NOTE:
ALL METAL FRAMES, GRATES, PLATES, AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED OR BETTER.

STA. 0+8900+00 FT. (D.I. #3)
EXIST. DRAIN INLET TO REMAIN.
MODIFY GRATE TO BICYCLE RATED STEEL GRATE.

STA. 1+7200+00 FT. (D.I. #3)
EXIST. DRAIN INLET TO REMAIN.
MODIFY GRATE TO BICYCLE RATED STEEL GRATE.

STA. 0+800+00 FT. (D.I. #1)
EXIST. DRAIN INLET TO BE MODIFIED AND CHANGED.
TO CATCH BASIN STRUCTURE.
NEW TOP CURB ELEV-200.88 FT.
NEW LIP ELEV-200.62 FT.
(SEE FIGURE 6 SHEET 117)

NOTE:
ALL METAL FRAMES, GRATES, PLATES, AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED OR BETTER.

GRADE NOTE:
GRADE TYPE WILL VARY DEPENDING ON ACTUAL LOCATION RELATIVE TO ACCESSIBLE ROUTE. NEEDS TO BE ADA COMPLIANT GRADE.
(SEE DETAIL SHEET 130) OR
OTHERWISE, MODIFY TO BICYCLE RATED GRADE.

STA. 4+1500+00 FT. (D.I. #5)
EXIST. DRAIN INLET TO BE MODIFIED AS NEEDED.
(SEE GRADE NOTE THIS SHEET)

STA. 4+3200+00 FT. (D.I. #6)
EXIST. DRAIN INLET TO REMAIN IN PLACE. EXIST.
GRADE TO REMAIN.

GRAPHICAL SCALE:
20 10 0 20 40
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER

DEPARTMENT OF PUBLIC WORKS
BUILDING SERVICES

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572001
Scale As Noted
Date September, 2004

PROJECT SHEET NO. 2 OF 24 SHEETS

100% SUBMITTAL
STA. 10+77.00 + LT. (C.B. #1)
EXIST: CATCH BASIN STRUCTURE TO REMAIN IN PLACE. MODIFY CATCH BASIN TO MATCH WITH NEW CURB & GUTTER.
NEW TOP MH COVER ELEV=206.29'
NEW TOP CURB ELEV=206.28'
NEW BOT. GUTTER ELEV=205.36'
EXIST: EDGE PWNT. ELEV=205.74'
(SEE FIGURE 4 SHT. 193)

STA. 19+70.00 + LT. (C.B. #3)
EXIST: CATCH BASIN LOCATION # TOP ELEVATION TO REMAIN IN PLACE.

STA. 20+60.00 + LT. (C.B. #2)
EXIST: CATCH BASIN STRUCTURE TO REMAIN IN PLACE. MODIFY CATCH BASIN TO MATCH WITH NEW CURB & GUTTER.
NEW TOP MH COVER ELEV=206.41'
NEW TOP CURB ELEV=206.40'
NEW BOT. GUTTER ELEV=205.95'
EXIST: EDGE PWNT. ELEV=205.60'
(SEE FIGURE 5 SHT. 193)

STA. 19+79.00 + RT. (C.B. #4)
EXIST: CATCH BASIN LOCATION # TOP ELEVATION TO REMAIN IN PLACE.

NOTE:
ALL METAL FRAMES, GRATES, PLATES, AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED OR BETTER.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA'I

COUNTY ENGINEER

DRAIN SITE PLAN ENLARGEMENT

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP-057200
Scale As Shown: 1" = 20'

Date: September 2004

Sheet No. 1 OF 3 SHEETS

100% SUBMITTAL
NOTE:
ALL METAL FRAMES, GRATES, PLATES, AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED OR BETTER.

NOTE:
ALL METAL FRAMES, GRATES, PLATES, AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED OR BETTER.
STA. 26+330.00, LT. (O.I. #10)
EXISTING DRAIN INLET TOP
GRATED SECTION TO BE REMOVED
AND REPLACED W/MODIFIED
CATCH BASIN # MANNHOLE COVER.
TOP COVER ELEV. TO BE ADJUSTED
TO NEW DESIGN ELEVATIONS
EXIST. TOP ELEV. 1928A
NEW TOP CURB ELEV. 1927A
NEW DOT. CURB ELEV. 1933A
(SEE DET. SHT. RAC FIGURE 9)

STA. 26+330.00, RT. (C.B. #5)
EXIST. CATCH BASIN LOCATION # TOP
ELEVATION TO REMAIN IN PLACE.
(SEE DET. SHT. RAC FIGURE 9)

NOTE:
ALL METAL FRAMES, GRATES, PLATES,
AND ACCESSORIES SHALL BE HOT DIPPED
GALVANIZED OR BETTER.

STA. 28+86.00, LT. (O.I. #3)
EXIST. DRAIN INLET STRUCTURE TO
REMAIN, ADJUST TOP ELEV. TO NEW
DESIGN
EXIST. TOP ELEV. 1902B
NEW TOP ELEV. 1903B
(SEE DET. SHT. RAC FIGURE 12)
EXIST. GRATING TO BE REMOVED AND
INSTALL ADAIS COMPLIANT, STEEL GRATES
(SEE DET. SHT. 100)

STA. 29+300.00, LT. (O.I. #4)
EXISTING DRAIN INLET
GRATING # FRAME TO BE REPLACED
WITH NEW GRATING # FRAME
(SEE DET. SHT. RAC FIGURE 12)
TOP GRADE ELEV. TO BE RAISED
TO NEW DESIGN ELEVATIONS
EXIST. TOP ELEV. 1903A
NEW TOP ELEV. 1904A
(SEE DET. SHT. RAC FIGURE 12)

NOTE:
ALL METAL FRAMES, GRATES, PLATES,
AND ACCESSORIES SHALL BE HOT DIPPED
GALVANIZED OR BETTER.
NOTE:
ALL METAL FRAMES, GRATES, PLATES, AND
ACCESSORIES SHALL BE HOT DIPPED
GALVANIZED OR BETTER.

STA. 34+95.00 LT. (SOMH, #4)
EXIST, DRAIN MH LOCATION TO
REMAIN. TOP COVER ELEV. TO BE
RAISED AND ADJUSTED TO NEW
DESIGN ELEVATIONS.
EXIST TOP ELEV. = 1764+
NEW TOP ELEV. = 1770+
(SEE MANHOLE RISER DETAIL SHT. 1.7)

STA. 34+160.00 LT. (C.B. #3)
EXIST, CATCH BASIN LOCATION & TOP
ELEVATION TO REMAIN IN PLACE.

STA. 36+320.00 LT. (C.B. #5)
EXIST, DRAIN INLET TO BE
MODIFIED TO CATCH BASIN
STRUCTURE AND CHANGED TO
NEW DESIGN ELEVATIONS.
(SEE DETAIL SHT. 1.80)

STA. 36+390.00 LT. (SOMH, #5)
EXIST, DRAIN MH LOCATION & TOP
ELEVATION TO REMAIN IN PLACE.
EXIST, DRAIN MH LOCATION TO
REMAIN. TOP COVER ELEV. TO REMAIN.
STA. 36+060.00 LT. (C.B. #9)
EXIST, CATCH BASIN TO
BE MODIFIED AND CHANGED TO
NEW DESIGN ELEVATIONS.
(SEE DETAIL SHT. 1.98 & 1.96)

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA'I
APPROVED:

COUNTY ENGINEER
DATE

COUNTY OF KAUA'I
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 057000
Scale As Noted, September, 2004

100% SUBMITTAL

112
DRAINAGE CURB CUT
SEE DRIVEWAY DETAILS SHEETS 67-73

SECTION A - A
SCALE: N.T.S.

EXIST TOP ELEV=206.462

5'-6" CONCRETE SIDEWALK, PLANTER & CURB
8'-6"
TOP CURB ELEV=207.072
BOTTOM CURB ELEV=206.872

AC PAVEMENT

NOTE:
ALL METAL PLATES, AND ACCESSORIES
SHALL BE HOT DIPPED GALVANIZED
OR BETTER.

TYPICAL TRENCH DRAIN DETAIL
SCALE: N.T.S.

CONCRETE SIDEWALK, PLANTER & CURB
8'-6"
TOP CURB ELEV=207.072
BOTTOM CURB ELEV=206.872

AC PAVEMENT

NOTE:
ALL METAL PLATES, AND ACCESSORIES
SHALL BE HOT DIPPED GALVANIZED
OR BETTER.

SECTION B-B

TYPICAL TRENCH DRAIN DETAIL
SCALE: N.T.S.
DRAIN INLET #8 DETAIL (STA, 15+98.00+)
DRAIN INLET #9 DETAIL (STA. 18+35.00+)
SECTION A - A
DRAINAGE IMPROVEMENT FIGURE 4 @ STA. 10+77.00+ (C.B. #1)

EXIST, MANHOLE COVER & FRAME
TO BE REUSED & RAISED TO
NEW DESIGN ELEVATION.
EXIST, TOP MH ELEV= 206.23
NEW TOP MH ELEV= 206.23

EXIST, CATCH BASIN STRUCTURE
TO REMAIN IN PLACE. MODIFY TOP
PORTION OF CATCH BASIN TO MATCH
WITH NEW CURB DESIGN AND LOCATION

EXIST, CMP DRAIN LINE

EXIST, 36" CMP DRAIN LINE

SEE STRUCTURAL DMGS. SHT.
ISA FOR CONNECTION AND
REINFORCEMENT DETAILS

REMOVE TOP PORTION OFEXIST.
CATCH BASIN STRUCTURE

NEW TOP CATCH BASIN STRUCTURE
TO REMAIN IN PLACE. MODIFY
TOP PORTION OF CATCH BASIN TO MATCH WITH NEW CURB DESIGN AND LOCATION.

NEW NEW TOP CURB ELEV=206.23
NEW BOT. GUTTER ELEV=205.36
SLOPE VARIES

NEW NEW TOP CURB ELEV=206.23
NEW BOT. GUTTER ELEV=205.36
SLOPE VARIES

NEW NEW TOP CURB ELEV=206.23
NEW BOT. GUTTER ELEV=205.36
SLOPE VARIES

NEW EDGE PVMT.
ELEV=206.23

EXIST, EDGE PVMT.
ELEV=206.23

SECTION B - B
SCALE: K.T.S.

NEW EDGE CONC.
GUTTER / PAVEMENT

NEW EDGE CONC.
GUTTER / PAVEMENT

MODIFIED 36" CMP DRAIN LINE

NEW TOP PORTION OF EXIST.
CATCH BASIN STRUCTURE

EXIST, CATCH BASIN STRUCTURE
TO REMAIN IN PLACE. MODIFY
TOP PORTION OF CATCH BASIN TO MATCH WITH NEW CURB DESIGN AND LOCATION.

NEW TOP MH COVER ELEV=206.24
NEW BOT. GUTTER ELEV=205.36
SLOPE VARIES

NEW TOP MH COVER ELEV=206.24
NEW BOT. GUTTER ELEV=205.36
SLOPE VARIES

NEW TOP MH COVER ELEV=206.24
NEW BOT. GUTTER ELEV=205.36
SLOPE VARIES

SECTION C - C
SCALE: K.T.S.

NEW INV.
ELEV=206.41

SEE STRUCTURAL DMGS. SHT.
ISA FOR CONNECTION AND
REINFORCEMENT DETAILS

NEW INV.
ELEV=206.41

NEW INV.
ELEV=206.41

NEW INV.
ELEV=206.41

EXIST TOP MH COVER ELEV=206.24
EXIST EDGE PVMT. ELEV=205.74

NEW TOP CATCH BASIN STRUCTURE
TO REMAIN IN PLACE. MODIFY
TOP PORTION OF CATCH BASIN TO MATCH WITH NEW CURB DESIGN AND LOCATION.

NEW TOP CATCH BASIN STRUCTURE
TO REMAIN IN PLACE. MODIFY
TOP PORTION OF CATCH BASIN TO MATCH WITH NEW CURB DESIGN AND LOCATION.

THE END
DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA‘I

DRAIN STRUCTURAL DETAILS
STA. 10+77.000E
FEDERAL AID PROJECT NO. STP 057001
Scale: 1/4" = 1'-0"
Drawn: September, 2003

New Top Curb Elev=206.20'
New Bot, Gutter Elev=205.36'

- At 6" G.C., E.W., Top Bases
- At 12" G.C., E.W., Top Bases
- 6-8 Bars

- @ 8" G.C., To Be Drilled And Embedded
  With Adhesive Into
  Exist. Conc.

New Top Curb Elev=206.20'
New Bot, Gutter Elev=205.36'

- At 6" G.C., E.W., Top And Bot. Bases
- @ 8" G.C., To Be
  Drilled And Embedded
  With Adhesive Into
  Exist. Conc.

Exist. Vert. Bar
(Note: Do Not Cut
Exist. Rebar, Typ.)
EXIST, OPEN THROAT STRUCTURE PORTION TO BE REMOVED

EXIST, CONC. PAD

EXIST, 36" CMP DRAIN LINE

EXIST, CATCH BASIN STRUCTURE TO REMAIN IN PLACE. MODIFY TOP PORTION OF CATCH BASIN TO MATCH WITH NEW CURB DESIGN AND LOCATION

EXIST, 36" CMP DRAIN LINE

NEW CATCH BASIN WITH

EXIST, 36" RCP DRAIN LINE

NEW CATCH BASIN STRUCTURE

DRAINAGE IMPROVEMENT FIGURE 5 @ STA. II+61.00+ (C.B. #2)

SCALE: NAT.

NEW NEW TOP CURB ELEV=205.36+
NEW BOT. GUTTER ELEV=205.52+
SLOPE VARIES

EXIST, EDGE PAVMT.
ELEV=205.51+

(NEW) NON-STANDARD GUTTER SECTION
SEE ENLARGEMENT THIS SHEET
REMOVE TOP PORTION OF EXIST, CATCH BASIN STRUCTURE.

EXIST, P-768 PAV.
ELEV=205.34+

SEE STRUCTURAL DWG. SHT. 180A FOR REINFORCEMENT DETAILS

EXIST, 2020

NEW LOCATION CATCH BASIN RINGS
SEE DET. SHT. 120

NEW LOCATION CATCH BASIN RINGS
SEE DET. SHT. 120

DEPRESS. GUTTER
CURB GRADE
ELEV=205.36+

NEW BOT. GUTTER ELEV=205.52+
SLOPE VARIES

5/16"

1/4" TO 1/2" SLOPE

5/16"

YAGIOTA

VARIAT

SEE STRUCTURAL DWG. SHT.
180A FOR CONNECTION AND REINFORCEMENT DETAILS

SCALE: NAT.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAULI

DRAIN DETAILS

STA II+61.00

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 067200
Scale As Shown
September 2014

100% SUBMITTAL

116
SECTION B - B

6" THICK CLASS "B" CONCRETE APRON

NEW TOP ELEV: 200.35'
EXIST. TOP ELEV: 199.94'

SLOPE VARYING

SEE STRUCTURAL DWGS. SH-118A FOR CONNECTION AND REINFORCEMENT DETAILS

SECTION A - A

6" THICK CLASS "B" CONCRETE APRON

EXISTING DRAIN INLET GRATING & FRAME TO BE REPLACED WITH NEW GRATING & FRAME
(SEE DET. SH-118A)
TOP GRATE ELEV. TO BE RAISED TO NEW DESIGN ELEVATIONS
EXIST. TOP ELEV: 199.94'
NEW TOP GRATE ELEV: 200.35'

EXISTING 36" DRAIN LINE TO MAINTAIN IN PLACE. MODIFY TOP PORTION OF DRAIN INLET TO MATCH WITH NEW DESIGN ELEVATION AND LOCATION

PLAN VIEW

SCALE: NAT.

DRAINAGE IMPROVEMENT FIGURE 7 @ STA. 19+41.00 (D.I. #10)

SCALE: NAT.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA'I

COUNTY ENGINEER

DRAIN DETAILS

STA. 19+41.00

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572001

Safe and Sound Encinitas

Sheet No. 14 OF 20 SHEETS

100% SUBMITTAL
EXISTING DRAIN INLET TOP
GRATED SECTION TO BE REMOVED
AND REPLACED W/ MODIFIED
CATCH BASIN & MANHOLE COVER.
TOP COVER ELEV. TO BE ADJUSTED
TO NEW DESIGN ELEVATIONS
EXIST, TOP ELEV.= 19.56
NEW TOP CURB ELEV.= 19.34
NEW BOT. CURB ELEV.= 19.30

SECTION A - A
SCALE: K.T.S.

EXISTING DRAIN INLET TOP
GRATED SECTION TO BE REMOVED
AND REPLACED W/ MODIFIED
CATCH BASIN & MANHOLE COVER.
TOP COVER ELEV. TO BE ADJUSTED
TO NEW DESIGN ELEVATIONS
EXIST, TOP ELEV.= 19.56
NEW TOP CURB ELEV.= 19.34
NEW BOT. CURB ELEV.= 19.30

EXIST. 42" DRAIN LINE

SEE STRUCTURAL DWGS.
SHT, IBE FOR CONNECTION AND
REINFORCEMENT DETAILS

259°

TRANSITION GUTTER

40°

DEPRESSED GUTTER

6" THK. CONC. APRON

6" THK. CONC. Curb

CONC. SIDEWALK

SEE ENLARGEMENT THIS SHEET

SLOPE VARIES

DEPRESSED GUTTER

259°

TRANSITION GUTTER

SECTION B - B
SCALE: K.T.S.

18°35' SLOPE

200% SLOPE

6" THK. CONC.

DEPRESSED GUTTER

6" THK. CONC.

160°

EXTENSION

Curb Cut

CONC. CURB

6" THICK CLASS "B" CONCRETE APRON

DRAINAGE IMPROVEMENT FIGURE 9 @ STA. 26+27.00+ (D.I. #12)
SCALE: K.T.S.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA'I

DRAIN DETAILS
STA. 26+27.00

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 057000
Scale As Noted
Date: September, 2014

APPROVED:
COUNTY ENGINEER

100% SUBMITTAL
118C
**SECTION "A" - "A"**

- **Scale:** M.T.S.
- **Notes:** See MTA for Beam End Connection Detail.

- **"5 At 6" O.C.**
- **"4 At 8" O.C.** To Be Drilled And Embedded With Adhesive Into Exist. Conc.
- **Exist. Vert. Bar (Note: Do Not Cut Exist. Rebar, Typ.)**

**DRAIN INLET #14 DETAIL (STA. 31+93.00+)**

- **Scale:** M.T.S.
- **New Elev.: 185.53**
- **To CL: "1" Beam**
- **New Elev.: 185.24**
- **New Elev.: 185.49**
- **New Elev.: 185.56**
- **322'**

**Existing Drain Inlet**
Grating And Frame To Be Replaced With New Grating And Frame  
(See Det. Shh. 120A)

**Angle Frame, See Civil Dwg.**
Provide #3 Anchor Bar At 2-6" O.C., Typ.

**At 6" O.C.**

- **"4 At 8" O.C.** To Be Drilled And Embedded With Adhesive Into Exist. Conc.

- **Exist. Vert. Bar (Note: Do Not Cut Exist. Rebar, Typ.)**

- **Note:** See MTA For Beam End Connection Detail.

**New Elev.: 185.24**

- **New Elev.: 185.56**

- **Angle Frame, See Civil Dwg.**
Provide #3 Anchor Bar At 2-6" O.C., Typ.

- **"4 At 8" O.C.** To Be Drilled And Embedded With Adhesive Into Exist. Conc.

- **Exist. Vert. Bar (Note: Do Not Cut Exist. Rebar, Typ.)**

**SECTION "B" - "B"**

- **Scale:** M.T.S.
- **New Elev.: 185.56**
- **5 At 6" O.C.**
- **4 At 8" O.C.** To Be Drilled And Embedded With Adhesive Into Exist. Conc.
- **Exist. Vert. Bar (Note: Do Not Cut Exist. Rebar, Typ.)**

**Existing Drain Inlet**
Grating And Frame To Be Replaced With New Grating And Frame  
(See Det. Shh. 120A)

- **New Elev.: 185.56**
- **New Elev.: 185.53**
DRAINAGE IMPROVEMENT FIGURE 11 @ STA. 36+06.00+ (C.B. #9)

SCALE: 1" = 1'-0"

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

DRAIN DETAILS
STA. 36+06.00

Federal Aid Project No. STP 0572004

HARRY STREET IMPROVEMENTS

Date: September, 2014

100% SUBMITTAL

119B
DRAINAGE IMPROVEMENT FIGURE 12 @ STA. 34+23.00+ (D.I. #15)

SECTION A - A

SECTION B - B

SCALE: K.T.S.

NEW LOCATION CATCH BASIN RUNGS (SEE DET. SHT. 120)

EXISTING TOP OF D-2 TYPE DRAIN INLET STRUCTURE TO BE MODIFIED TO A CATCH BASIN TYPE STRUCTURE

4'-3" 3/8"

NEW CONC. CURB & GUTTER

EXISTING DRAIN INLET
EXIST TOP GRADE=H17750
NEW TOP=H17735+

NEW MAN-HOLE FRAME & COVER

EXIST W DRAINLINE

NEW 10'-0" CONVERT OPENING
DEPRESSED GUTTER

SEE STRUCTURAL DWGS. SHT. 13F FOR CONNECTION AND REINFORCEMENT DETAILS

NEW 12'-0" CONCRETE PEDESTAL

EXIST. TOP GRADE ELEV= H17730+
NEW TOP MAN-HOLE ELEV= H17730+

EXISTING DRAIN INLET TOP GRADED SECTION TO BE REMOVED AND REPLACED W/ MODIFIED CATCH BASIN & MANHOLE COVER. TOP COVER ELEV. TO BE ADJUSTED TO NEW DESIGN ELEVATIONS.

EXIST. TOP GRADE ELEV= H17730+
NEW TOP MAN-HOLE ELEV= H17730+

NEW ADDED PORTION LENGTH VARIES SEE PLAN VIEW
THIS SHEET
NEW 10'-0" DEPRESSED GUTTER
(BEYOND)

NEW LOCATION CATCH BASIN RUNGS (SEE DET. SHT. 120)

EXIST. 18" DRAINLINE

NEW ADDED PORTION

NEW MAN-HOLE FRAME & COVER

SEE STRUCTURAL DWGS. SHT. 13F FOR CONNECTION AND REINFORCEMENT DETAILS

DRAINAGE IMPROVEMENT FIGURE 12 @ STA. 34+23.00+ (D.I. #15)

SCALE: 1" = 1'-0"
SECTION "B" - "B"
Scale 1/16" = 1'-0"

New BC Throat Elev. = 1745'
New BC Elev. = 1751'

*4 Stirrups At 6" O.C.
Exist. Rebar to Be Cast With The New Conc.

SECTION "A" - "A"
Scale 1/16" = 1'-0"

CATCH BASIN #9 DETAIL (STA. 36+06.00+)

Concrete Infill, Provide *4 at 8" O.C. E.W. To Be Drilled and Embedded With Adhesive Into Exist. Conc.

*5 At 6" O.C.

*4 At 8" O.C., To Be Drilled And Embedded With Adhesive Into Exist. Conc.

*5 AT 5" O.C.

New TC Elev. = 1749'

*4 AT 5" O.C. To Be Drilled And Embedded With Adhesive Into Exist. Concrete.

Exist. Vert. Bar (Note: Do Not Cut Exist. Rebar)
**RUNG DETAIL FOR CATCH BASIN**

**N.T.S.**

**STANDARD FRAME DETAIL**

**N.T.S.**

**ADAAG COMPLIANT STEEL GRATE DETAIL**

**GENERAL NOTES FOR STEEL FRAME AND GRATE:**

1. **GRATING SHALL BE HEAVY-DUTY WELDED STEEL WITH 3 1/2"x3 1/8" BEARING BARS AT 13/16" ON CENTER AND 3/8" ROUND CROSS BARS AT 4" ON CENTER.**

2. **THE MAXIMUM SPACE BETWEEN BEARING BARS SHALL BE 1/2" AND BETWEEN THE GRATING AND FRAME SHALL BE 1/4" TO MEET THE REQUIREMENTS OF ADAAG SECTION 4.5.A.**

3. **FRAME AND GRATINGS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.**

4. **ALL WELDS FOR THE FRAME AND GRATE SHALL BE 3/16" UNLESS OTHERWISE NOTED.**

5. **GRATINGS SHALL BE INSTALLED SO THAT THE BEARING BARS REST ON THE 3" LEDGE AND ARE PERPENDICULAR TO THE PATH OF TRAVEL.**
GENERAL NOTES FOR STEEL FRAME AND GRATE:

1. GRATING SHALL BE HEAVY-DUTY WELDED STEEL WITH 3 1/2" x 1/2" BEARING BARS AT 2 1/2" ON CENTER AND 3/8" ROUND CROSS BARS AT 4" ON CENTER.

2. THE MAXIMUM SPACE BETWEEN BEARING BARS SHALL BE 2" CLEARANCE.

3. FRAME AND GRATTINGS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.

4. ALL WELDS FOR THE FRAME AND GRATE SHALL BE 3/16" UNLESS OTHERWISE NOTED.

5. GRATTINGS SHALL BE INSTALLED SO THAT THE BEARING BARS REST ON THE 3" LEDGE AND ARE PERPENDICULAR TO THE PATH OF TRAVEL.