> (2) </u>	EA AT \$	_____	/ EA	= \$	_____
BASE FEE:		EACH PERMIT AT \$	_____	/ EA	= \$	_____
TOTAL PERMIT FEE						= \$ _____

(To Be Placed On The Cover Sheet Of Grading/On-site Paving Plan).

GRADING/ON-SITE PAVING PERMIT FEE

ON-SITE PAVING	<u> (2)* </u>	SY AT \$	_____	/ SY	= \$	_____
CATCH BASIN/SCUPPER	<u> (2) </u>	EA AT \$	_____	/ EA	= \$	_____
STORM DRAIN MANHOLE/DRYWELL	<u> (2) </u>	EA AT \$	_____	/ EA	= \$	_____
STORM DRAIN PIPE	<u> (2) </u>	LF AT \$	_____	/ LF	= \$	_____
BASE FEE:		EACH PERMIT AT \$	_____	/ EA	= \$	_____
TOTAL ON-SITE PERMIT FEE						= \$ _____

*(Asphalt and Concrete Combined)

NOTES:

- (1) NOTE TYPE-WATER, SEWER, IRRIGATION (SRP OR PRIVATE), OR OTHER UTILITIES.
(INDIVIDUAL PERMIT FEE SCHEDULE REQUIRED FOR EACH TYPE OF UTILITIES TO BE INSTALLED).
- (2) QUANTITY TAKEN FROM CONSULTANTS APPROVED PLANS.

STANDARD DETAIL G-207

CITY OF GLENDALE
ENGINEERING



RIGHT-OF-WAY IMPROVEMENTS ESTIMATED QUANTITIES

To be placed on the cover sheet or detail sheet of all plans involving improvements within the public right-of-way or within easements dedicated to the City of Glendale.

SANITARY SEWER:

_____ LF of _____ in. Diameter (Pipe Mat'l)
_____ each Manholes

WATER LINES:

_____ LF of _____ in. Diameter (Pipe Mat'l)
_____ each Fire Hydrants

STREET IMPROVEMENTS:

_____ SY of _____ in. Thick Asphalt Paving
_____ SY of _____ in. Thick Aggregate Base
_____ LF of Curb and Gutter
_____ SF of Sidewalk
_____ each Streetlights
_____ SF Concrete Bus Bay

PEORIA DETAIL 199

ALLOWABLE MATERIALS LIST



APPROVALS:

CITY ENGINEER

DATE

UTILITIES DIRECTOR

DATE

Materials allowed for construction in Peoria shall be per Maricopa Association of Governments, Uniform Specifications and Details for Public Works Construction except as provided below.

Water Line Materials:

- a. Ductile Iron Pipe, pressure class 350, is acceptable for water lines sizes six (6) inches through twelve (12) inches in diameter.
- b. Ductile Iron Pipe, pressure class 250 minimum, is acceptable for water lines sixteen (16) inches in diameter.
- c. PVC Pipe, AWWA C-900 pressure class 200, is acceptable for water lines sizes six (6) inches and eight (8) inches in diameter.
- d. Polywrap for Ductile Iron Pipe shall be in conformance with Section 610.5 of the MAG Standard Specifications.

Fire Hydrants: The only allowable makes, models and manufacturers are: AVK, Clow, Kennedy model K81 only, Mueller, and Watrous.

Valves: Shall be resilient seated, solid wedge gate valves meeting AWWA standards and shall open by turning left.

Water Service Materials:

- a. All water services shall be AWWA approved for the specific application and water line material.
- b. "O" rings shall be securely seated and glued to the saddle around 100% of the perimeter of the ring
- c. The Service Saddle shall be correctly sized to the outside diameter of the pipe in conformance with the manufacturer's recommendations.
- d. Saddles for PVC include:

Mueller	Ford	Jones
BR1S	101BS	J965
BR2S	202BS	J969

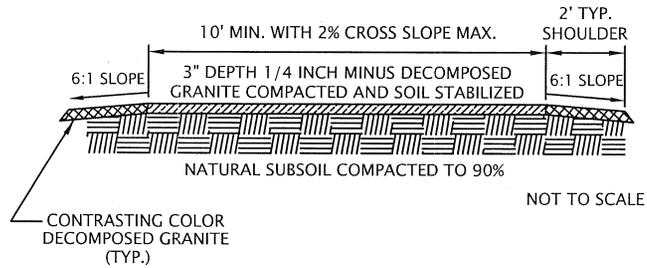
Sewer Line Materials:

- a. Vitrified Clay Pipe which conforms with Section 743 of the MAG Standard Specifications is acceptable for sewer line sizes eight (8) inches through fifteen (15) inches in diameter.
- b. PVC SDR 35 Sewer Pipe which conforms with Section 745 of the MAG Standard Specifications is acceptable for sewer line sizes eight (8) inches through fifteen (15) inches in diameter.

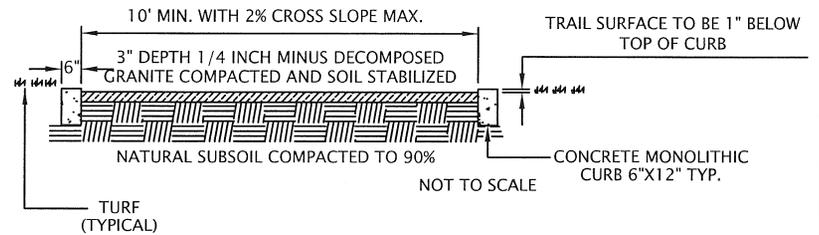
Storm Drain and Irrigation Line Materials:

- a. Materials used within the right-of-way shall be Rubber Gasketted Reinforced Concrete Pipe (RGRCP) per ASTM C76.
- b. The rating shall be provided by the Design Engineer. The minimum rating shall be Class III.

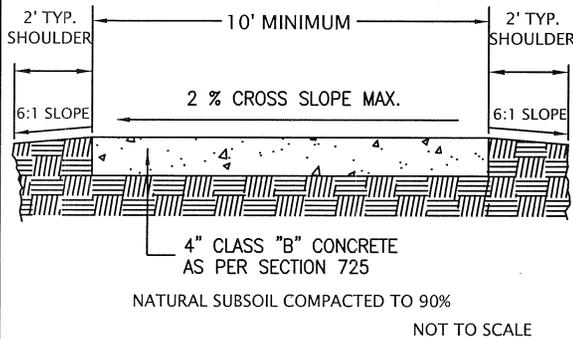
MULTI-USE TRAIL IN DECOMPOSED GRANITE



MULTI-USE TRAIL IN TURF

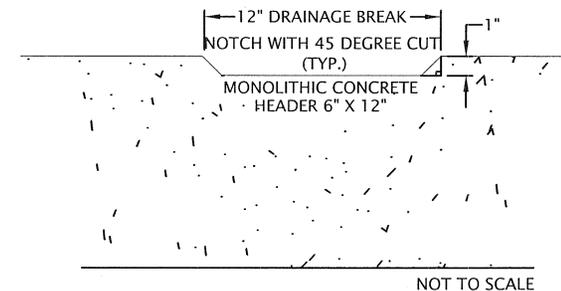


SHARED-USE PATH



DRAINAGE CUTS IN CONCRETE HEADER

(TO ACCOMPANY MULTI-USE TRAIL IN TURF DETAIL)



NOTES:

- 1) NO RUNNING SLOPE SHALL EXCEED 5%. IF RUNNING SLOPE EXCEEDS 5%, TRAIL MUST CONFORM TO AMERICANS WITH DISABILITIES ACT GUIDELINES.
- 2) TRAILS WILL NOT EXCEED 8% SLOPES, SLOPES 5-8% NOT TO EXCEED 30' DISTANCE WITHOUT 5' LANDING. REFER TO U.S. DEPT. OF JUSTICE WEBSITE FOR MORE INFO.
- 3) SHARED-USE TRAIL WILL FOLLOW P1 230 SIDEWALK DETAILS & SPECIFICATIONS FOR CONCRETE SIDEWALK.
- 4) FOR APPROVED STABILIZATION PRODUCTS SEE SPECIFICATIONS IN SECTION 429.2 - SECTION 6.
- 5) MULTI-USE TRAIL TO BE LOCATED WITH AN EXCLUSIVE MINIMUM 20' PUBLIC TRAIL EASEMENT OR A 28' PUBLIC TRAIL EASEMENT THAT INCLUDES A PUE.
- 6) SHARED-USE TRAIL TO BE LOCATED WITHIN A 20' PUBLIC TRAIL SIDEWALK EASEMENT.
- 7) MULTI-USE TRAILS AND SHARED-USE TRAILS LOCATED WITHIN OPEN SPACE OR WASH CORRIDOR WILL BE LOCATED WITHIN A MINIMUM 25' PUBLIC TRAIL EASEMENT.

DETAIL NO.
P1130



City of Phoenix
STANDARD DETAIL

MULTI-USE TRAILS

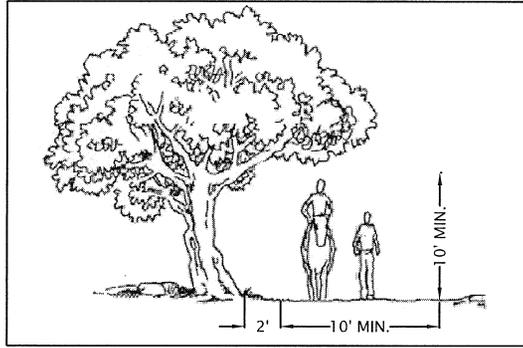
APPROVED

Mario Saldamando
CITY ENGINEER

07-19-04
DATE

DETAIL NO.
P1130

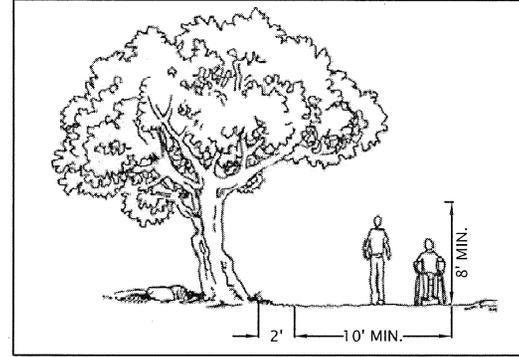
MULTI-USE REQUIRED VERTICAL CLEARANCES



NOT TO SCALE

MULTI-USE TRAILS REQUIRE VEGETATION CLEARED TO A HEIGHT OF 10 FEET, WITHIN 2' OF THE TRAIL EDGE.

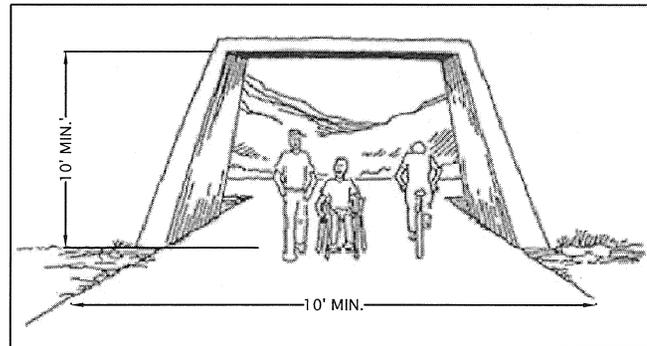
SHARED-USE REQUIRED VERTICAL CLEARANCES



NOT TO SCALE

SHARED USE TRAILS REQUIRE VEGETATION CLEARED TO A HEIGHT OF 8 FEET, WITHIN 2' OF THE TRAIL EDGE.

UNDERPASS CLEARANCES REQUIRED FOR TRAILS



NOT TO SCALE

UNOBSTRUCTED SIGHT LINES SHALL BE MAINTAINED. UNDERPASSES OR BRIDGES MORE THAN 50' IN LENGTH SHALL BE LIT TO AN AVERAGE OF 2 FOOT CANDLES. NATURAL LIGHT SOURCES ARE PREFERRED WHERE DESIGN CAN ACCOMMODATE THIS.

DETAIL NO.

P1131



City of Phoenix
STANDARD DETAIL

VERTICAL CLEARANCE
MULTI-USE, SHARED-USE,
AND UNDERPASS/BRIDGE CLEARANCE

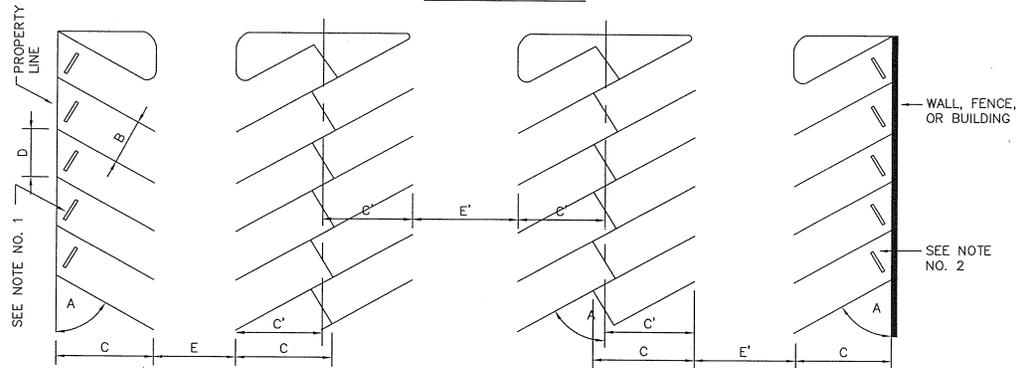
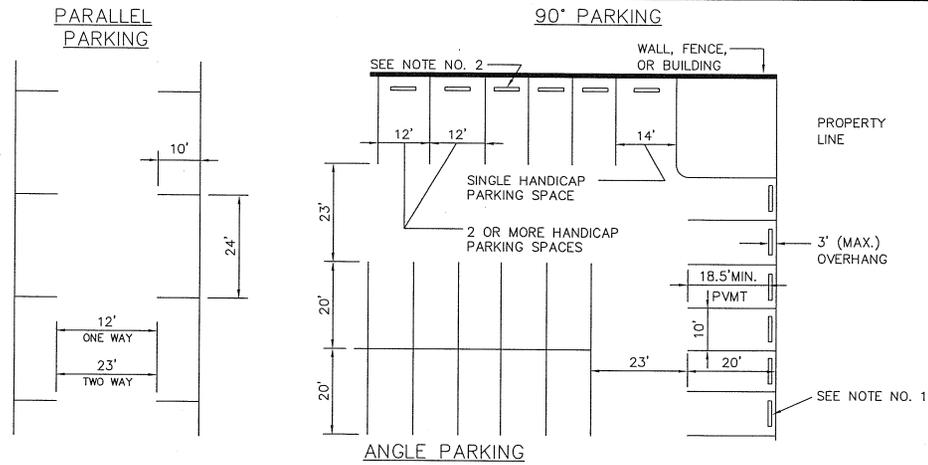
APPROVED

Mano Saldaña
CITY ENGINEER

2-11-02
DATE

DETAIL NO.

P1131



- NOTES: 1. WHERE NO WALL OR BUILDING EXISTS, A 6" HIGH CURB OR BUMPER GUARD IS REQUIRED SO THAT NO PART OF THE VEHICLE EXTENDS OVER OR BEYOND THE PROPERTY LINE. A 6" X 18" CONCRETE CURB IS REQUIRED BETWEEN AREAS OF VEHICULAR ACTIVITY AND PUBLIC RIGHT-OF-WAY, I.E., STREETS AND ALLEYS.
2. WHERE PARKING ABUTS A PERIMETER WALL/FENCE OR BUILDING, A 6" BUMPER GUARD IS RECOMMENDED TO PREVENT VEHICLE OR STRUCTURE DAMAGE.

PARKING ANGLE	STALL WIDTH	STALL	DEPTH	CURB LENGTH	DRIVEWAY WIDTH	
					ONE-WAY	TWO-WAY
30°	10'	19.25'	15'	20'	11'	23'
45°	10'	21.5'	18'	14.2'	13'	23'
60°	10'	22.5'	20'	11.5'	18'	23'

*20' (MIN.) WIDTH WHERE FIRE DEPT. ACCESS IS REQUIRED.

DETAIL NO.
G-3150

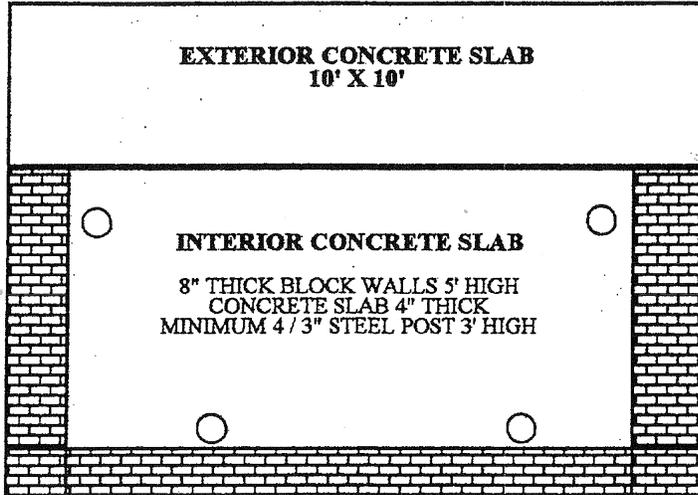
CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee 7/97

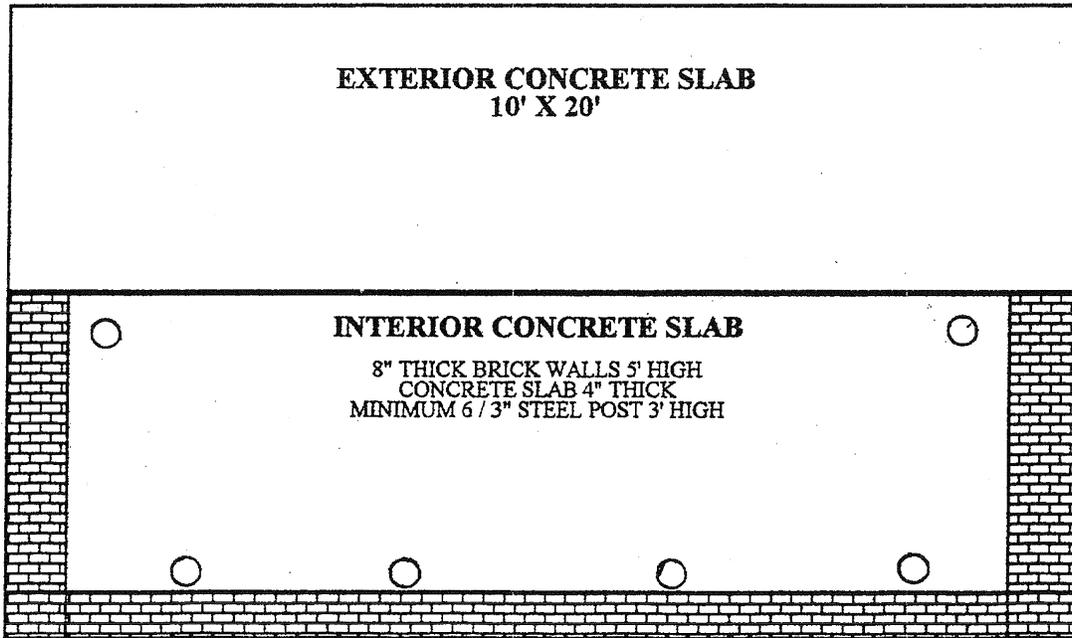
PARKING LOT DIMENSIONS

DETAIL NO.
G-3150

**CITY OF AVONDALE
GARBAGE ENCLOSURE
SPECIFICATIONS
932-1909**



10' X 7' / Outside Dimensions (ONE CONTAINER)



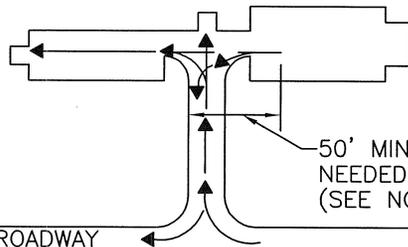
20' X 7' / Outside Dimensions (TWO LARGE PLASTIC OR TWO METAL CONTAINERS)

Stucco block painted to match exterior of building or slump block to match building. Some area's will be required to paint enclosures a light earth tone as specified in the city's building codes. All enclosures are required to have screened gates and a concrete slab poured in front if not installed in conjunction to a paved surface.

All gates shall be constructed of wrought iron with redwood slats. Submittals required.

PLEASE NOTE:
REFUSE VEHICLES
WEIGH APPROX.
27 TONS WHEN
FULL. DRIVEWAYS
MUST BE BUILT
TO SUPPORT THIS
WEIGHT WITHOUT
DAMAGE TO DRIVE

HAMMER HEAD DRIVE



NOTE:
TRUCKS ARE NOT
TO BACK-UP MORE
THAN 50' AFTER
SERVICE TO
DUMPSTER BIN

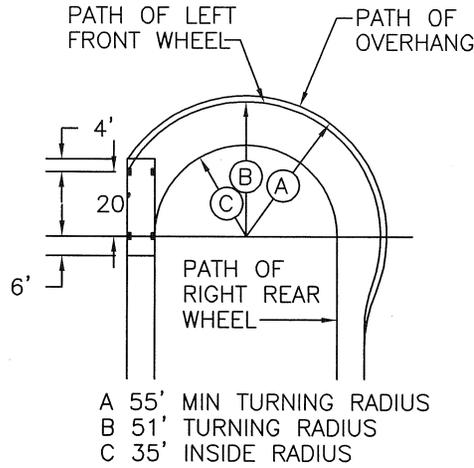
50' MIN. CLEARANCE
NEEDED FOR BACK-UP
(SEE NOTE ABOVE)

PUBLIC ROADWAY

TRUCK ROUTE
DIRECTION

A TYPICAL REFUSE
PICK-UP ROUTE

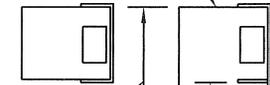
MAX. BIN
DEVIATION
30°



TRUCK CLEARANCE REQUIREMENT

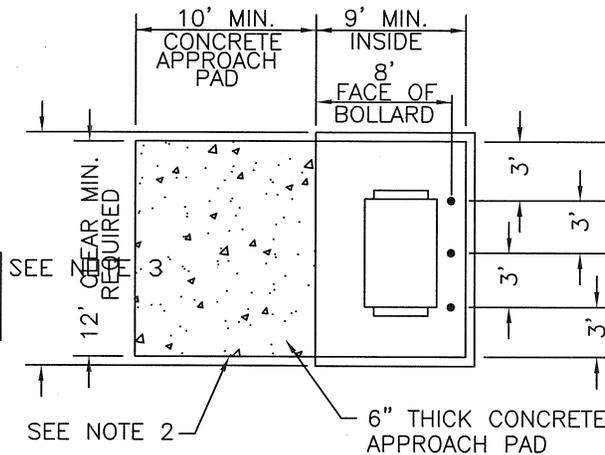
BIN ENCLOSURE
CONFIGURATION
EXAMPLES

SEE NOTE 4

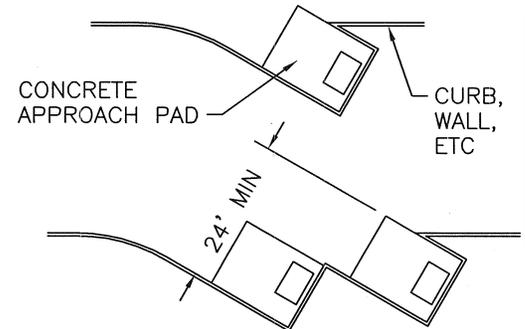


22' MIN WIDTH
ACCEPTABLE
WITHOUT MIDWALL

12' MIN WITH MIDWALL



BIN RECEPTABLE REQUIREMENT



NOTES

1. INSTALL (2) 4" DIA. STEEL POSTS, 3' HIGH (ABOVE GRADE) SET IN A 8" CYLINDER OF CLASS 'C' CONCRETE PER SECT. 725 A MIN OF 2' DEEP.
2. USE CLASS 'A' CONCRETE AS PER SECTION 725.
3. NO AWNINGS OR BUILDING PROJECTIONS ALLOWED IN AREAS TRAVELED BY REFUSE TRUCKS. MINIMUM CLEARANCE OF 14' IS REQUIRED IN DRIVE AND 25' CLEARANCE OVER BIN RECEPTABLE AREA FROM POSTS BACK 30'.
4. RESTAURANTS WHICH ARE EXPECTED TO DO A LARGE VOLUME OF BUSINESS ARE RECOMMENDED A MINIMUM OF (2) DUMPSTERS BINS.

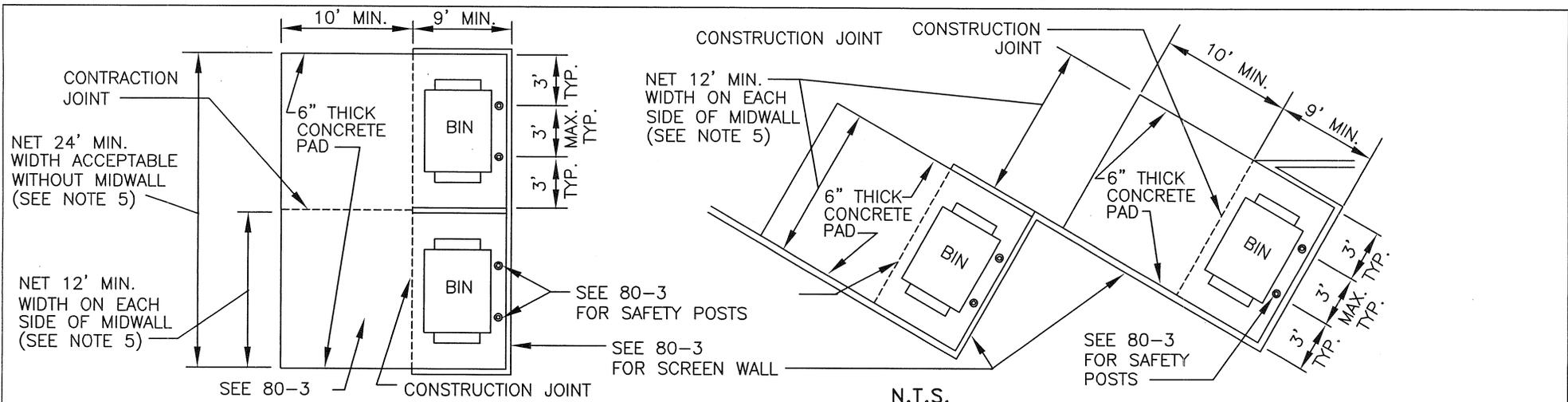
DETAIL NO.
80

TOWN OF GILBERT
STANDARD DETAIL

DRIVEWAY STANDARDS FOR REFUSE
TRUCKS AND DUMPSTER BIN
ENCLOSURE

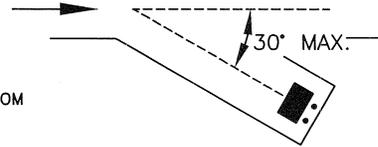
REVISED 1/28/04

DETAIL NO.
80



DOUBLE WIDE BIN ENCLOSURE CONFIGURATIONS

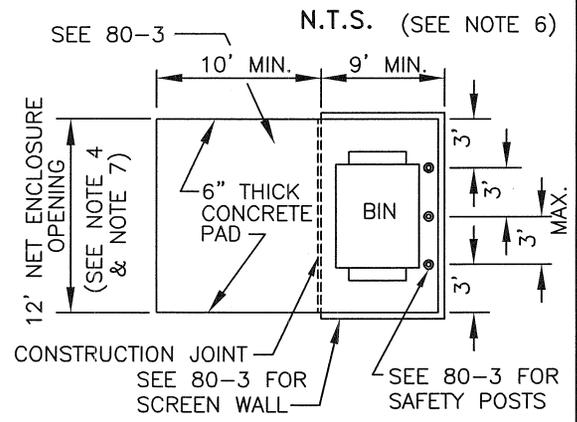
MAX. BIN DEVIATION



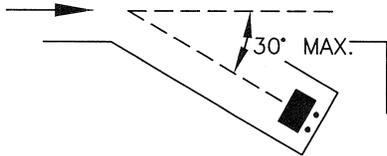
NOTES

- ALL COMMERCIAL PROPERTIES SHALL BE DESIGNED WITH ENCLOSURES TO ACCOMMODATE (1) REFUSE AND (1) RECYCLING ENCLOSURE FOR EVERY 20,000 SQUARE FEET OF BUILDING SPACE. RESTAURANTS WHICH ARE DESIGNED ON A SINGLE PAD SHALL HAVE A MINIMUM (1) REFUSE AND (1) RECYCLING ENCLOSURE. THE ENCLOSURES CAN BE SET UP AS DOUBLES OR SINGLES TO MAXIMIZE THE USE OF THE PROPERTY.
- MULTI-UNIT RESIDENTIAL DEVELOPMENTS SHALL BE DESIGNED WITH EITHER SINGLE OR DOUBLE-WIDE ENCLOSURES FOR TRASH AND AT LEAST ONE TRIPLE-WIDE ENCLOSURE FOR RECYCLING.
- COMPACTORS CAN BE USED IN DEVELOPMENTS WHERE THE EMPLOYEES LOAD AND ACTIVATE THE COMPACTING EQUIPMENT. DEVELOPMENTS THAT ALLOW CUSTOMERS OR RESIDENTS ACCESS TO THE COMPACTING EQUIPMENT WILL NOT BE APPROVED. MARICOPA COUNTY REGULATIONS REQUIRE TWICE PER WEEK COLLECTION IF FOOD WASTE IS PLACED INTO CONTAINERS.
- THE NUMBER OF BIN ENCLOSURES NEEDED DEPENDS ON THE SIZE OF THE DEVELOPMENT. TYPICALLY, TOTAL VOLUME NEEDS CAN BE CALCULATED BASED ON ONE HALF-CUBIC YARD PER LIVING UNIT PER WEEK. FOR EXAMPLE, A DEVELOPMENT WITH 240 UNITS X .5 YARDS = 120 YARDS PER WEEK OR 10 TRASH BINS (6 YARD) SERVICED TWO TIMES PER WEEK (10 X 6 X 2 = 120 YARDS).
- SINGLE-WIDE BIN ENCLOSURES SHALL HAVE A NET ENCLOSURE OPENING OF 12 FEET.
- DOUBLE-WIDE BIN ENCLOSURES SHALL HAVE A NET ENCLOSURE OPENING OF 24 FEET WITHOUT MIDWALLS. ALTHOUGH NOT PREFERRED, DOUBLE WIDE BIN ENCLOSURES CAN BE DESIGNED WITH MIDWALLS WITH A NET ENCLOSURE OPENING OF 12 FEET ON EACH SIDE OF MIDWALL.
- GATES, HINGES, & MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MIN. 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE. AND WITH 8 FOOT DEPTH FROM INSIDE EDGE OF BALLARD TO INSIDE EDGE OF GATE.
- GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.
- BIN ENCLOSURES ARE TO BE ANGLED NO MORE THAN 30 DEGREES FROM THE CENTER LINE OF THE SOLID WASTE COLLECTION VEHICLE ROUTE.
- BINS THAT ARE VISIBLE FROM A PUBLIC ROADWAY SHALL HAVE ENCLOSURE GATES THAT SCREEN THE BINS FROM PUBLIC VIEW.
- BIN ENCLOSURES TO BE A MINIMUM OF 5 FEET FROM ANY PLANNED OR EXISTING STRUCTURE AT ITS CLOSEST POINT. (PER UNIFORM FIRE CODE 1103.2.2).
- STANDARDS FOR SOLID WASTE VEHICLE ACCESS ARE ADDRESSED IN DTL 80
- STANDARDS FOR TRIPLE WIDE ENCLOSURES ARE ADDRESSED IN 80-2.
- STANDARDS FOR BIN ENCLOSURE SCREEN WALLS, SAFETY POSTS, AND GATES ARE ADDRESSED IN 80-3.
- RESTAURANTS MUST PROVIDE A SEPARATE ENCLOSED AREA TO ACCOMODATE THEIR GREASE TRAP. THIS DESIGNATED AREA MUST NOT INTERFERE WITH THE TRASH/RECYCLING COLLECTION.
- SOLID WASTE ENCLOSURES MAY INCLUDE WATER CONNECTIONS & DRAINS TO FACILITATE CLEANING OF DUMPSTERS. THESE SHOULD BE LOCATED TO NOT IMPEDE THE ENCLOSURE OPENING (AND GATING IF REQUIRED). ADDITIONAL ITEMS SUCH AS LANDSCAPING CONTROL BOXES AND LIGHTING MAY BE POSITIONED ON THE OUTSIDE OF THE ENCLOSURE WALLS.

SINGLE-WIDE BIN ENCLOSURE CONFIGURATION

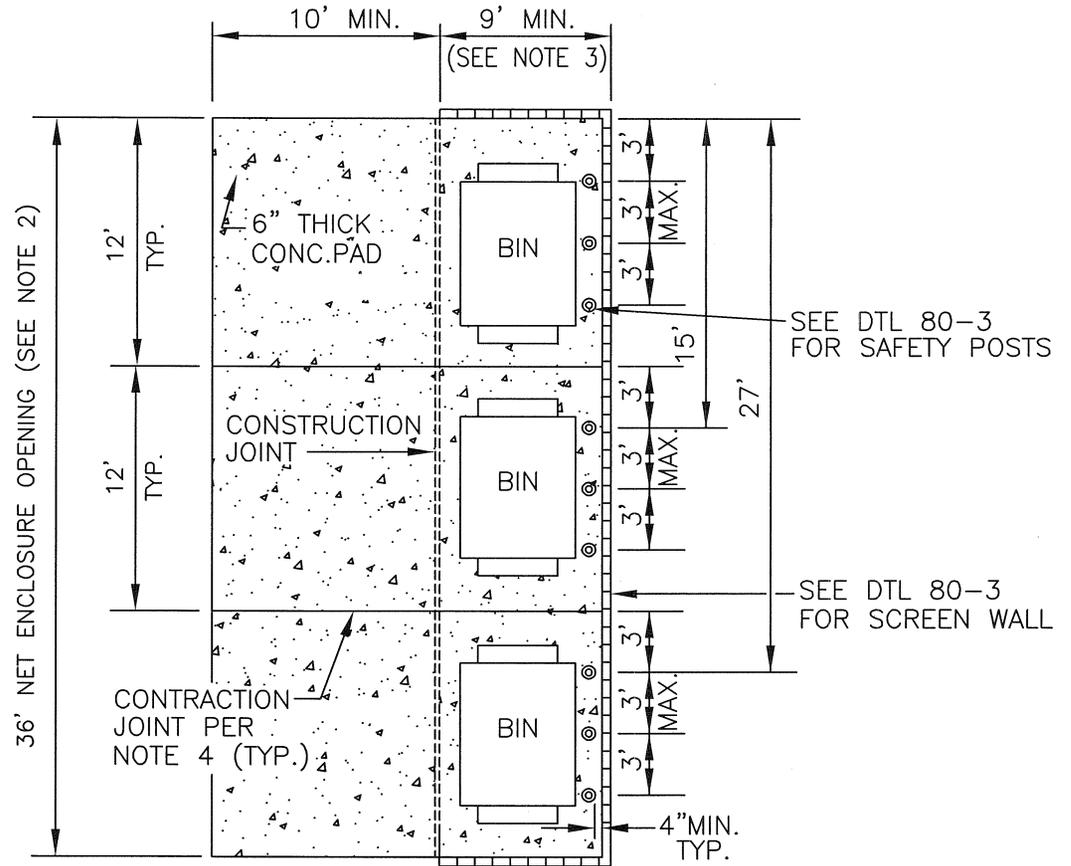


MAX. BIN DEVIATION



NOTES

1. MULTI-UNIT RESIDENTIAL DEVELOPMENTS SHALL BE DESIGNED WITH A TRIPLE-WIDE ENCLOSURE TO ACCOMMODATE THREE COMMODITIES FOR RECYCLING.
2. TRIPLE-WIDE ENCLOSURES SHALL HAVE A NET ENCLOSURE OPENING OF 36 FEET AND SHALL BE DESIGNED WITHOUT MIDWALLS. GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.
3. GATES, HINGES, AND MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MINIMUM 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE.
4. BIN ENCLOSURES ARE TO BE ANGLED NO MORE THAN 30 DEGREES FROM THE CENTER LINE OF THE SOLID WASTE COLLECTION VEHICLE ROUTE.
5. CONTRACTION JOINTS MAY BE EITHER SCORED OR SAWCUT 1-INCH DEEP.



TRIPLE-WIDE BIN ENCLOSURE

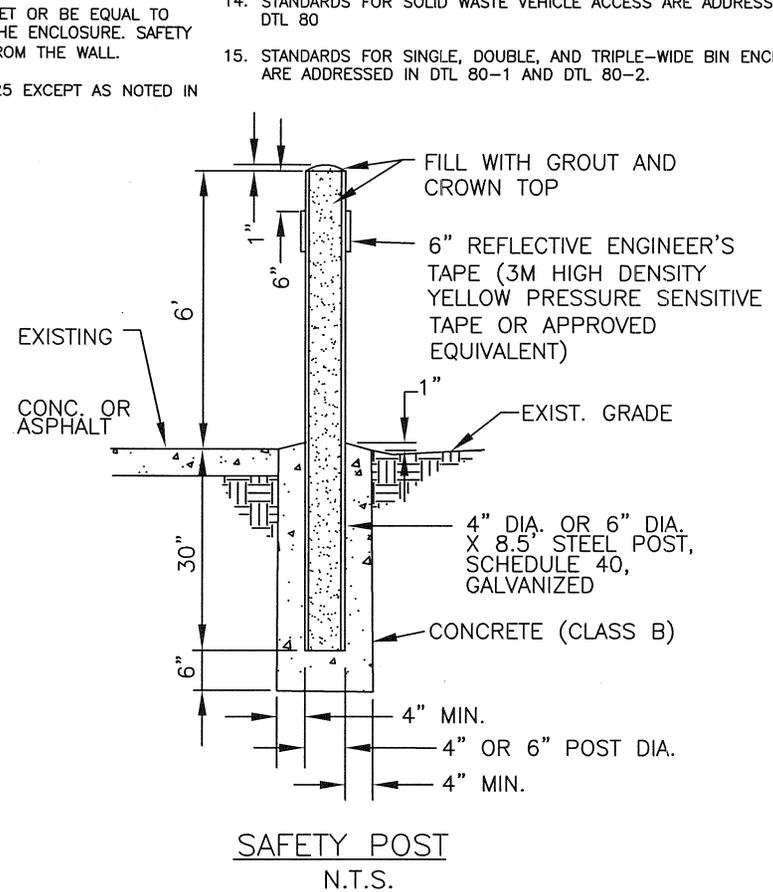
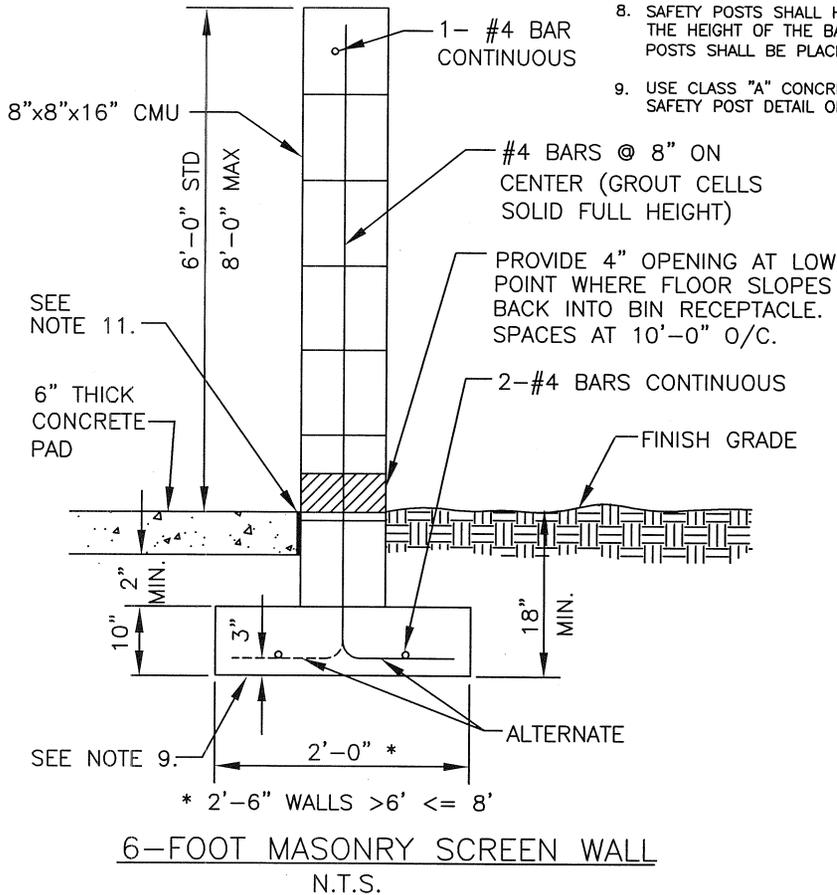
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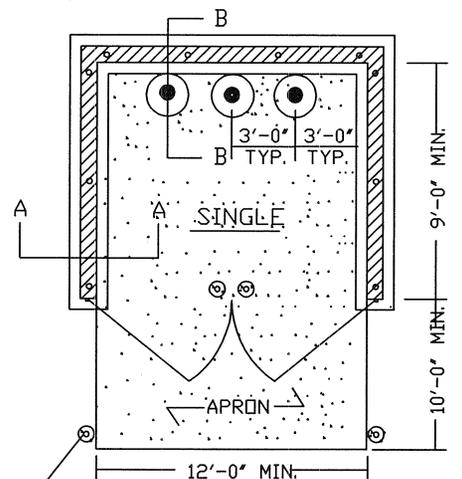
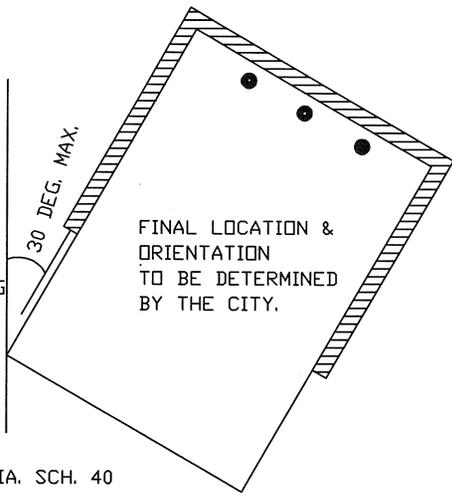
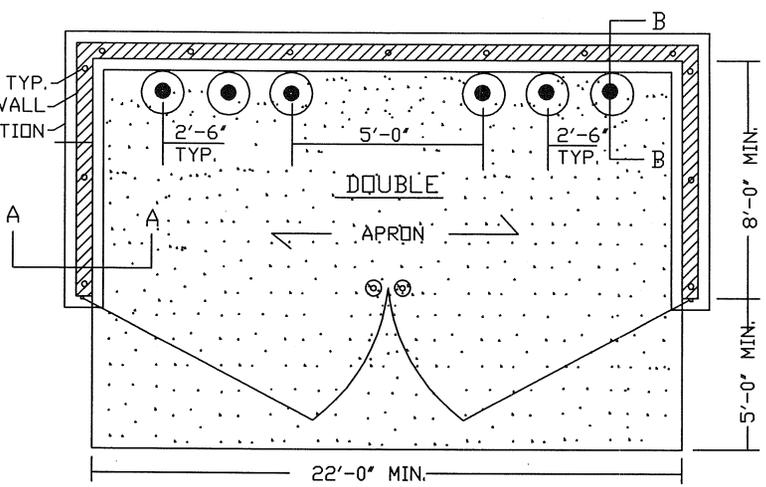
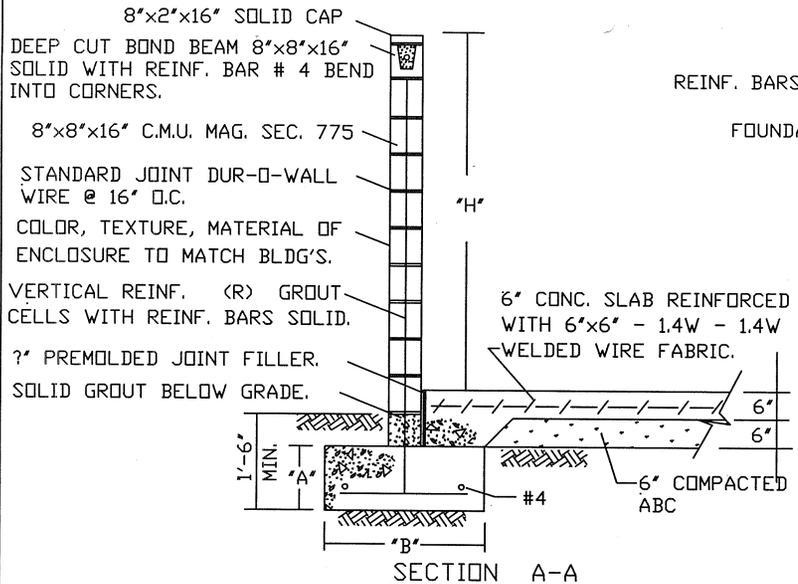
NOTES

1. TRASH AND RECYCLING BIN AREA SHALL BE SCREENED WITH A SIX FOOT (6') MASONRY WALL PER DETAIL ON THIS SHEET.
2. BIN ENCLOSURE TO BE A MINIMUM OF 5 FEET FROM ANY PLANNED OR EXISTING STRUCTURE AT ITS CLOSEST POINT.
3. BINS THAT ARE VISIBLE FROM A PUBLIC ROADWAY SHALL HAVE ENCLOSURE GATES THAT SCREEN THE BINS FROM PUBLIC VIEW.
4. GATES SHALL BE INSTALLED SO THERE IS A NET BIN ENCLOSURE OPENING OF 12 FEET PER BIN. GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.

5. GATES, HINGES, AND MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MINIMUM 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE.
6. EACH ENCLOSURE GATE SHALL HAVE DROP PINS INSTALLED AND HOLES DRILLED IN THE CONCRETE AT BOTH THE OPEN AND CLOSED POSITIONS TO PREVENT GATES FROM CLOSING INTO THE COLLECTION VEHICLE.
7. BIN ENCLOSURES SHALL HAVE (3) 6" DIAMETER STEEL SAFETY POSTS INSTALLED IN THE BACK OF THE ENCLOSURE ONLY PER DETAIL ON THIS SHEET.

10. STEEL REINFORCEMENT SHALL BE GRADE 40.
11. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER ASTM D-1751.
12. EXTERIOR FINISH OF 6 FOOT MASONRY SCREEN WALLS SHALL BE COORDINATED ARCHITECTURALLY WITH PRIMARY BUILDING FINISHES.
13. SOIL BELOW THE WALL FOOTER AND CONCRETE PAD SHALL BE COMPACTED TO A DEPTH OF 6 INCHES AND TO A MINIMUM DRY DENSITY OF 90% IN ACCORDANCE WITH ASTM D-2922 AND D-3017, AFTER ADJUSTMENT FOR ROCK CORRECTION.
14. STANDARDS FOR SOLID WASTE VEHICLE ACCESS ARE ADDRESSED IN DTL 80
15. STANDARDS FOR SINGLE, DOUBLE, AND TRIPLE-WIDE BIN ENCLOSURES ARE ADDRESSED IN DTL 80-1 AND DTL 80-2.





- NOTES:
- WHERE GATES ARE REQUIRE, DESIGN PLANS SHALL BE SUBMITTED TO CITY OF TEMPE FOR APPROVAL.
 - CONSTRUCT ENCLOSURE PER M.A.G. SECTION 510.
 - 4" DIA. SCH. 40 STL. PIPE GUARD POSTS SHALL RECEIVE A ZINC CHROMATE PRIME COAT AND 2 COATS FLAT MATTE PAINT TO MATCH ENCLOSURE.
 - ALL INTERIOR PAD DIMENSIONS ARE MINIMUMS.
 - CONCRETE $f'_c = 3,000$ psi
 - REINFORCING $f_y = 60,000$ psi
 - $f_s = 24,000$ psi
 - MASONRY $f_m = 1,500$ psi

TABLE # 1

"H"	"A"	"B"	"R"	"C"
6'-0"	12"	24"	#4 @ 48"	14"
7'-0"	12"	24"	#5 @ 48"	14"
8'-0"	12"	24"	#5 @ 48"	14"
9'-0"	12"	28"	#6 @ 48"	16"
10'-0"	12"	30"	#6 @ 48"	17"

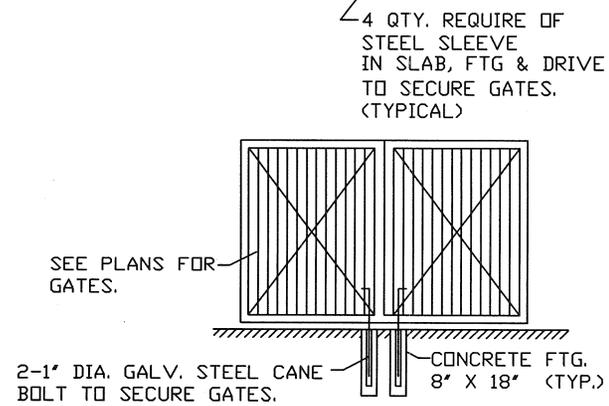
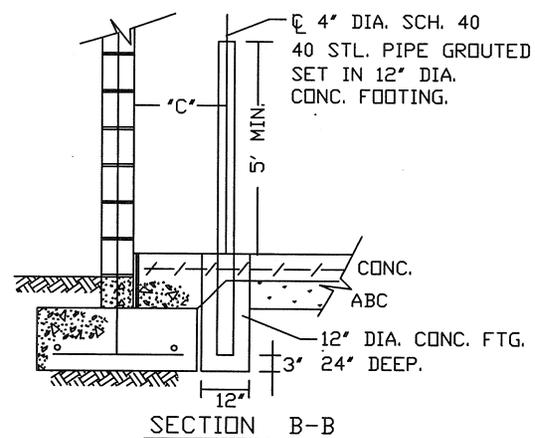
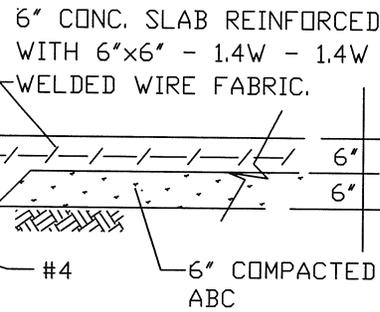
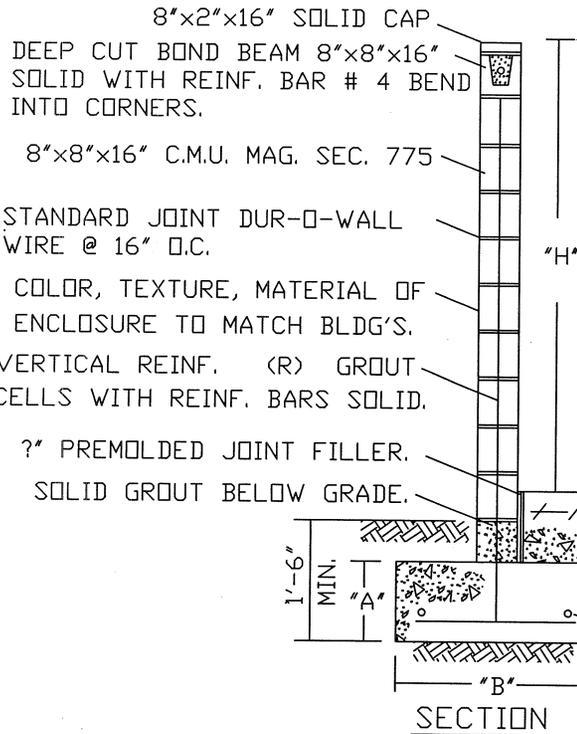
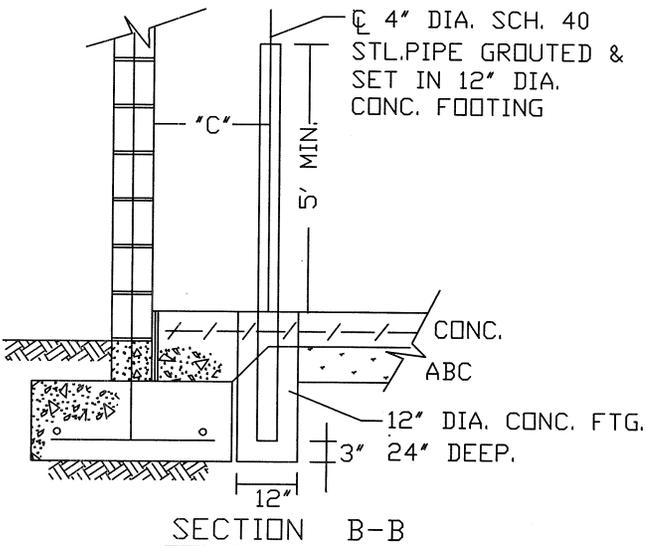


TABLE # 1

"H"	"A"	"B"	"R"	"C"
6'-0"	12"	24"	#4 @ 48"	14"
7'-0"	12"	24"	#5 @ 48"	14"
8'-0"	12"	24"	#5 @ 48"	14"
9'-0"	12"	28"	#6 @ 48"	16"
10'-0"	12"	30"	#6 @ 48"	17"



SECTION A-A



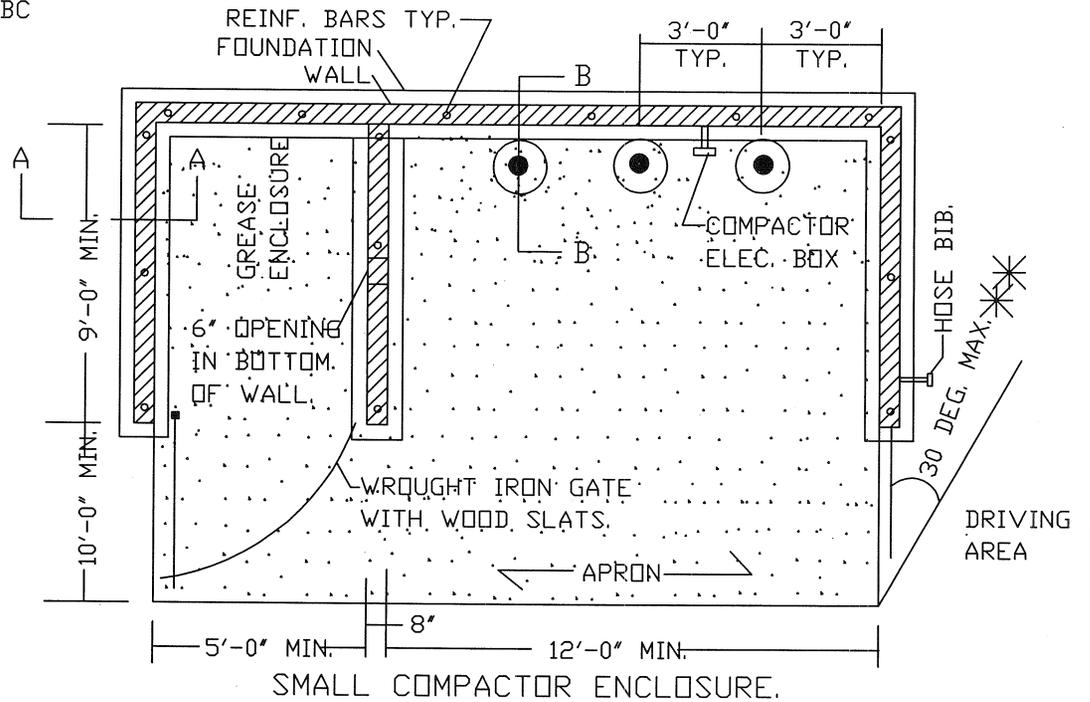
SECTION B-B

NOTES:

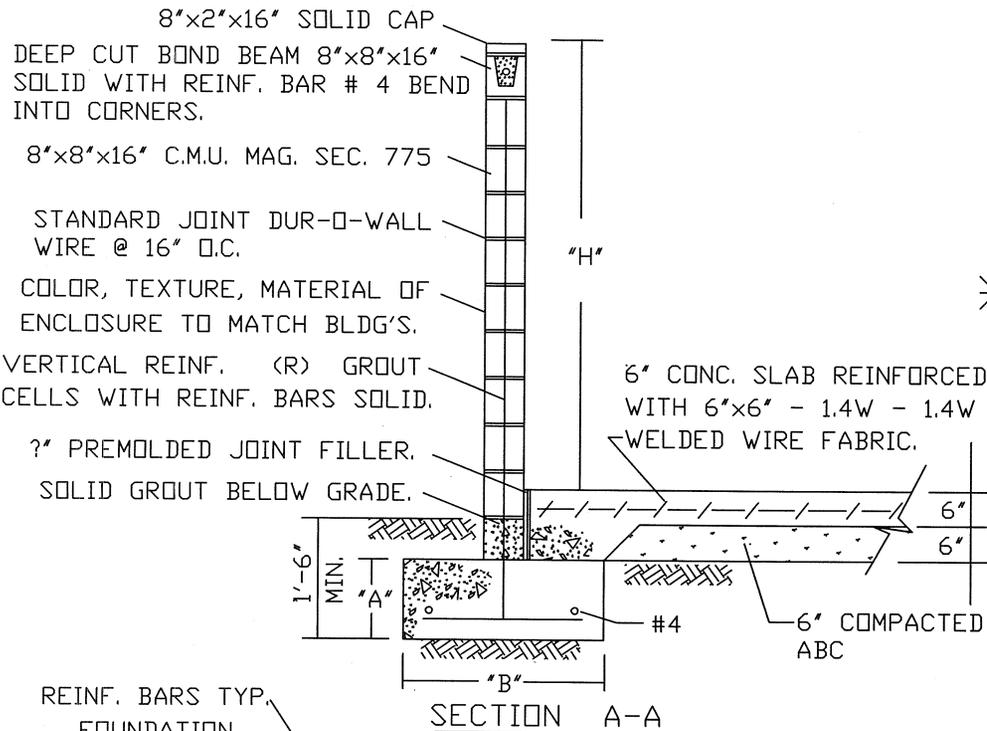
- CONSTRUCT ENCLOSURE PER M.A.G. SECTION 510.
- 4" DIA. SCH. 40 STL. PIPE GUARD POSTS SHALL RECEIVE A ZINC CHROMATE PRIME COAT AND 2 COATS FLAT MATTE PAINT TO MATCH ENCLOSURE.
- ALL INTERIOR PAD DIMENSIONS ARE MINIMUMS.
- WALL HEIGHT PREDETERMINED BY COMPACTOR HEIGHT (6'-0" MIN.)

✱-FINAL LOCATION & ORIENTATION TO BE DETERMINED BY THE CITY.

- CONCRETE f'_c = 3,000 psi
- REINFORCING f_y = 60,000 psi
- f_s = 24,000 psi
- MASONRY f_m = 1,500 psi



SMALL COMPACTOR ENCLOSURE.

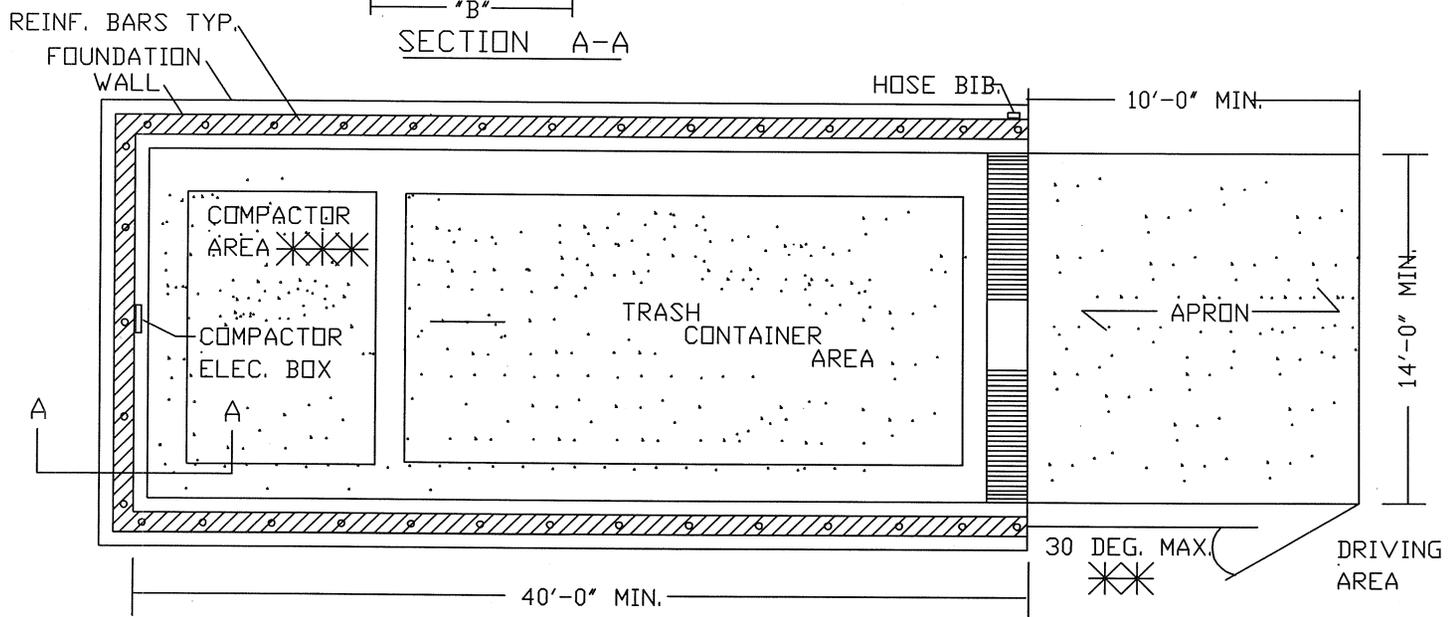


NOTES:
 -CONSTRUCT ENCLOSURE PER M.A.G. SECTION 510.
 -ALL INTERIOR PAD DIMENSIONS ARE MINIMUMS.
 -WALL HEIGHT PREDETERMINED BY COMPACTOR HEIGHT (6'-0" MIN.)

✱✱✱-FINAL LOCATION & ORIENTATION TO BE DETERMINED BY THE CITY.
 ✱✱✱-PROVIDE PEDESTRIAN ACCESS TO THIS AREA (THRU WALL)
 -CONCRETE $f'_c = 3,000$ psi
 -REINFORCING $f_y = 60,000$ psi
 $f_s = 24,000$ psi
 -MASONRY $f_m = 1,500$ psi

TABLE # 1

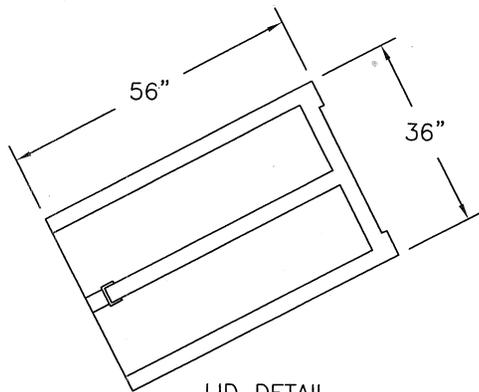
"H"	"A"	"B"	"R"
6'-0"	12"	24"	#4 @ 48"
7'-0"	12"	24"	#5 @ 48"
8'-0"	12"	24"	#5 @ 48"
9'-0"	12"	28"	#6 @ 48"
10'-0"	12"	30"	#6 @ 48"



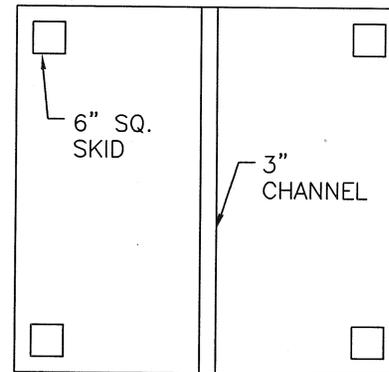
LARGE COMPACTOR ENCLOSURE

SPECIFICATIONS: SIX (6) CUBIC YARD CAPACITY METAL REFUSE CONTAINER (FRONT LOADING TYPE).

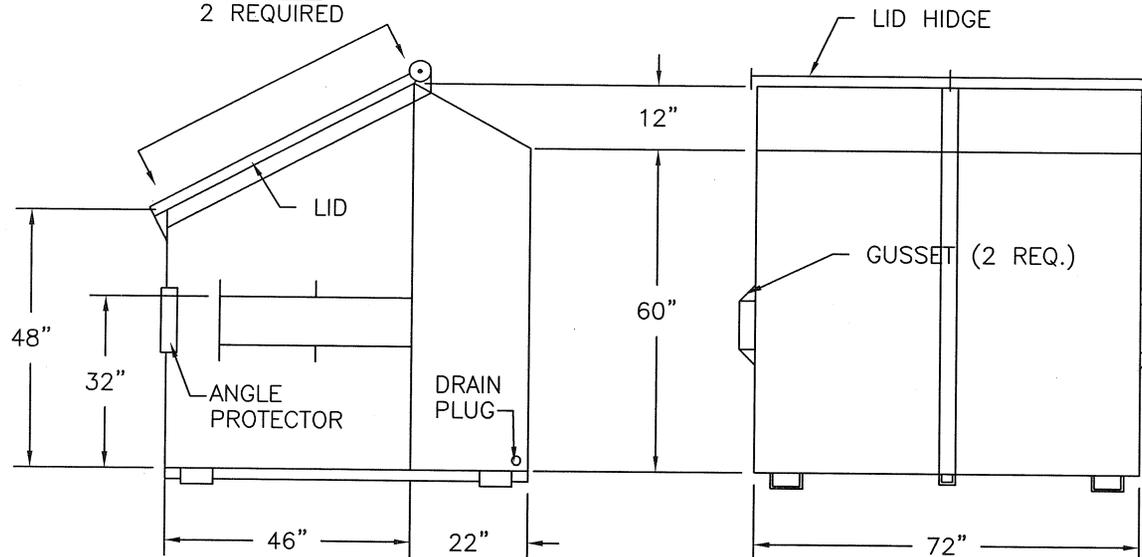
1. ALL UNITS SHALL BE SIMILAR IN CONSTRUCTION TO CONTAINERS NOW BEING USED BY THE TOWN OF GILBERT AND COMPATIBLE WITH THE TOWN'S FRONT END LOADING REFUSE TRUCKS.
2. SIDES: 12 GAUGE TWO PIECES AS SHOWN.
3. FRONT AND BACK: 12 GAUGE WITH ONE STIFFENER IN THE MIDDLE OF EACH.
4. BACK TOP PANEL: TO BE 12 GAUGE.
5. OPENING EDGE: TO BE REINFORCED WITH 3" STRUCTURAL CHANNEL OR OTHER TOWN APPROVED METHOD. OPENING EDGE SHALL BE CONSTRUCTED SO THAT THE LID CANNOT FALL INTO THE CONTAINER DURING NORMAL OPERATION (MINIMUM 1" PLASTIC TO METAL OVERLAP ON ALL SIDES).
6. LIDS: 2 REQUIRED. MATERIAL TO BE CROSS LINKED POLYETHYLENE. "ROTOLITE" LID OR EQUIVALENT.
7. LID HINGE: ROD OR TUBING WITH COTTER PIN ON ONE END FOR LID REMOVAL.
8. FLOOR: 10 GAUGE STEEL WITH A 3" STEEL CHANNEL IN MIDDLE AND FOUR 6" SQUARE CHANNEL SKIDS ON THE CORNERS AS SHOWN.
9. PICK-UP SLEEVES: FORMED 10 GAUGE STEEL 9" WIDTH, 4" LEGS AND 36" LONG.
10. ANGLE PROTECTOR: 3" STRUCTURAL ANGLES 12" LONG TO BE CENTERED WITH PICK-UP SLEEVES ON FRONT CORNERS, 2 REQUIRED.
11. WELDING: FULL WELD ALL SEAMS.
12. PAINTING REQUIREMENTS: ALL UNITS SHALL BE THOROUGHLY CLEANED BOTH INSIDE AND OUTSIDE, JUST PRIOR TO PAINTING. ALL GREASE, OIL, GRAPHITE, MILL SCALE, WELD SLAG AND SPLATTER AND OTHER FOREIGN MATTER SHALL BE REMOVED FROM THE BARE METAL. THE CONTAINER SHALL BE COATED WITH ONE COAT OF SYNTHETIC PRIMER AND ONE FINISH COAT OF DESERT TAN ENAMEL OR LATEX SIMILAR TO CURRENT PAINT USED BY TOWN OF GILBERT. EXCEPT THE LOWER ONE HALF AND BOTTOM OF THE INSIDE WHICH SHALL BE WEATHER RESISTANT COATING RECOMMENDED BY THE PAINT MANUFACTURER FOR THIS APPLICATION.



LID DETAIL
2 REQUIRED



BOTTOM VIEW



SIDE VIEW

BACK VIEW

DETAIL NO.
81

TOWN OF GILBERT
STANDARD DETAIL

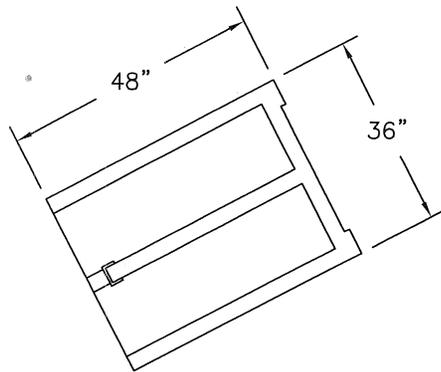
6 CU. YD. METAL FRONT
LOADING REFUSE CONTAINER

REVISED 8/1/95

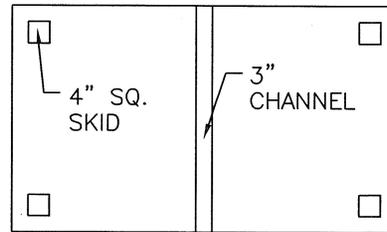
DETAIL NO.
81

SPECIFICATIONS: THREE (3) CUBIC YARD CAPACITY METAL REFUSE CONTAINER (FRONT LOADING TYPE).

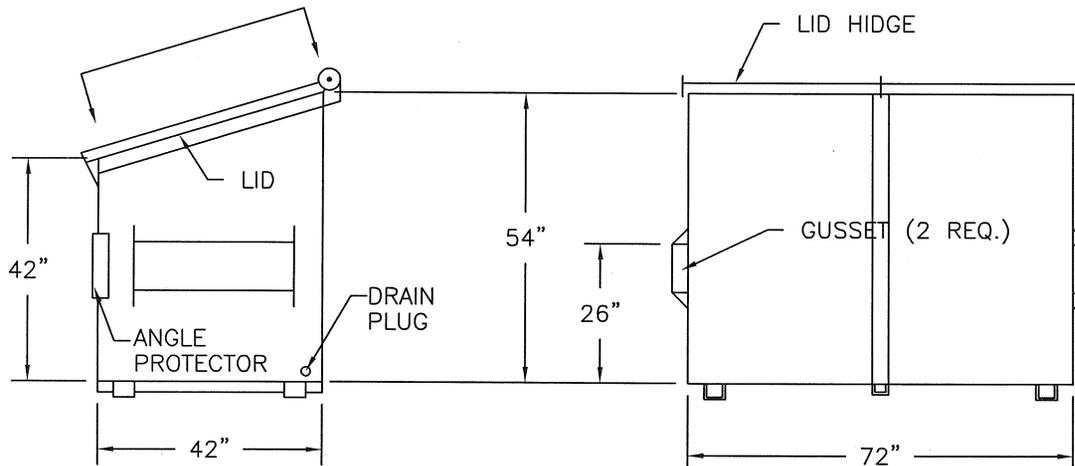
1. ALL UNITS SHALL BE SIMILAR IN CONSTRUCTION TO CONTAINERS NOW BEING USED BY THE TOWN OF GILBERT AND COMPATIBLE WITH THE TOWN'S FRONT END LOADING REFUSE TRUCKS.
2. SIDES: 12 GAUGE.
3. FRONT AND BACK: 12 GAUGE WITH ONE STIFFENER IN THE MIDDLE OF EACH.
4. OPENING EDGE: TO BE REINFORCED WITH 3" STRUCTURAL CHANNEL OR OTHER TOWN APPROVED METHOD. OPENING EDGE SHALL BE CONSTRUCTED SO THAT THE LID CANNOT FALL INTO THE CONTAINER DURING NORMAL OPERATION (MINIMUM 1" PLASTIC TO METAL OVERLAP ON ALL SIDES).
5. LIDS: 2 REQUIRED. MATERIAL TO BE CROSS LINKED POLYETHYLENE. "ROTOLITE" LID OR EQUIVALENT.
6. LID HINGE: ROD OR TUBING WITH COTTER PIN ON ONE END FOR LID REMOVAL.
7. FLOOR: 10 GAUGE STEEL WITH A 3" STEEL CHANNEL IN MIDDLE AND FOUR 4" SQUARE CHANNEL SKIDS ON THE CORNERS AS SHOWN.
8. PICK-UP SLEEVES: FORMED 10 GAUGE STEEL 9" WIDTH, 4" LEGS AND 30" LONG.
9. ANGLE PROTECTOR: 3" STRUCTURAL ANGLES 12" LONG TO BE CENTERED WITH PICK-UP SLEEVES ON FRONT CORNERS, 2 REQUIRED.
10. WELDING: FULL WELD ALL SEAMS.
11. PAINTING REQUIREMENTS: ALL UNITS SHALL BE THOROUGHLY CLEANED BOTH INSIDE AND OUTSIDE, JUST PRIOR TO PAINTING. ALL GREASE, OIL, GRAPHITE, MILL SCALE, WELD SLAG AND SPLATTER AND OTHER FOREIGN MATTER SHALL BE REMOVED FROM THE BARE METAL. THE CONTAINER SHALL BE COATED WITH ONE COAT OF SYNTHETIC PRIMER AND ONE FINISH COAT OF DESERT TAN ENAMEL OR LATEX SIMILAR TO CURRENT PAINT USED BY TOWN OF GILBERT. EXCEPT THE LOWER ONE HALF AND BOTTOM OF THE INSIDE WHICH SHALL BE WEATHER RESISTANT COATING RECOMMENDED BY THE PAINT MANUFACTURER FOR THIS APPLICATION.



LID DETAIL
2 REQUIRED



BOTTOM VIEW



SIDE VIEW

BACK VIEW

DETAIL NO.
82

TOWN OF GILBERT
STANDARD DETAIL

3 CU. YD. METAL FRONT
LOADING REFUSE CONTAINER

REVISED 8/1/95

DETAIL NO.
82

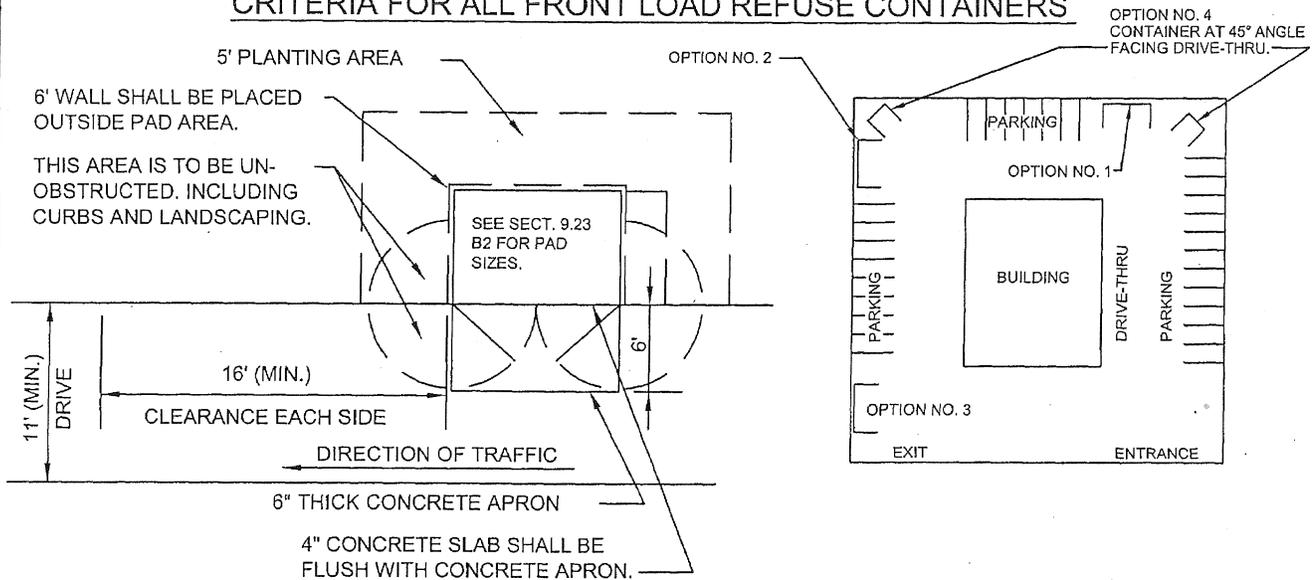
STANDARD DETAIL G-935

CITY OF GLENDALE
ENGINEERING



REFUSE COLLECTION STATION, DESIGN, LOCATION AND CONSTRUCTION (FRONT LOAD)

CRITERIA FOR ALL FRONT LOAD REFUSE CONTAINERS



NOTES:

1. THE CITY OF GLENDALE SANITATION DIVISION, PER CITY ORDINANCE, WILL PROVIDE REFUSE CONTAINERS FOR ALL SINGLE FAMILY AND MULTIFAMILY DEVELOPMENTS WITHIN THE CITY LIMITS OF GLENDALE. BUSINESS AND INDUSTRIAL DEVELOPMENTS HAVE A CHOICE OF BEING SERVED BY THE CITY OR A PRIVATE REFUSE DISPOSAL COMPANY.
2. MULTIPLE REFUSE CONTAINERS SHALL BE PLACED ON THE RIGHT SIDE OF THE DRIVE IN RELATION TO THE TRAFFIC FLOW TRAFFIC FLOW SO COLLECTION TRUCKS MAY BE ROUTED THROUGH THE SITE IN ONE DIRECTION.
3. FRONT-END LOADING CONTAINERS WILL BE PLACED THROUGHOUT THE CITY AND IN ALL NEW COMMERCIAL BUSINESSES LOCATING IN GLENDALE.
4. ENCLOSURES IN INDUSTRIAL AREAS SHALL BE PLACED IN THE BACK OF THE LOT IN LINE WITH THE DRIVE THRU SO THE DRIVER CAN HAVE A DIRECT APPROACH TO THE REFUSE BIN, SERVICE IT, AND EXIT THE FACILITY.
5. THE ENCLOSURE SHOULD NOT BE PLACED AT THE END OF A DEAD END STREET UNLESS THERE IS A TURNING RADIUS OF FIFTY FIVE (55) FEET.
6. THE ENCLOSURE SHALL BE FREE OF ANY OVERHEAD OBSTRUCTIONS WHICH MAY INTERFERE IN THE SERVICING OF THE CONTAINER.
7. GATES ARE REQUIRED ON ALL ENCLOSURES FOR COMMERCIAL PROJECTS IN LOCATIONS VISIBLE TO THE PUBLIC. THE GATES MUST CLEAR THE DRIVEWAY AND BE ABLE TO BE LOCKED IN AN OPEN POSITION AT OR PAST 90 DEGREES SO AS NOT TO INTERFERE WITH THE OPERATION OF THE COLLECTION TRUCK.

APPROVED BY:

Harry Brosler
CITY ENGINEER

6/28/02

DATE

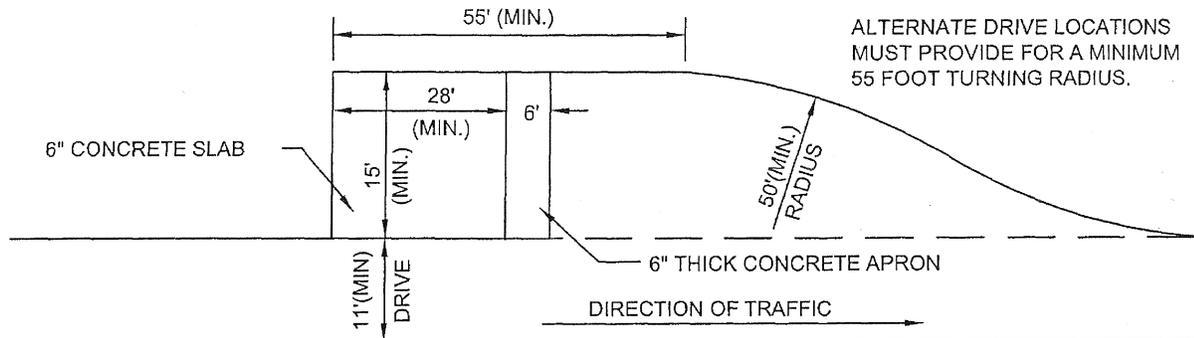
REVISED: JUNE 2002

STANDARD DETAIL G-936

CITY OF GLENDALE
ENGINEERING



REFUSE COLLECTION STATION, DESIGN, LOCATION AND CONSTRUCTION (ROLL OFF)



CRITERIA FOR 20 YD., 30 YD. & 40 YD. ROLL OFF REFUSE CONTAINERS

NOTES:

1. THE CITY OF GLENDALE SANITATION DIVISION, PER CITY ORDINANCE, WILL PROVIDE REFUSE CONTAINERS FOR ALL SINGLE FAMILY AND MULTI-FAMILY DEVELOPMENTS WITHIN THE CITY LIMITS OF GLENDALE. BUSINESS AND INDUSTRIAL DEVELOPMENTS HAVE A CHOICE OF BEING SERVED BY THE CITY OR A PRIVATE REFUSE DISPOSAL COMPANY.
2. MULTIPLE REFUSE CONTAINERS SHALL BE PLACED ON THE RIGHT SIDE OF THE DRIVE IN RELATION TO THE TRAFFIC FLOW SO COLLECTION TRUCKS MAY BE ROUTED THROUGH THE SITE IN ONE DIRECTION.
3. TEMPORARY REFUSE CONTAINERS DO NOT REQUIRE A CONCRETE PAD.
4. GATES ARE REQUIRED ON ALL ENCLOSURES FOR COMMERCIAL AND INDUSTRIAL PROJECTS IN LOCATIONS VISIBLE TO THE PUBLIC.

APPROVED BY:

CITY ENGINEER

6/28/02

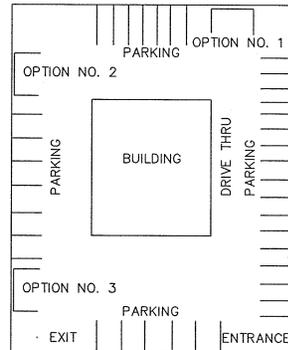
DATE

6' WALL SHALL BE PLACES OUTSIDE PAD AREA
THIS AREA IS TO BE UNOBSTRUCTED. INCLUDING CURBS AND LANDSCAPING

SEE SECT. 8.23
B2 FOR PAD SIZES.

4" CONCRETE SLAB SHALL BE FLUSH WITH EDGE OF DRIVE

IF GATES ARE INSTALLED , THEY MUST CLEAR DRIVEWAY AND BE ABLE TO BE LOCKED IN PLACE SO AS NOT TO INTERFERE WITH THE OPERATION FOR THE COLLECTION TRUCK. (SEE NOTE 4)



NOTES:

1. FRONT-END LOADING CONTAINERS WILL BE PLACED THROUGHOUT THE CITY AND IN ALL NEW COMMERCIAL BUSINESSES LOCATING IN GOODYEAR.
2. ENCLOSURES IN INDUSTRIAL AREAS SHALL BE PLACES IN THE BACK OF THE LOT IN LINE WITH THE DRIVE THRU SO THE DRIVER CAN HAVE A DIRECT APPROACH TO THE REFUSE BIN, SERVICE IT, AND EXIT THE FACILITY.
3. THE ENCLOSURE SHOULD NOT BE PLACED AT THE END OF A DEAD END STREET UNLESS THERE IS A TURNING RADIUS OF FIFTY FIVE (55) FEET.
4. THE ENCLOSURE SHALL BE FREE OF ANY OVERHEAD OBSTRUCTION WHICH MY INTERFERE IN THE SERVICING OF THE CONTAINER.

DETAIL NO.
G-3160

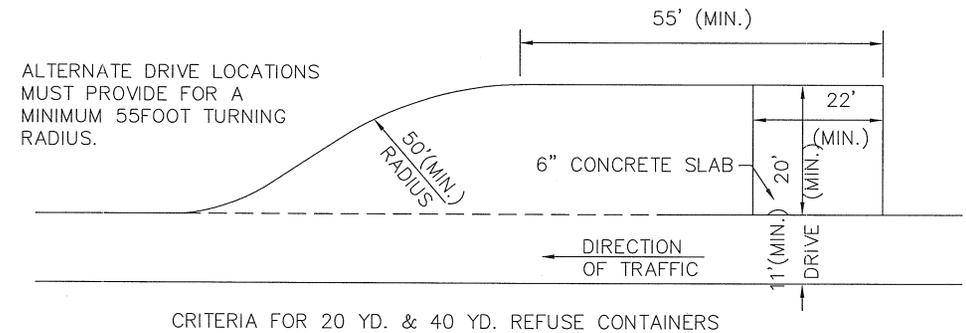
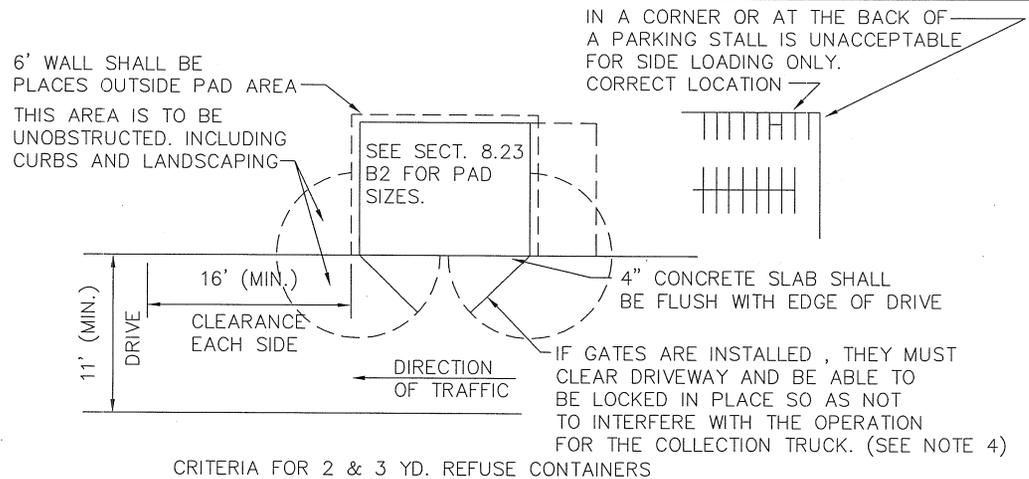
CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee

7/97

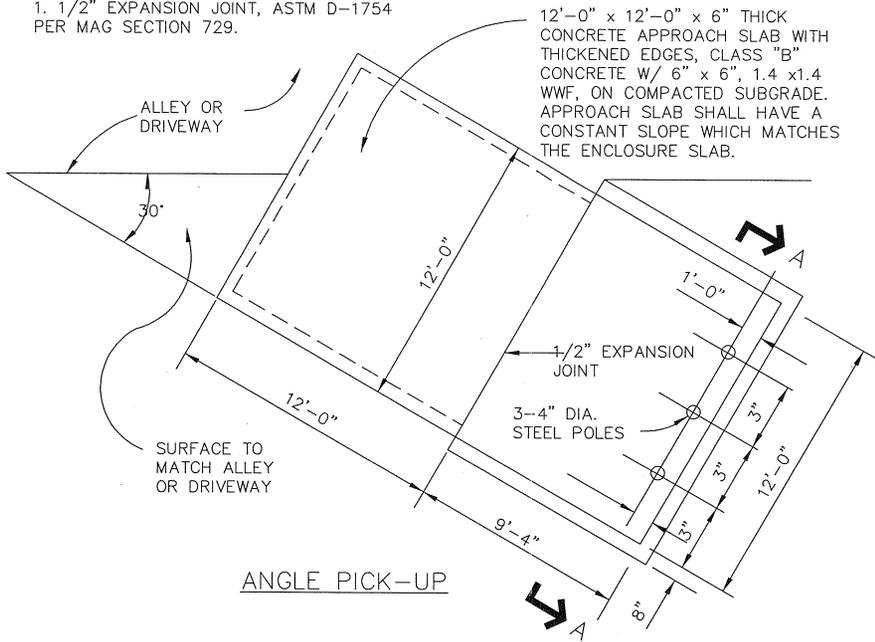
REFUSE COLLECTION STATION LOCATIONS
DESIGN AND CONSTRUCTION

DETAIL NO.
G-3160

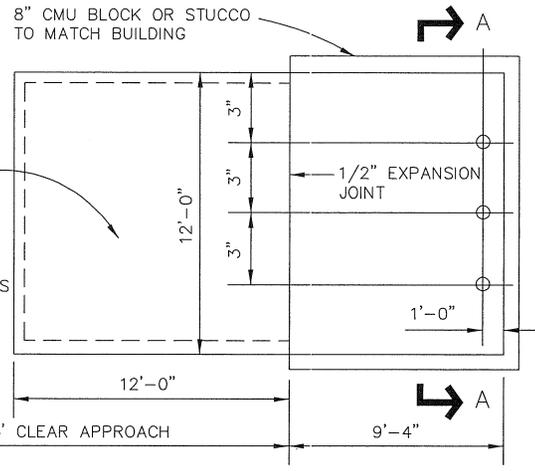


- NOTES:
1. THE CITY OF GOODYEAR, PUBLIC WORKS DEPARTMENT SANITATION SECTION, PER CITY ORDINANCE, WILL PROVIDE REFUSE-CONTAINERS FOR MULTI-FAMILY COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL DEVELOPMENTS WITHIN THE CITY LIMITS OF GOODYEAR.
 2. MULTIPLE REFUSE CONTAINERS SHALL BE PLACED ON THE RIGHT SIDE OF THE DRIVE IN RELATION TO THE TRAFFIC FLOW SO COLLECTION TRUCKS MY BE ROUTED THROUGH THE SITE IN ONE DIRECTION
 3. TEMPORARY REFUSE CONTAINERS DO NO REQUIRE A CONCRETE PAD.
 4. GATES ARE REQUIRED ON ALL ENCLOSURES FOR COMMERCIAL PROJECTS IN LOCATIONS VISIBLE TO THE PUBLIC.

NOTE:
 1. 1/2" EXPANSION JOINT, ASTM D-1754
 PER MAG SECTION 729.

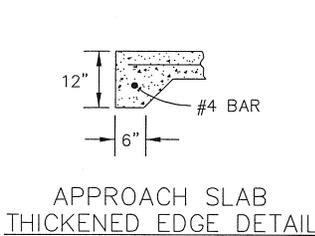
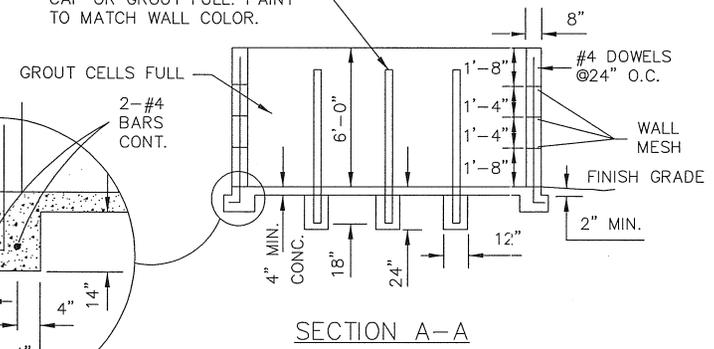


12'-0" x 12'-0" x 6" THICK CONCRETE APPROACH SLAB WITH THICKENED EDGES, CLASS "B" CONCRETE W/ 6" x 6", 1.4 x1.4 WWF, ON COMPACTED SUBGRADE. APPROACH SLAB SHALL HAVE A CONSTANT SLOPE WHICH MATCHES THE ENCLOSURE SLAB.

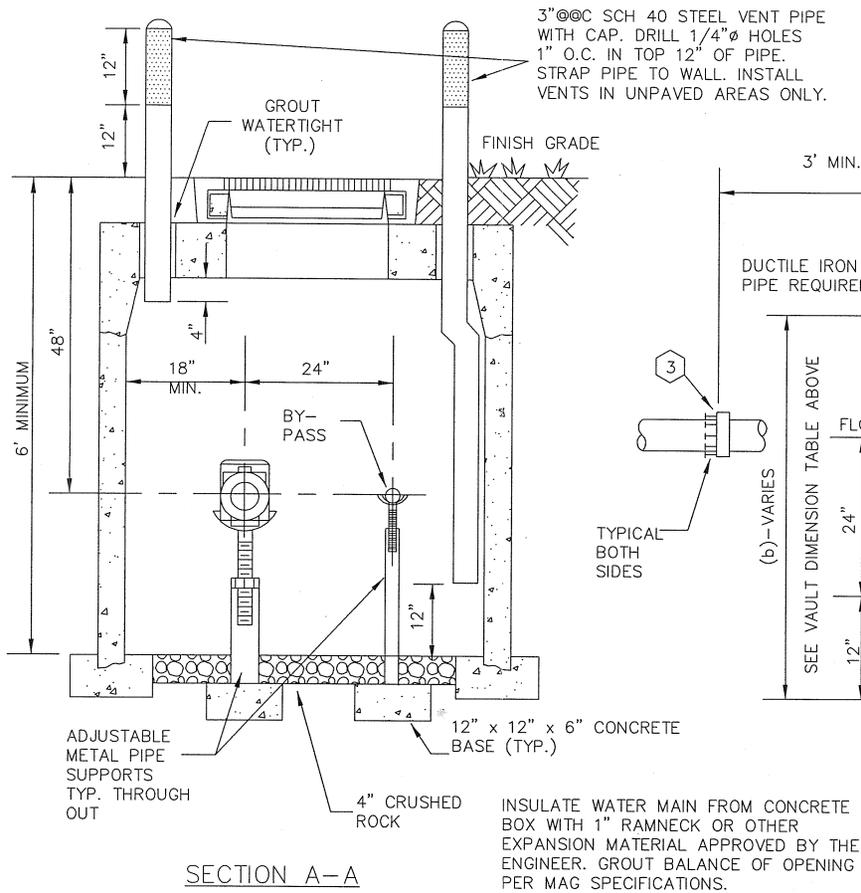


THICKENED EDGE DETAIL

PLACE 3-4" DIA. STEEL POLES 60" ABOVE GRADE CAP OR GROUT FULL. PAINT TO MATCH WALL COLOR.

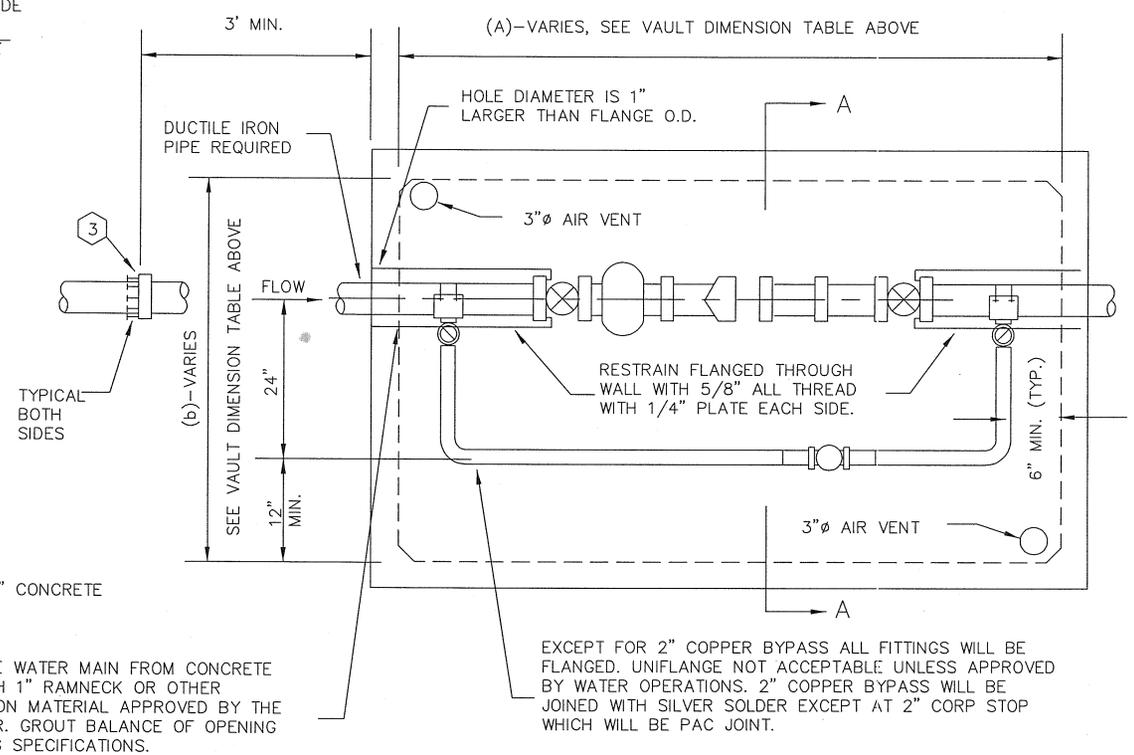


DETAIL NO. G-3162-1	CITY OF GOODYEAR STANDARD DETAIL	APPROVED BY: Goodyear Standards and Policies Committee 7/97	REFUSE ENCLOSURE	DETAIL NO. G-3162-1
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NOTE: METER VAULTS MAY BE EITHER BLOCK MASONRY OR CAST-IN-PLACE OR PRE-CAST CONCRETE, SEE MAG STD DETAIL 321 FOR VAULT CONSTRUCTION.

VAULT DIMENSIONS TABLE			
MAIN SIZE	3"	4"	6"
(A)	8'-4"	10'-6"	12'-0"
(B)	4'-6"	5'-0"	5'-0"



SECTION A-A

PLAN

VAULT INSTALLATION

DETAIL NO.
G-3162-2

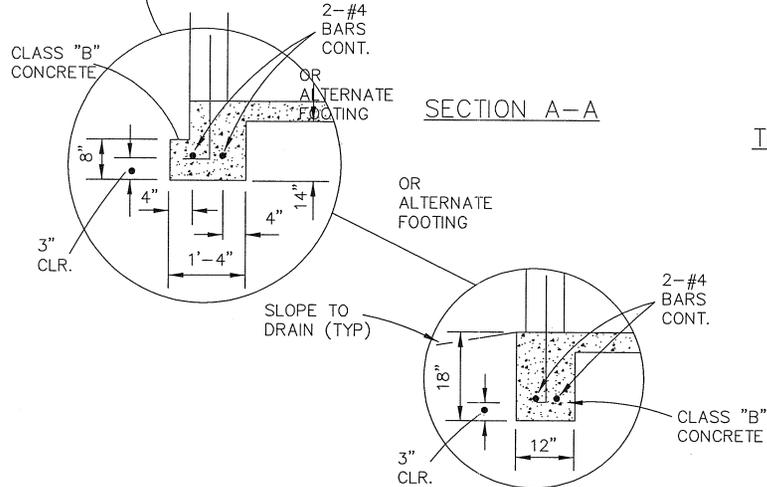
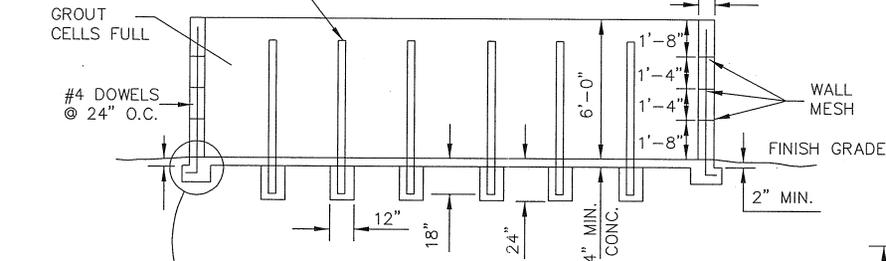
CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee 7/97

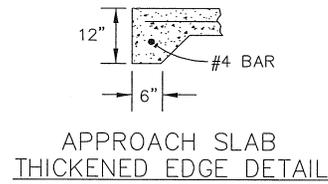
REFUSE ENCLOSURE
W/ GREASE CONTAINMENT AREA

DETAIL NO.
G-3162-2

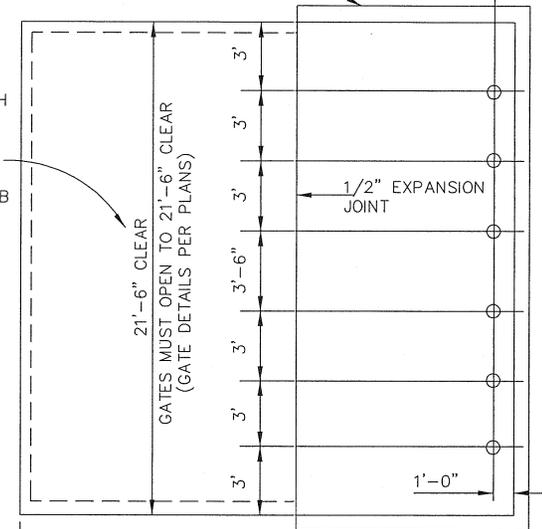
PLACE 6-4" DIA. STEEL
POLES 60" ABOVE GRADE
CAP OR GROUT FULL. PAINT
TO MATCH WALL COLOR.



12'-0" x 21'-6" x 6"
THICK CONCRETE APPROACH
SLAB WITH THICKENED
EDGES, CLASS "B" CONC.
W/ 6" x 6", 1.4 x 1.4
WWF, ON COMPACTED
SUBGRADE. APPROACH SLAB
SHALL HAVE A CONSTANT
SLOPE WHICH MATCHES
THE ENCLOSURE SLAB.



8" CMU OR BLOCK OR STUCCO
TO MATCH BUILDING



PLAN

- NOTE:
1. DOUBLE ENCLOSURE FOR ANGLE PICK-UP
SIMILAR TO COS DET. 2146-1
 2. 1/2" EXPANSION JOINT, ASTM D-1751
PER MAG SECTION 729.

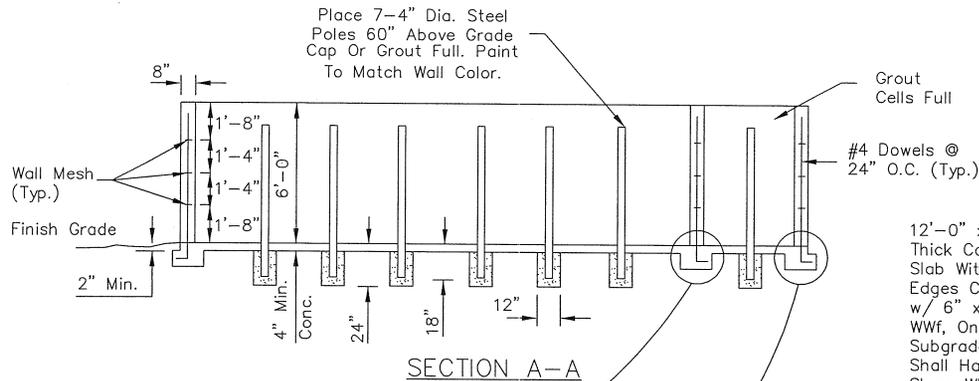
DETAIL NO.
G-3164-1

CITY OF GOODYEAR
STANDARD DETAIL

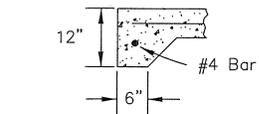
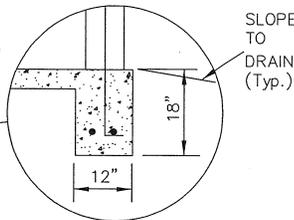
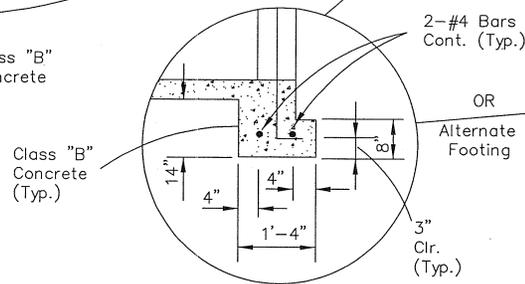
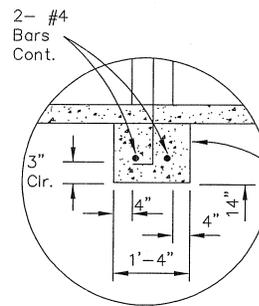
APPROVED BY:
Goodyear Standards and
Policies Committee
7/97

DOUBLE REFUSE ENCLOSURE

DETAIL NO.
G-3164-1



12'-0" x 26'-2" x 6" Thick Concrete Approach Slab With Thickened Edges Class "B" Conc. w/ 6" x 6", 1.4 x 1.4 WWf, On Compacted Subgrade. Approach Slab Shall Have A Constant Slope Which Matches The Enclosure Slab.

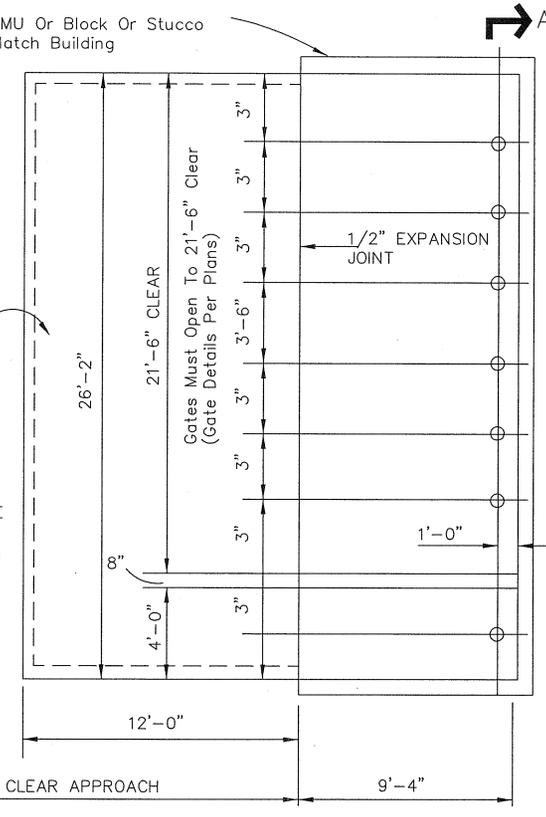


APPROACH SLAB THICKENED EDGE DETAIL

NOTES:

1. Double Enclosure For Angle Pick-Up Similar To COS Det. 2146-1
2. 1/2" Expansion Joint, ASTM D-1751 Per MAG Section 729.

8" CMU Or Block Or Stucco To Match Building



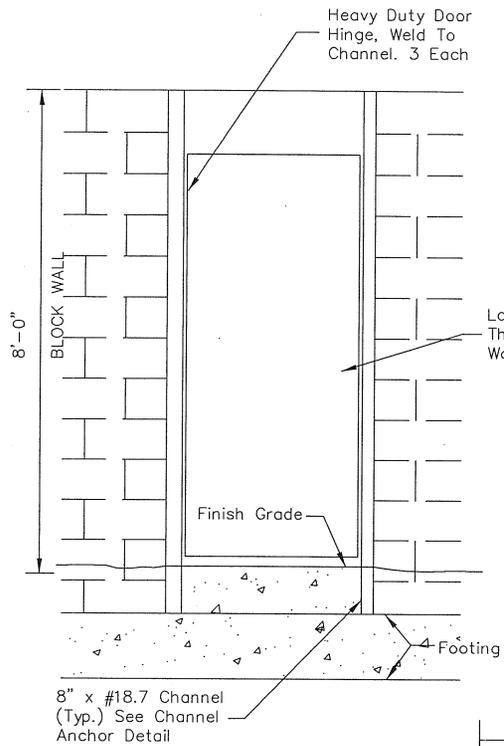
DETAIL NO. G-3164-2

CITY OF GOODYEAR STANDARD DETAIL

APPROVED BY: Goodyear Standards and Policies Committee 7/97

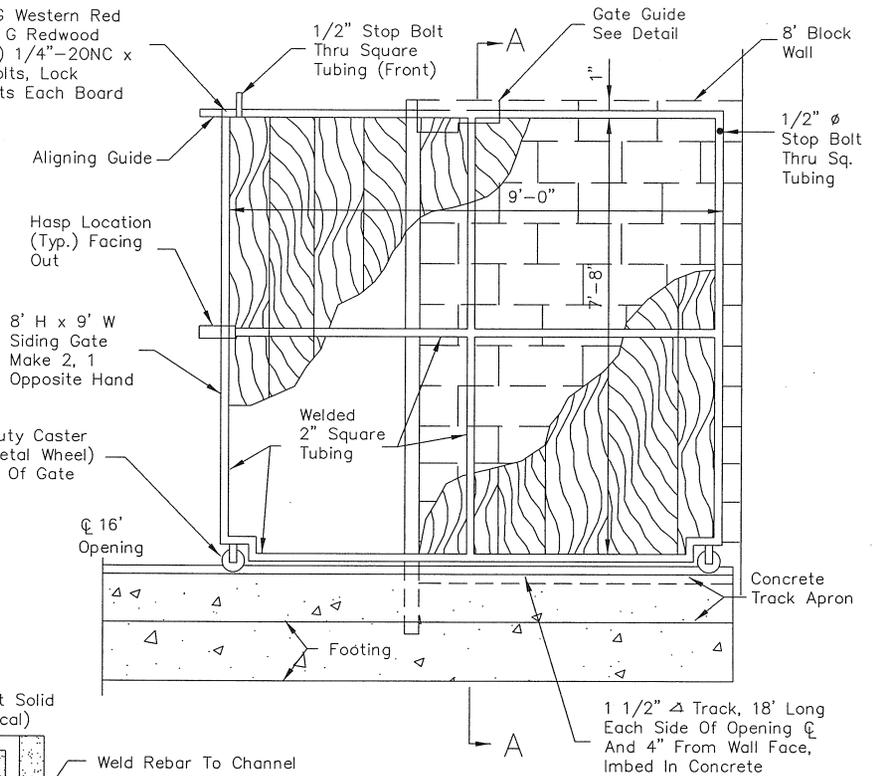
DOUBLE REFUSE ENCLOSURE W/ GREASE CONTAINMENT AREA

DETAIL NO. G-3164-2

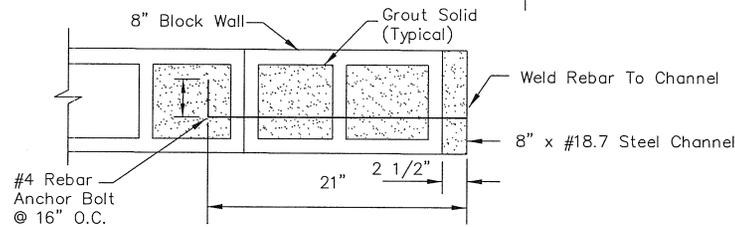


HINGED DOOR

1" x 8" T & G Western Red Cedar Or T & G Redwood Siding With (6) 1/4"-20NC x 3" Carriage Bolts, Lock Washers & Nuts Each Board



ELEVATION



CHANNEL ANCHOR DETAIL

DETAIL NO.
G-3166-1

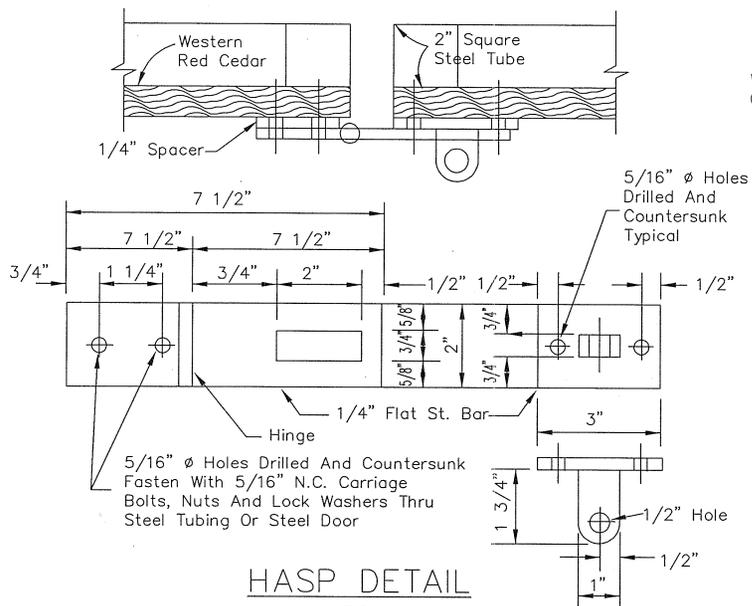
CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee

7/97

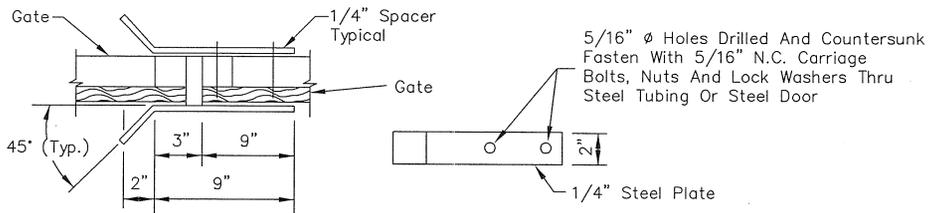
16' SLIDING GATE & HINGED DOOR

DETAIL NO.
G-3166-1



HASP DETAIL

N.T.S.

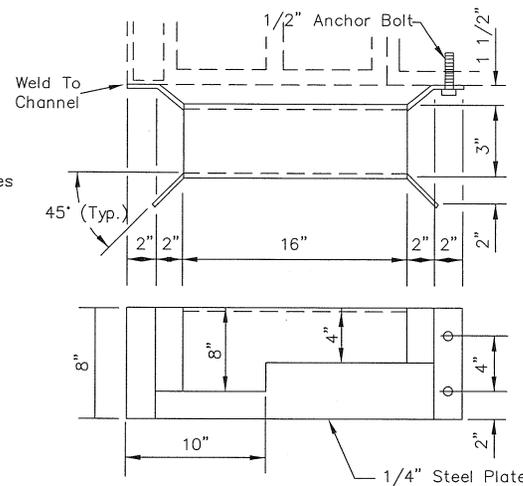


PLAN

ELEVATION

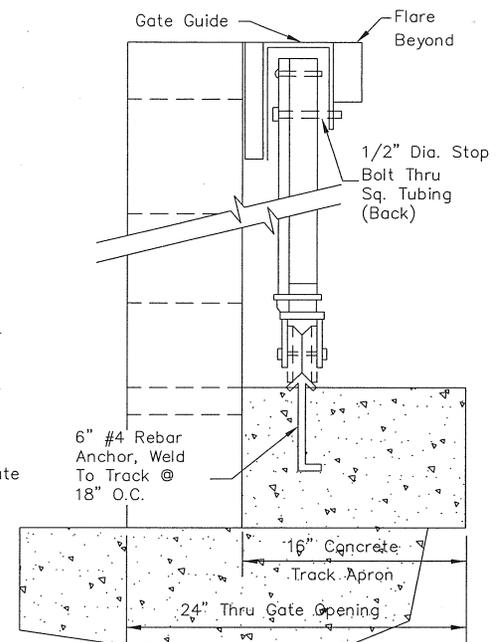
ALIGNING GUIDE DETAIL

2 Required



GATE GUIDE DETAIL

(MAKE 2, 1 OPPOSITE HAND)



SECTION A-A

NOTES:

1. Contractor shall prime and paint all metal surfaces and shall seal all wood surfaces. Before application, the color and manufacturer of the paint and sealer shall be approved by the City.
2. Prior to painting, all surfaces shall be cleaned free of concrete, mortar, rust, dirt, and any other objectional materials.
3. Apply one (1) primer coat and two (2) exterior alkylid gloss enamel coats to metal.

DETAIL NO.
G-3166-2

CITY OF GOODYEAR
STANDARD DETAIL

APPROVED BY:
Goodyear Standards and
Policies Committee

7/97

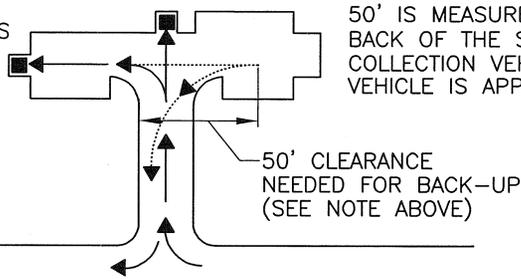
16' SLIDING GATE

DETAIL NO.
G-3166-2

PLEASE NOTE:

SOLID WASTE VEHICLES WEIGH APPROX. 20 TONS WHEN FULL. DRIVEWAYS MUST BE BUILT TO SUPPORT THIS WEIGHT WITHOUT DAMAGE TO DRIVE.

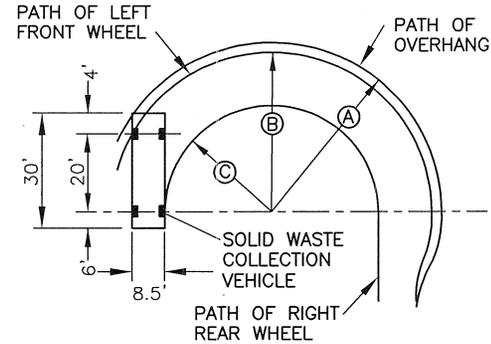
HAMMER HEAD DRIVE



SAFETY NOTE:

BACKING UP MORE THAN 50' AFTER SERVICE TO A SOLID WASTE BIN IS PROHIBITED. THE 50' IS MEASURED FROM THE BACK OF THE SOLID WASTE COLLECTION VEHICLE. THE VEHICLE IS APPROX. 30' LONG.

PUBLIC ROADWAY

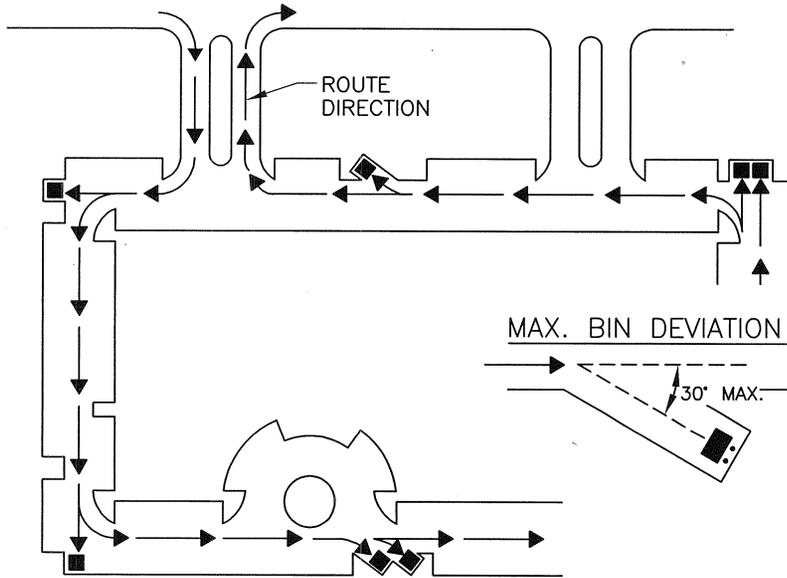


- (A) 43.9' MIN. TURNING RADIUS
- (B) 42' TURNING RADIUS
- (C) 28.4' TURNING RADIUS

CLEARANCE REQUIREMENTS

NOTES

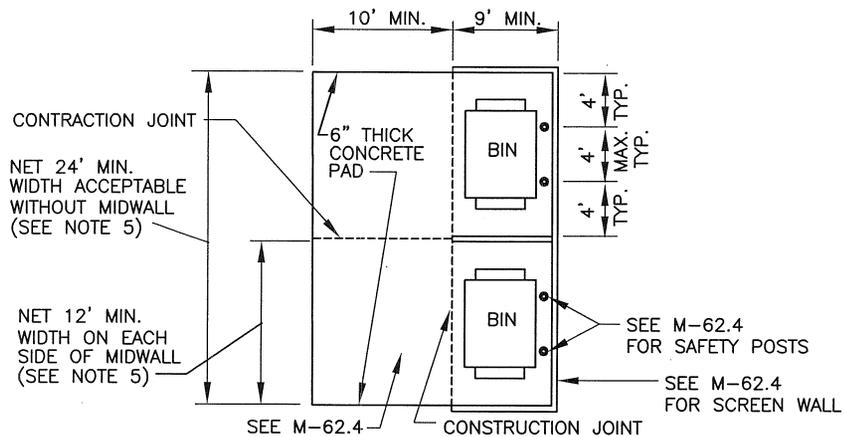
1. ALL CURBS ARE TO BE ALIGNED ON THE OUTSIDE OF ENCLOSURE WALLS. THE CURBS SHALL NOT INTERFERE WITH THE ROUTE OF THE SOLID WASTE COLLECTION VEHICLE.
2. IN GENERAL TERMS, ALL SOLID WASTE COLLECTION ROUTES SHALL MEET ENGINEERING DESIGN CRITERIA (STREET WIDTHS, TURNING RADII) IN A MANNER THAT ALLOWS SOLID WASTE COLLECTION VEHICLES ACCESS TO BIN ENCLOSURES. SITES SHALL BE DESIGNED SO COLLECTION VEHICLES CAN SAFELY ACCESS AND LIFT A BIN WITHOUT OBSTRUCTIONS (GROUND LEVEL AND AERIAL OBSTRUCTIONS).
3. FOR THE SAFETY OF OTHERS, SOLID WASTE COLLECTION VEHICLES WILL NOT BACK UP MORE THAN 50 FEET AFTER SERVICING A BIN.
4. NO AWNINGS OR BUILDING PROJECTIONS ALLOWED IN SOLID WASTE COLLECTION VEHICLE ROUTES. MIN. OVERHEAD CLEARANCE OF 14' IS REQUIRED IN DRIVE AND 25' OVER BIN ENCLOSURE AREA FROM STEEL SAFETY POSTS BACK 50'.
5. ROUTES SHALL BE CLEAR OF ALL OBSTRUCTIONS (CURBS, WALLS, OVERHEAD WIRES, AND AWNINGS) TO PREVENT DAMAGE FROM THE COLLECTION VEHICLE.
6. TAKE NOTE OF THE SOLID WASTE COLLECTION ROUTE. THE COLLECTION VEHICLE SHALL TRAVEL THROUGH A SITE ONCE WITHOUT BACKTRACKING.
7. BIN ENCLOSURES ARE TO BE ANGLED NO MORE THAN 30 DEGREES FROM THE CENTER LINE OF THE SOLID WASTE COLLECTION VEHICLE ROUTE.
8. BIN ENCLOSURES SHALL BE LOCATED AWAY FROM ENTRANCES AND EXITS SO SOLID WASTE COLLECTION VEHICLE DOES NOT CREATE A SAFETY HAZARD BY BLOCKING IN-COMING OR OUT-GOING TRAFFIC.
9. STANDARDS FOR SINGLE, DOUBLE, AND TRIPLE-WIDE BIN ENCLOSURES ARE ADDRESSED IN M-62.2 AND M-62.3.
10. STANDARDS FOR BIN ENCLOSURE SCREEN WALLS, SAFETY POSTS, AND GATES ARE ADDRESSED IN M-62.4.



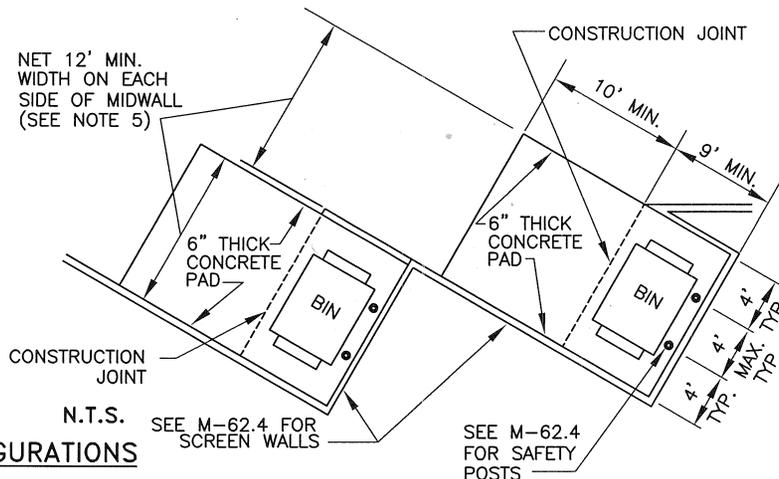
A TYPICAL SOLID WASTE COLLECTION ROUTE

STANDARDS FOR SOLID WASTE VEHICLE ACCESS

DETAIL NO. M-62.1

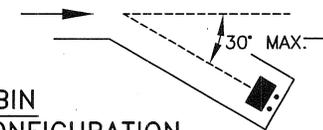


DOUBLE WIDE BIN ENCLOSURE CONFIGURATIONS

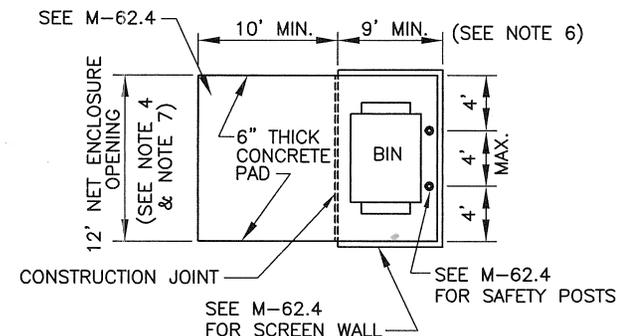


SINGLE-WIDE BIN ENCLOSURE CONFIGURATION

MAX. BIN DEVIATION



N.T.S.

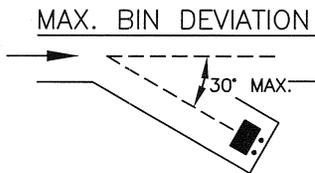


NOTES

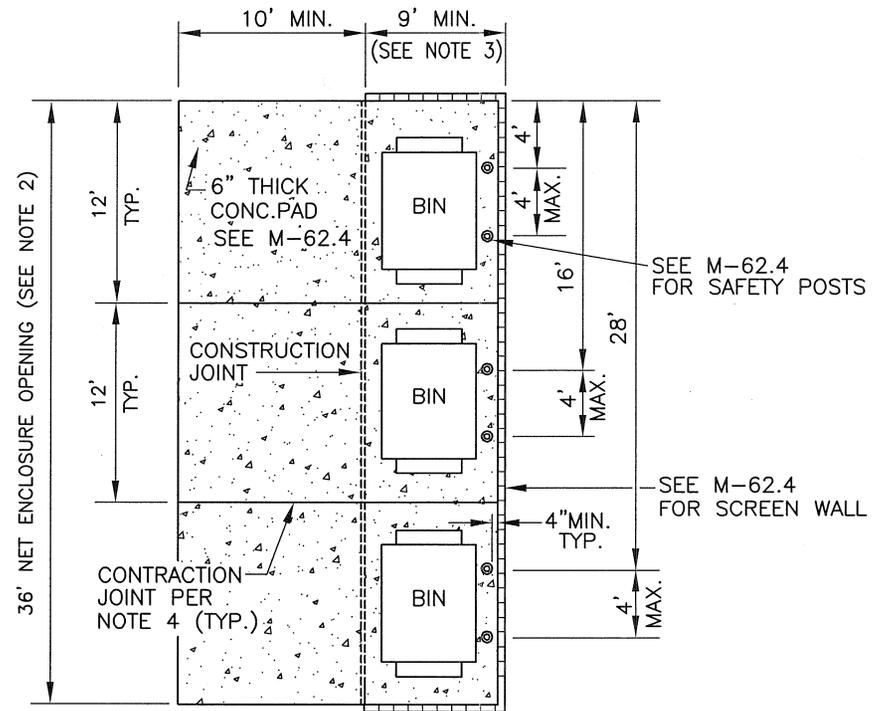
- ALL COMMERCIAL PROPERTIES SHALL BE DESIGNED WITH ENCLOSURES TO ACCOMMODATE (1) REFUSE AND (1) RECYCLING ENCLOSURE FOR EVERY 20,000 SQUARE FEET OF BUILDING SPACE. RESTAURANTS WHICH ARE DESIGNED ON A SINGLE PAD SHALL HAVE A MINIMUM (1) REFUSE AND (1) RECYCLING ENCLOSURE. THE ENCLOSURES CAN BE SET UP AS DOUBLES OR SINGLES TO MAXIMIZE THE USE OF THE PROPERTY.
- MULTI-UNIT RESIDENTIAL DEVELOPMENTS SHALL BE DESIGNED WITH EITHER SINGLE OR DOUBLE-WIDE ENCLOSURES FOR TRASH AND AT LEAST ONE TRIPLE-WIDE ENCLOSURE FOR RECYCLING.
- COMPACTORS CAN BE USED IN DEVELOPMENTS WHERE THE EMPLOYEES LOAD AND ACTIVATE THE COMPACTING EQUIPMENT. DEVELOPMENTS THAT ALLOW CUSTOMERS OR RESIDENTS ACCESS TO THE COMPACTING EQUIPMENT WILL NOT BE APPROVED. MARICOPA COUNTY REGULATIONS REQUIRE TWICE PER WEEK COLLECTION IF FOOD WASTE IS PLACED INTO CONTAINERS.
- THE NUMBER OF BIN ENCLOSURES NEEDED DEPENDS ON THE SIZE OF THE DEVELOPMENT. TYPICALLY, TOTAL VOLUME NEEDS CAN BE CALCULATED BASED ON ONE HALF-CUBIC YARD PER LIVING UNIT PER WEEK. FOR EXAMPLE, A DEVELOPMENT WITH 240 UNITS X .5 YARDS = 120 YARDS PER WEEK OR 10 TRASH BINS (6 YARD) SERVICED TWO TIMES PER WEEK (10 X 6 X 2 = 120 YARDS).
- SINGLE-WIDE BIN ENCLOSURES SHALL HAVE A NET ENCLOSURE OPENING OF 12 FEET.
- DOUBLE-WIDE BIN ENCLOSURES SHALL HAVE A NET ENCLOSURE OPENING OF 24 FEET WITHOUT MIDWALLS. ALTHOUGH NOT PREFERRED, DOUBLE WIDE BIN ENCLOSURES CAN BE DESIGNED WITH MIDWALLS WITH A NET ENCLOSURE OPENING OF 12 FEET ON EACH SIDE OF MIDWALL.
- GATES, HINGES, & MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MIN. 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE.
- GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.
- BIN ENCLOSURES ARE TO BE ANGLED NO MORE THAN 30 DEGREES FROM THE CENTER LINE OF THE SOLID WASTE COLLECTION VEHICLE ROUTE.
- BINS THAT ARE VISIBLE FROM A PUBLIC ROADWAY SHALL HAVE ENCLOSURE GATES THAT SCREEN THE BINS FROM PUBLIC VIEW.
- BIN ENCLOSURES TO BE A MINIMUM OF 3 FEET FROM ANY NON-COMBUSTIBLE PLANNED OR EXISTING STRUCTURE AT ITS CLOSEST POINT; 5 FEET FROM ANY COMBUSTIBLE PLANNED OR EXISTING STRUCTURE AT ITS CLOSEST POINT (PER UNIFORM FIRE CODE 1103.2.2).
- STANDARDS FOR SOLID WASTE VEHICLE ACCESS ARE ADDRESSED IN M-62.1.
- STANDARDS FOR TRIPLE WIDE ENCLOSURES ARE ADDRESSED IN M-62.3.
- STANDARDS FOR BIN ENCLOSURE SCREEN WALLS, SAFETY POSTS, AND GATES ARE ADDRESSED IN M-62.4.
- STANDARDS FOR PROPERTIES APPROVED FOR BARREL SERVICE ARE ADDRESSED IN M-62.5.
- RESTAURANTS MUST PROVIDE A SEPARATE ENCLOSED AREA TO ACCOMMODATE THEIR GREASE TRAP. THIS DESIGNATED AREA MUST NOT INTERFERE WITH THE TRASH/RECYCLING COLLECTION.
- SOLID WASTE ENCLOSURES MAY INCLUDE WATER CONNECTIONS & DRAINS TO FACILITATE CLEANING OF DUMPSTERS. THESE SHOULD BE LOCATED TO NOT IMPEDE THE ENCLOSURE OPENING (AND GATING IF REQUIRED). ADDITIONAL ITEMS SUCH AS LANDSCAPING CONTROL BOXES AND LIGHTING MAY BE POSITIONED ON THE OUTSIDE OF THE ENCLOSURE WALLS.

SINGLE AND DOUBLE-WIDE BIN ENCLOSURES

DETAIL NO.
M-62.2



- NOTES**
- MULTI-UNIT RESIDENTIAL DEVELOPMENTS SHALL BE DESIGNED WITH A TRIPLE-WIDE ENCLOSURE TO ACCOMMODATE THREE COMMODITIES FOR RECYCLING.
 - TRIPLE-WIDE ENCLOSURES SHALL HAVE A NET ENCLOSURE OPENING OF 36 FEET AND SHALL BE DESIGNED WITHOUT MIDWALLS. GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.
 - GATES, HINGES, AND MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MINIMUM 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE.
 - BIN ENCLOSURES ARE TO BE ANGLED NO MORE THAN 30 DEGREES FROM THE CENTER LINE OF THE SOLID WASTE COLLECTION VEHICLE ROUTE.
 - CONTRACTION JOINTS MAY BE EITHER SCORED OR SAWCUT 1-INCH DEEP.



TRIPLE-WIDE BIN ENCLOSURE

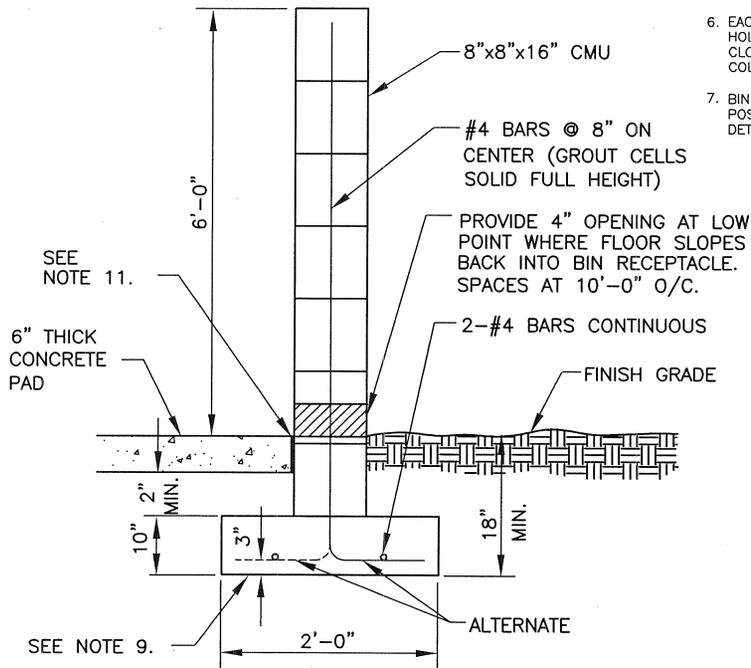
N.T.S.

TRIPLE-WIDE BIN ENCLOSURES

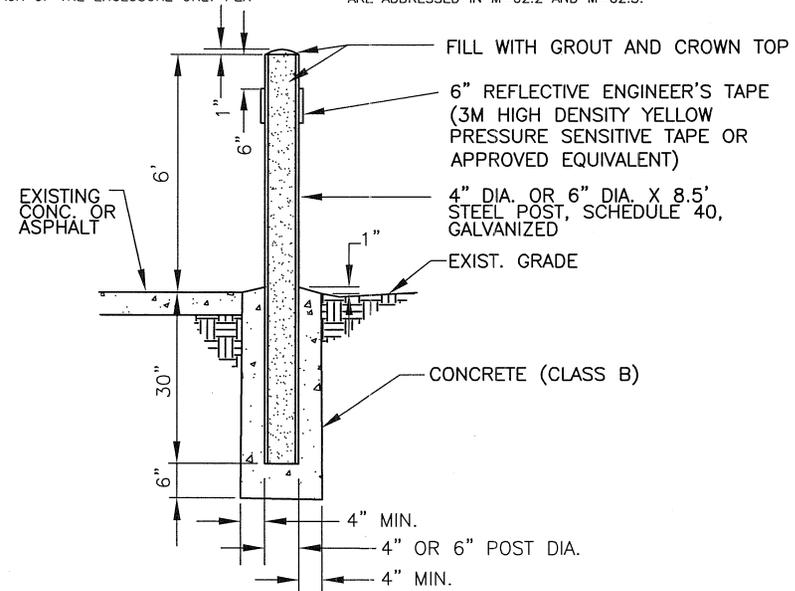
DETAIL NO.
M-62.3

NOTES

1. TRASH AND RECYCLING BIN AREA SHALL BE SCREENED WITH A SIX FOOT (6') MASONRY WALL PER DETAIL ON THIS SHEET.
2. BIN ENCLOSURE TO BE A MINIMUM OF 3 FEET FROM ANY PLANNED OR EXISTING STRUCTURE AT ITS CLOSEST POINT.
3. BINS THAT ARE VISIBLE FROM A PUBLIC ROADWAY SHALL HAVE ENCLOSURE GATES THAT SCREEN THE BINS FROM PUBLIC VIEW.
4. GATES SHALL BE INSTALLED SO THERE IS A NET BIN ENCLOSURE OPENING OF 12 FEET PER BIN. GATES, HINGES, AND MOUNTING HARDWARE SHALL NOT INTRUDE UPON MINIMUM NET ENCLOSURE OPENING.
5. GATES, HINGES, AND MOUNTING HARDWARE SHALL BE INSTALLED SO THERE IS A MINIMUM 9 FOOT DEPTH CREATED WITHIN EACH ENCLOSURE.
6. EACH ENCLOSURE GATE SHALL HAVE DROP PINS INSTALLED AND HOLES DRILLED IN THE CONCRETE AT BOTH THE OPEN AND CLOSED POSITIONS TO PREVENT GATES FROM CLOSING INTO THE COLLECTION VEHICLE.
7. BIN ENCLOSURES SHALL HAVE (2) 4" DIAMETER STEEL SAFETY POSTS INSTALLED IN THE BACK OF THE ENCLOSURE ONLY PER DETAIL ON THIS SHEET.
8. SAFETY POSTS SHALL HAVE A HEIGHT OF 6 FEET OR BE EQUAL TO THE HEIGHT OF THE BACK SCREEN WALL OF THE ENCLOSURE. SAFETY POSTS SHALL BE PLACED A MINIMUM OF 4" FROM THE WALL.
9. USE CLASS "A" CONCRETE AS PER SECTION 725 EXCEPT AS NOTED IN SAFETY POST DETAIL ON THIS SHEET.
10. STEEL REINFORCEMENT SHALL BE GRADE 40.
11. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER ASTM D-1751.
12. EXTERIOR FINISH OF 6 FOOT MASONRY SCREEN WALLS SHALL BE COORDINATED ARCHITECTURALLY WITH PRIMARY BUILDING FINISHES.
13. SOIL BELOW THE WALL FOOTER AND CONCRETE PAD SHALL BE COMPACTED TO A DEPTH OF 6 INCHES AND TO A MINIMUM DRY DENSITY OF 90% IN ACCORDANCE WITH ASTM D-2922 AND D-3017, AFTER ADJUSTMENT FOR ROCK CORRECTION.
14. STANDARDS FOR SOLID WASTE VEHICLE ACCESS ARE ADDRESSED IN M-62.1.
15. STANDARDS FOR SINGLE, DOUBLE, AND TRIPLE-WIDE BIN ENCLOSURES ARE ADDRESSED IN M-62.2 AND M-62.3.



6-FOOT MASONRY SCREEN WALL
N.T.S.



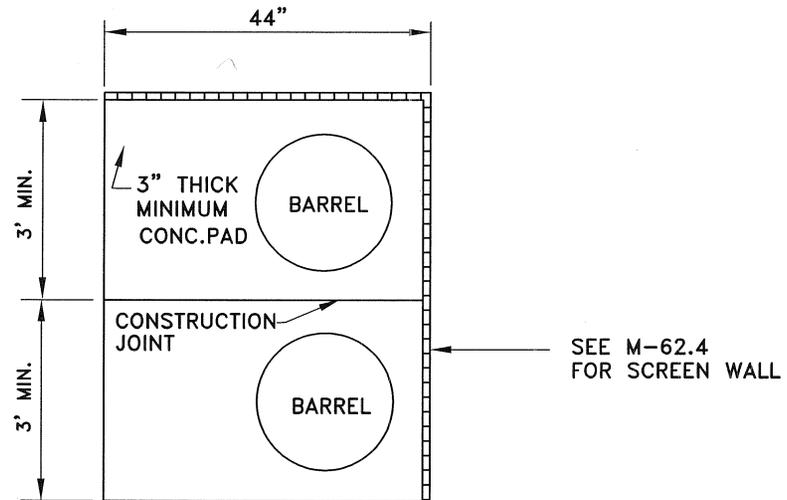
SAFETY POST
N.T.S.

BIN ENCLOSURE SCREEN WALL,
SAFETY POST, & GATE STANDARDS

DETAIL NO.
M-62.4

NOTES

1. BUSINESSES AND APARTMENTS THAT GENERATE A SMALL VOLUME OF REFUSE AND RECYCLABLES (TYPICALLY SMALL OFFICES, DUPLEXES, TRIPLEXES, AND FOURPLEXES) MAY REQUEST TO USE AUTOMATED BARREL SERVICE. PRIOR APPROVAL MUST BE MADE FROM THE SOLID WASTE DIVISION. APPROVAL WILL BE BASED ON THE NEEDS OF THE BUSINESS OR APARTMENT AND CAPABILITY OF ROUTING THE STOP.
2. THE NUMBER OF BARRELS WILL BE DETERMINED BY:
 - BUSINESS – THE NUMBER OF OCCUPANTS AND THE SERVICES THEY PROVIDE.
 - APARTMENTS – THE NUMBER OF UNITS.
3. STORAGE AREA SCREEN WALLS ARE REQUIRED FOR BUSINESSES AND APARTMENTS THAT UTILIZE BARREL SERVICE. THE WALL SHALL BE DESIGNED TO SCREEN THE BINS FROM PUBLIC VIEW.
4. THE LENGTH OF THE PAD WILL DEPEND ON THE NUMBER OF BARRELS RECOMMENDED BY THE SOLID WASTE DIVISION (3' FOR EACH BARREL). THE PAD SHALL BE A MINIMUM OF 3" OF CONCRETE WITHOUT A LIFT. THIS WILL ENABLE THE CUSTOMERS TO ROLL THE BARRELS WITH MINIMUM DIFFICULTY. THE DEPTH SHALL BE 44" AND THE HEIGHT A MINIMUM OF 4'.
5. COLLECTION OF BARRELS WILL FOLLOW THE CURRENT RESIDENTIAL COLLECTION ORDINANCE.



STORAGE AREA SCREEN WALLS FOR BARREL SERVICE

N.T.S.

STORAGE AREA SCREEN WALLS - BARREL SERVICE

DETAIL NO.
M-62.5

PEORIA DETAIL 911

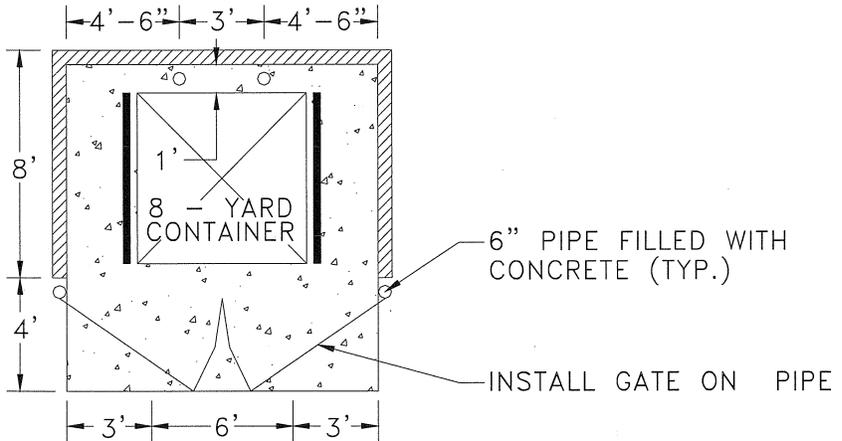
TRASH ENCLOSURE - SINGLE CONTAINER



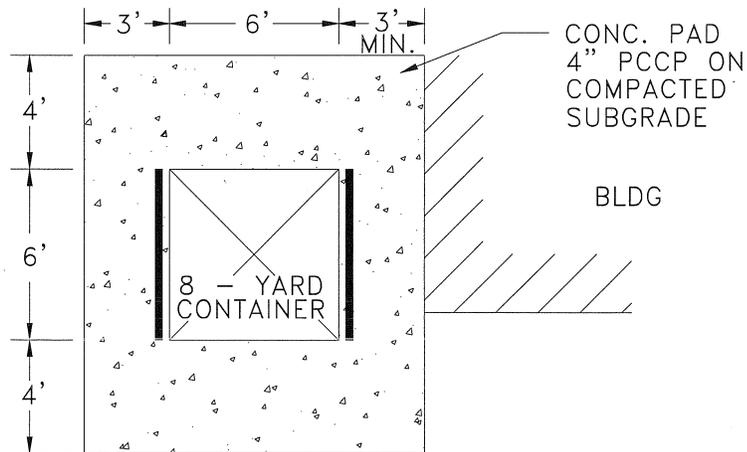
APPROVALS:

CITY ENGINEER

DATE



WALL SIZE - 6' HEIGHT
 CONTAINER SIZE - 6' WIDE, 6' DEEP, 7' HIGH



CONTAINER SIZE - 6' WIDE, 6' DEEP, 7' HIGH

NOTES:

1. FRONTLOAD VEHICLE 35' LONG.
2. TURNING RADIUS - 45'.
3. TRUCKS LOAD FROM THE FRONT.
4. WHEN STRAIGHT APPROACH IS NOT AVAILABLE, ENCLOSURE MUST BE PLACED AT 45° TO THE ROADWAY.
5. CONCRETE SLAB 4' IN FRONT OF THE ENCLOSURE TO SUPPORT THE VEHICLE.
6. ENCLOSURE TO BE CONSTRUCTED AS PER SPECS.
7. NO PRIVATE HAULING SERVICE TO BE PROVIDED TO THE RESIDENTS OF PEORIA.

REVISED 5/9/02

NOTE:

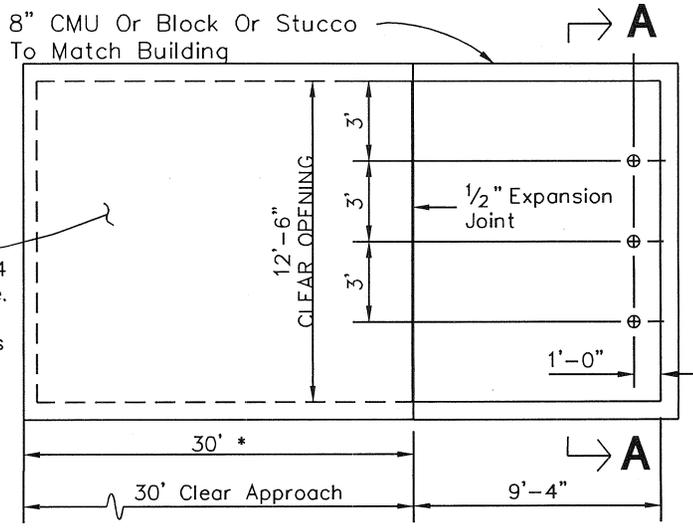
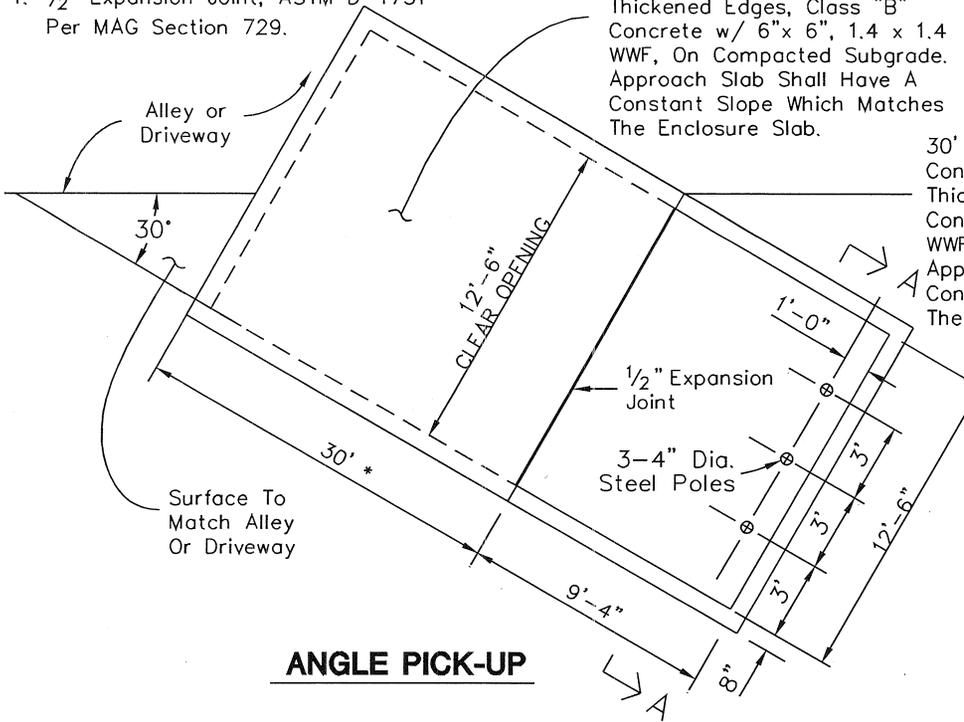
- 1/2" Expansion Joint, ASTM D-1751 Per MAG Section 729.

30' x 14' x 6" Thick Concrete Approach Slab With Thickened Edges, Class "B" Concrete w/ 6"x 6", 1.4 x 1.4 WWF, On Compacted Subgrade. Approach Slab Shall Have A Constant Slope Which Matches The Enclosure Slab.

30' x 14' x 6" Thick Concrete Approach Slab With Thickened Edges, Class "B" Concrete w/ 6"x 6", 1.4 x 1.4 WWF, On Compacted Subgrade. Approach Slab Shall Have A Constant Slope Which Matches The Enclosure Slab.

* In locations where a 30' approach slab is not possible, approval from the City of Scottsdale Quality Compliance Division is required.

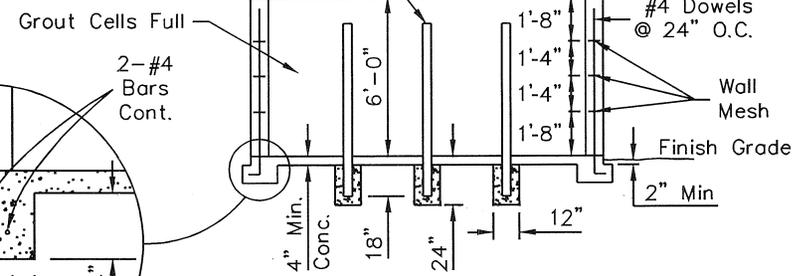
8" CMU Or Block Or Stucco To Match Building



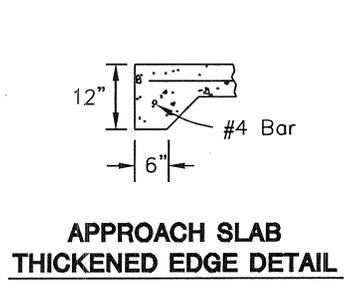
HEAD ON PICK-UP

ANGLE PICK-UP

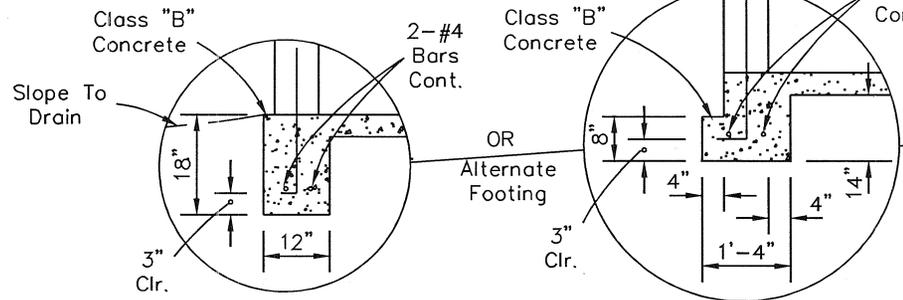
Place 3-4" Dia. Steel Poles 60" Above Grade Cap Or Grout Full. Paint To Match Wall Color.



SECTION A-A

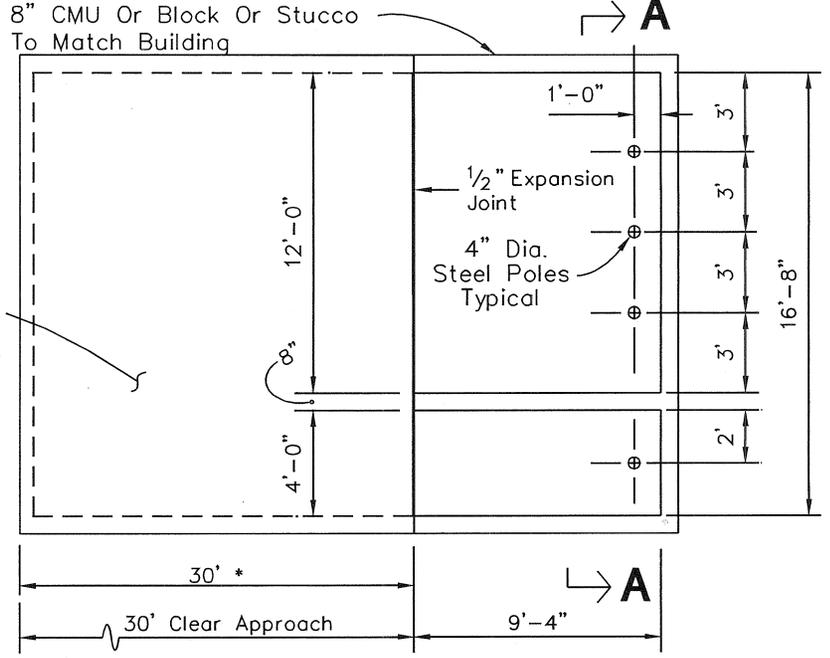
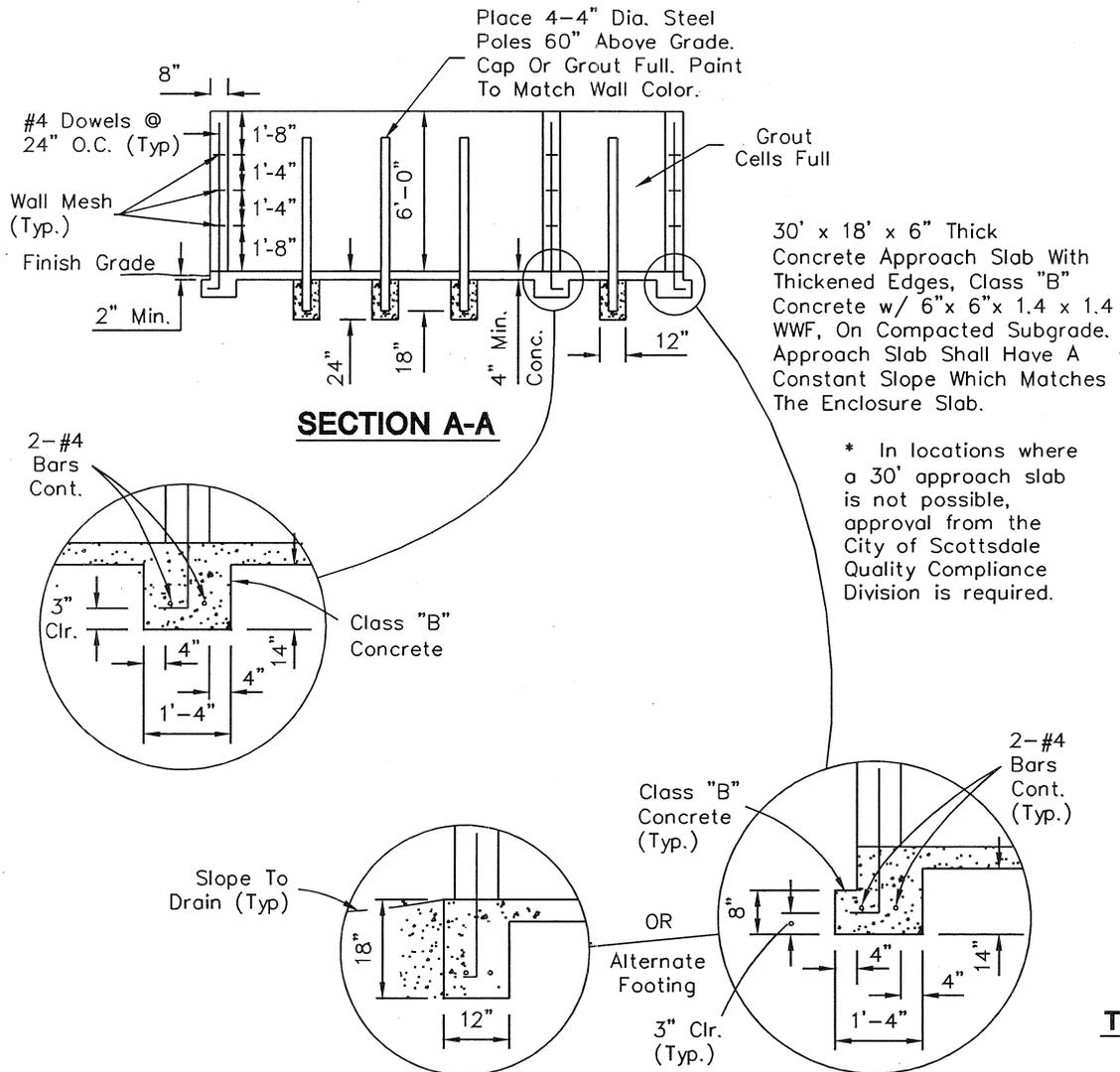


APPROACH SLAB THICKENED EDGE DETAIL

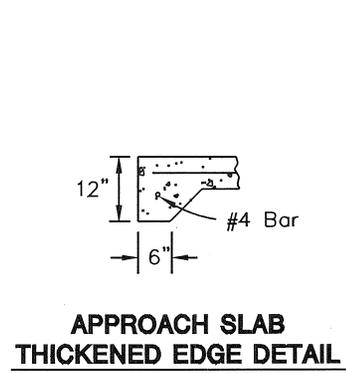


DETAIL NO. 2146-1	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	REFUSE ENCLOSURE	DETAIL NO. 2146-1
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REVISED 5/9/02



* In locations where a 30' approach slab is not possible, approval from the City of Scottsdale Quality Compliance Division is required.



PLAN

- NOTES:**
1. Enclosure For Angle Pick-up Similar To COS Detail 2146-1
 2. 1/2" Expansion Joint, ASTM D-1751 Per MAG Section 729.

REVISED 5/9/02

Place 6-4" Dia. Steel Poles 60" Above Grade Cap Or Grout Full. Paint To Match Wall Color.

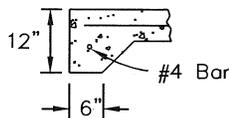
Grout Cells Full

#4 Dowels @ 24" O.C.

Class "B" Concrete

2-#4 Bars Cont.

SECTION A-A



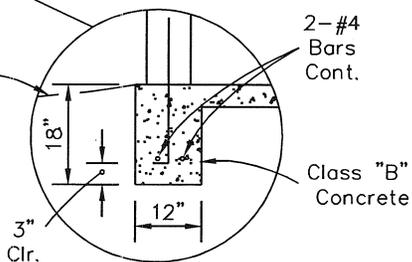
APPROACH SLAB THICKENED EDGE DETAIL

OR Alternate Footing

Slope To Drain (Typ)

2-#4 Bars Cont.

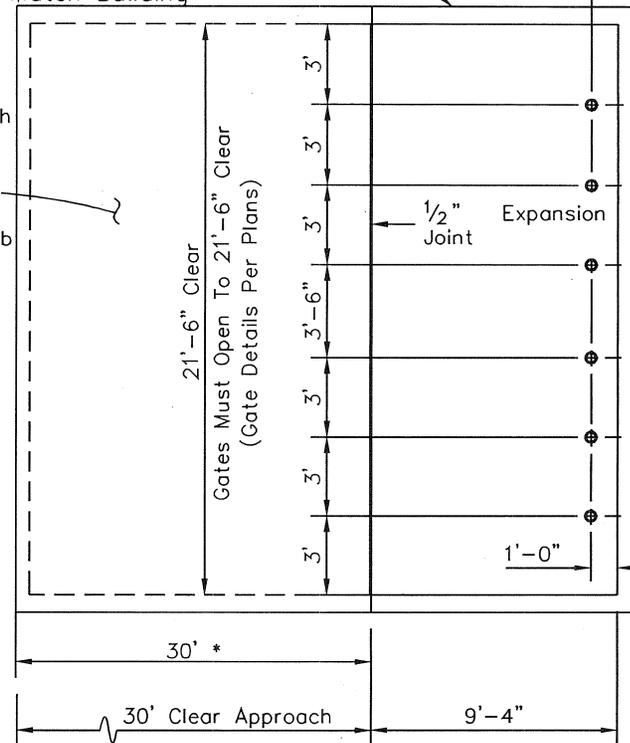
Class "B" Concrete



8" CMU Or Block Or Stucco To Match Building

30' x 23' x 6" Thick Concrete Approach Slab With Thickened Edges, Class "B" Conc. w/ 6"x 6", 1.4 x 1.4 WWF, On Compacted Subgrade. Approach Slab Shall Have A Constant Slope Which Matches The Enclosure Slab.

* In locations where a 30' approach slab is not possible, approval from the City of Scottsdale Quality Compliance Division is required.



PLAN

NOTE:

1. Double Enclosure For Angle Pick-Up Similar To COS Det. 2146-1
2. 1/2" Expansion Joint, ASTM D-1751 Per MAG Section 729.

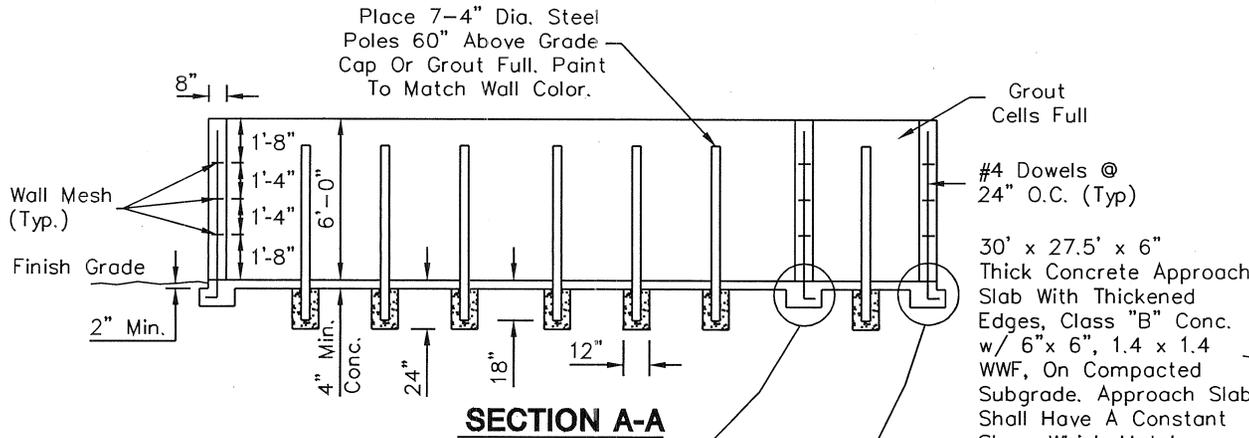
DETAIL NO. **2147-1** **City of Scottsdale Standard Details**

APPROVED BY: **Scottsdale Standards & Specifications Committee**

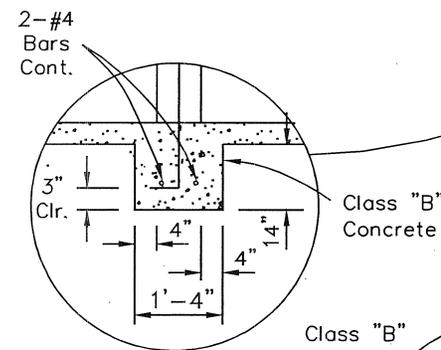
DOUBLE REFUSE ENCLOSURE

DETAIL NO. **2147-1**

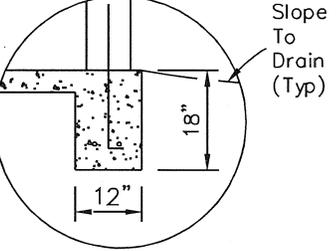
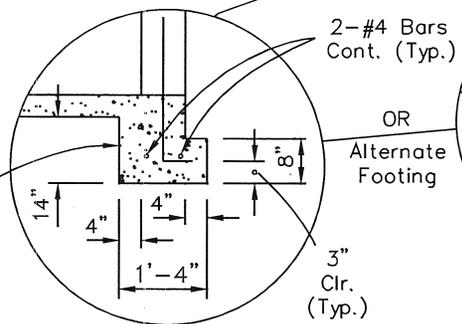
REVISED 5/9/02



SECTION A-A

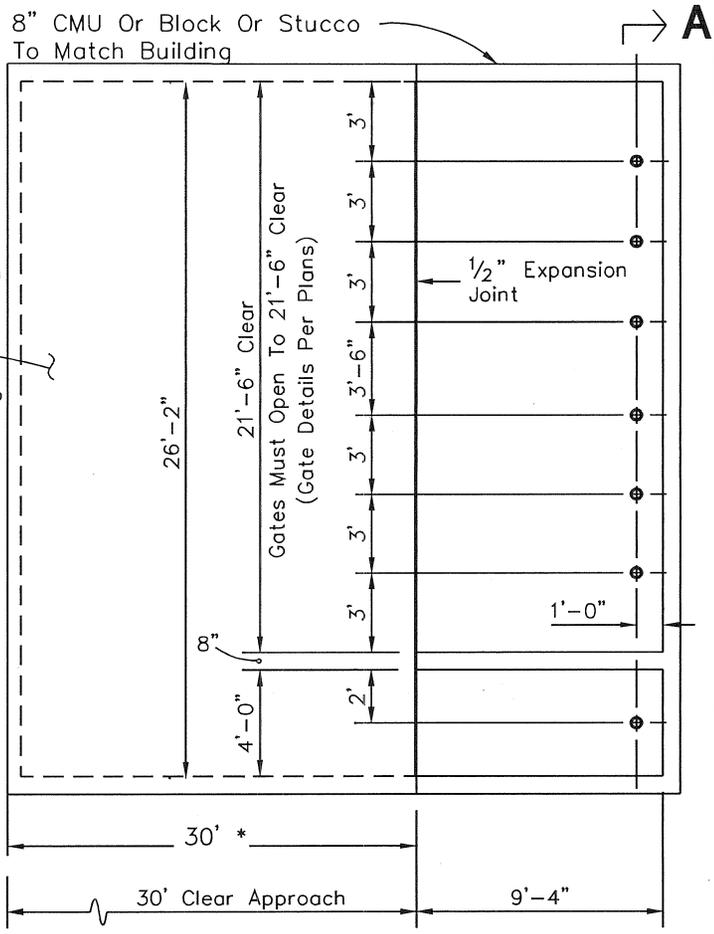


APPROACH SLAB THICKENED EDGE DETAIL



NOTES:

1. Double Enclosure For Angle Pick-Up Similar To COS Det. 2146-1
2. 1/2" Expansion Joint, ASTM D-1751 Per MAG Section 729.



PLAN

* In locations where a 30' approach slab is not possible, approval from the City of Scottsdale Quality Compliance Division is required.

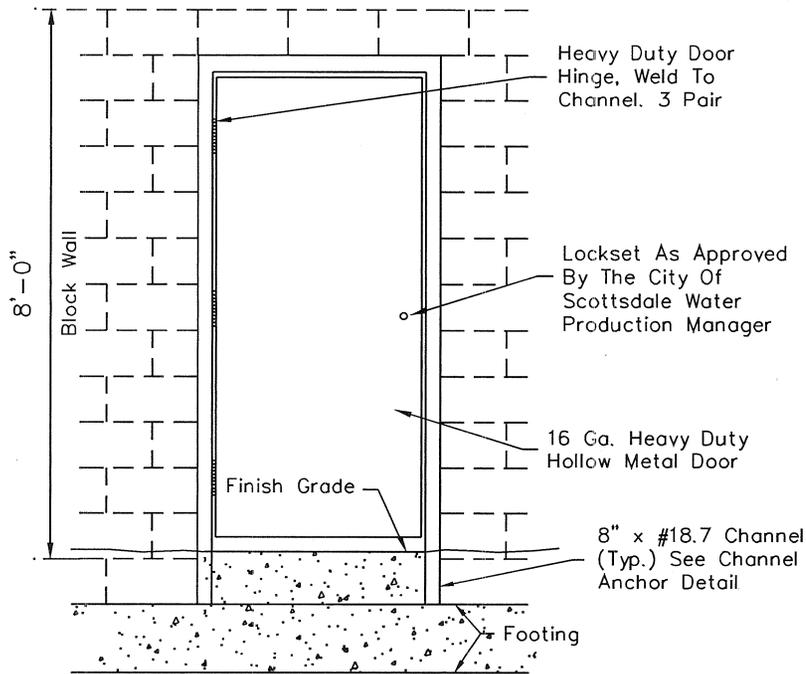
DETAIL NO. **2147-2** City of Scottsdale Standard Details

APPROVED BY: **Scottsdale Standards & Specifications Committee**

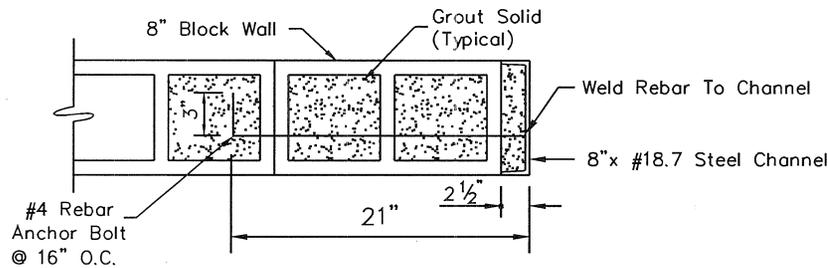
DOUBLE REFUSE ENCLOSURE W/ GREASE CONTAINMENT AREA

DETAIL NO. **2147-2**

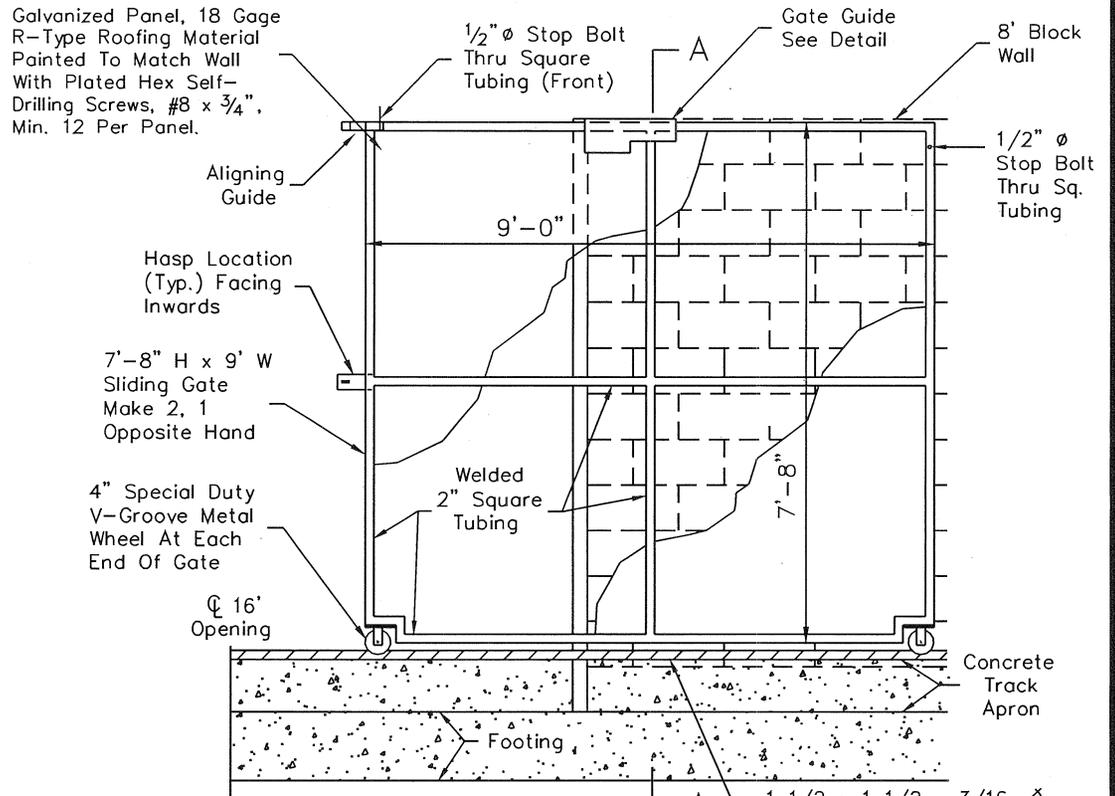
REVISED 4/12/05



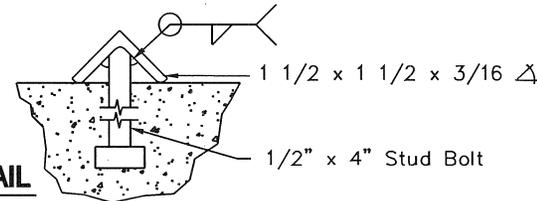
HINGED DOOR



CHANNEL ANCHOR DETAIL



ELEVATION



TRACK DETAIL

DETAIL NO.
2165-1

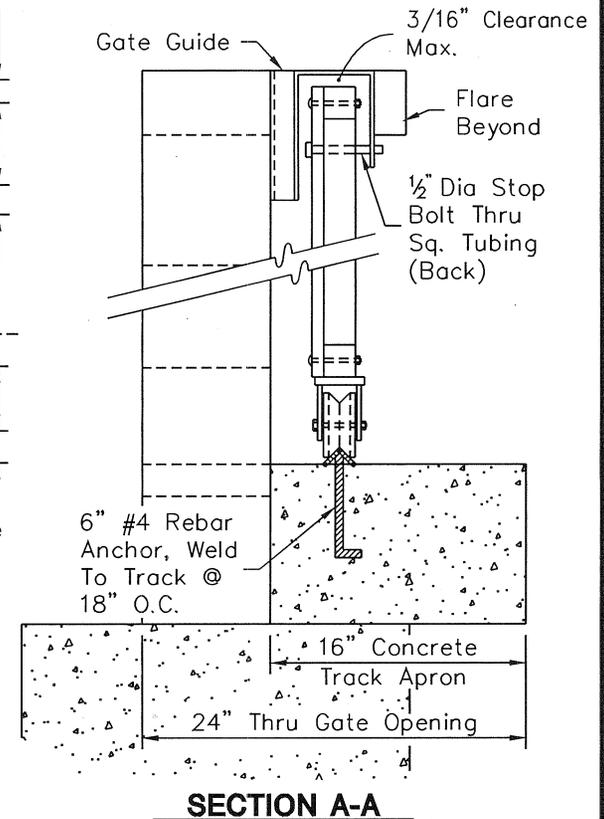
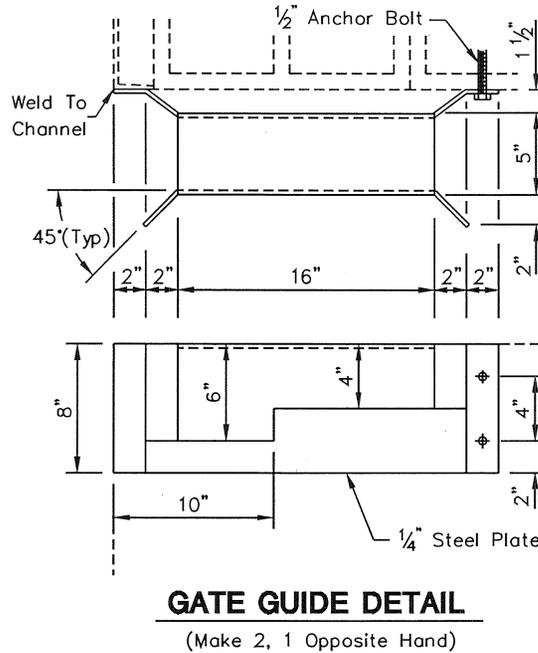
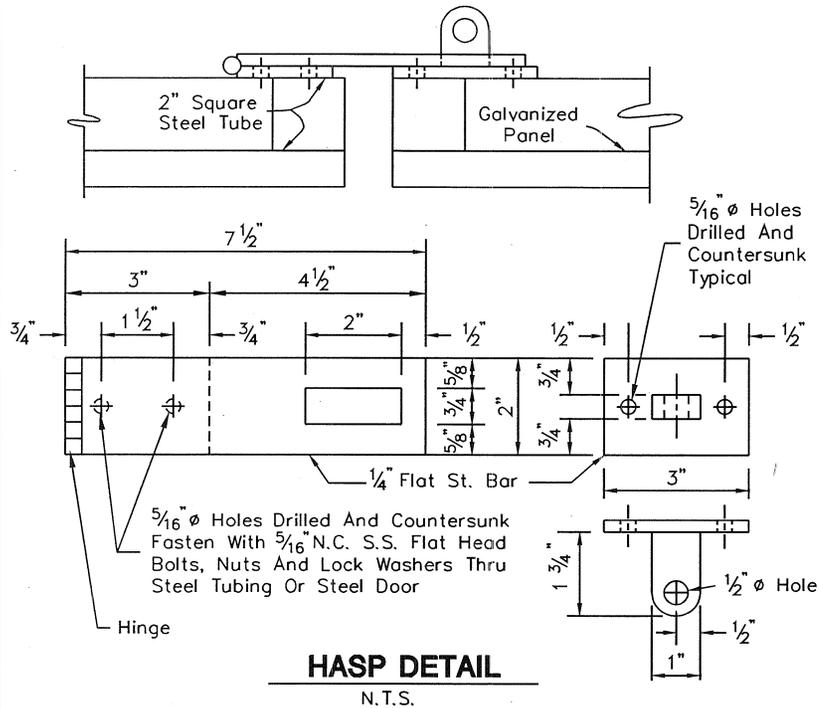
City of Scottsdale
Standard Details

APPROVED BY:
Scottsdale Standards & Specifications Committee

16' SLIDING GATE & HINGED DOOR

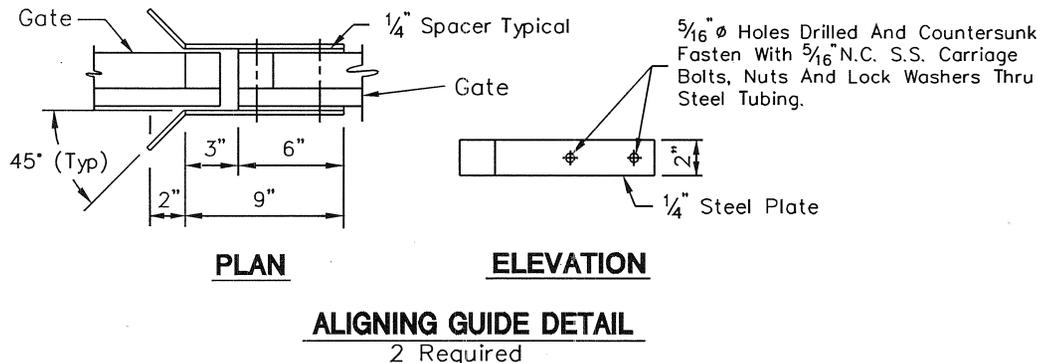
DETAIL NO.
2165-1

REVISED 4/12/05



NOTES:

1. Contractor shall prime and paint all metal surfaces. Before application, the color and manufacturer of the paint shall be approved by the City.
2. Prior to painting, all surfaces shall be cleaned free of concrete, mortar, rust, dirt and any other objectionable materials.
3. Apply one (1) primer coat and two (2) exterior alkyd gloss enamel coats to metal.



DETAIL NO. 2165-2	City of Scottsdale Standard Details	APPROVED BY: Scottsdale Standards & Specifications Committee	16' SLIDING GATE	DETAIL NO. 2165-2
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