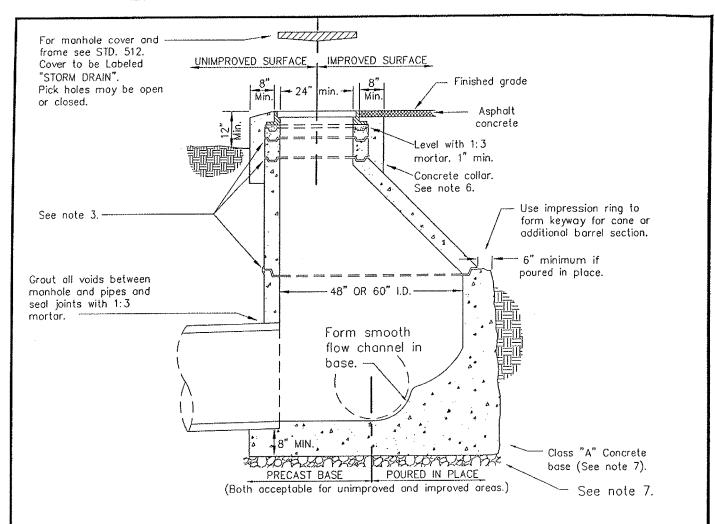


City of Rohnert Park

Storm Drain Detail Drawings

STORM DRAIN DETAIL DRAWINGS

| Standard Number 400 Series | <u>Title</u> | Date Approved |
|----------------------------|--|---------------|
| 400 | Standard Precast Concrete Storm Drain Manhole | 2006 |
| 401 | Precast Concrete Storm Drain Manhole Reducer Slabs | 2006 |
| 402 | Type II Catch Basin | 2006 |
| 403 | Type I Catch Basin | 2014 |
| 404 | Storm Drain Gallery | 2014 |
| 405A | Precast Catch Basin Cover | 2014 |
| 405B | Type I Catch Basin – Throat Opening Detail | 2014 |
| 406A | 3" Sidewalk Drain | 2006 |
| 406B | 3" x 12-1/2" Cast Iron Sidewalk Drain | 2006 |
| 407 | Loose Rock Rip-Rap Storm Drain Outlet | 2006 |
| 408 | Precast Side Opening Field Drain | 2006 |
| 409 | Storm Drain Labels | 2014 |
| 410 | Sidewalk Drain Catch Basin 12" x 12" | 2014 |
| 411 | Sidewalk Drain Catch Basin 16" x 16" | 2014 |
| 412 | Reinforced Concrete Pipe Collar | 2014 |



NOTES:

- 1. When manholes are installed in unimproved areas, the top of the cover shall be a min. of 1 foot above adjacent finished grade.
- 2. Min. of one 3" grade adjustment ring. Max. height of grade adjustment rings = 20". Alternatively, contractor may cast grade adjustment rings in place.
- 3. Set all sections in 1:3 mortar bed. Wet both tongue and groove before applying mortar. Wipe inside of joint smooth and plaster outside of joint with 1/2" layer of mortar. Ram—nek gaskets or approved equal may be used instead of mortar.
- 4. Cone section (taper) may be concentric or eccentric unless otherwise specified by the Engineer.
- 5. All precast manhole sections per ASTM C478.
- 6. Class "A" conc. collar shall be 2" below top of manhole cover in improved surface areas.

7. Poured—in—place base shall be poured full thickness to undisturbed sides of excavation, sloped at 1:1 or shall be formed. Precast base shall be from City Engineer's approved list and be placed on 6" thick 3/4" drain rock sub—base installed against undisturbed earth.

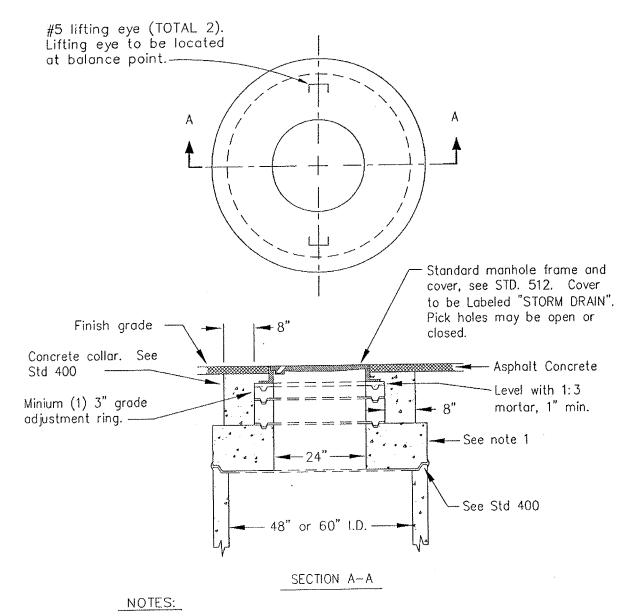
APPROVED 48" & 60" PRECAST

STORM DRAIN MANHOLE

COMPONENTS

See Engineer's approved list

STANDARD CONCRETE STORM DRAIN MANHOLE SCALE: NONE DATE: JANUARY 2006 Approved: STD. - 400



- 1. Reducer slab shall be designed to withstand H20 loading and conform to ASTM C478.
- 2. All inside joints to be grouted smooth.
- 3. Class A concrete collar shall be poured to 2" below finished grade.
- 4. Reducers shall be concentric. Eccentric reducers can be used if it would place the opening in a more desirable location or improve access.

APPROVED 48" and 60" MANHOLE REDUCER SLAB

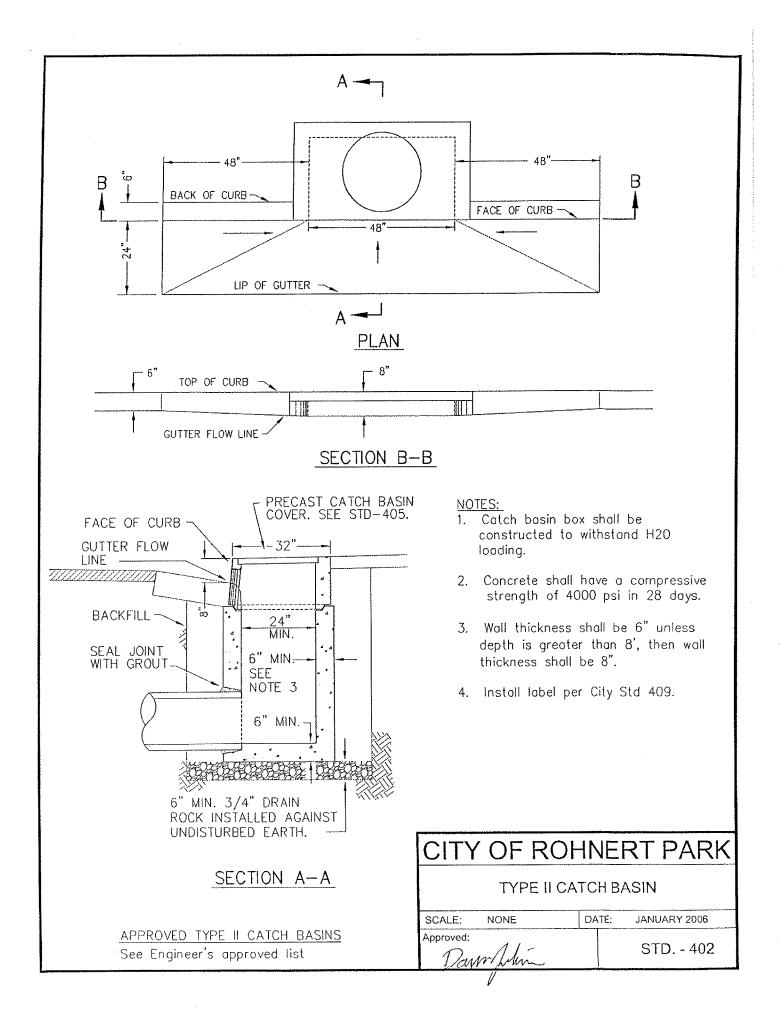
See Engineer's approved list

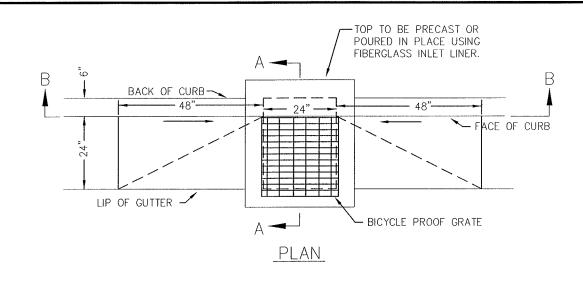
For detail and specifications of barrel section and base see City of Rohnert Park Std. 400.

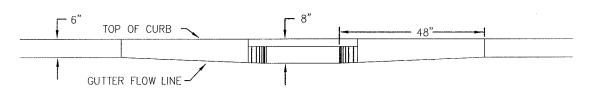
CITY OF ROHNERT PARK

PRECAST CONCRETE STORM DRAIN MANHOLE REDUCER SLABS

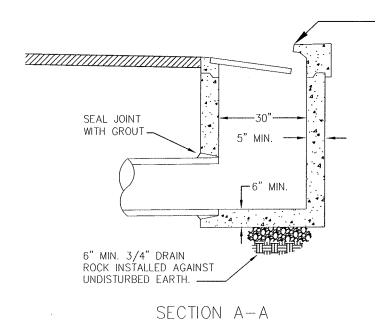
| SCALE: NONE | DATE: | JANUARY 2006 | |
|-------------|-------|--------------|--|
| Approved: | | STD 401 | |







SECTION B-B



see Standard 405 B

NOTES:

- Concrete shall have a compressive strength of 4000 psi in 28 days.
- 2. Grate and nosing angle shall be hot dipped galvanized after fabrication per ASTM A-123.
- 3. Grate frames shall be installed tight against gutter flowline.
- 4. Catch basin box and grate shall be constructed to withstand H20 loading.
- 5. Install label per City Std 409.

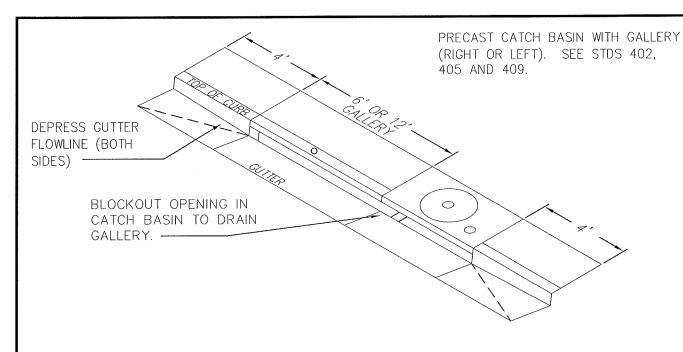
ONLY TO BE USED WHERE SPECIFICALLY APPROVED BY VARIANCE.

APPROVED TYPE I CATCH BASINS See Engineer's approved list

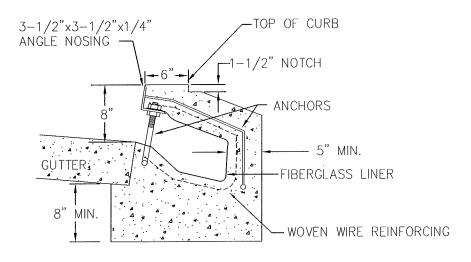
CITY OF ROHNERT PARK

TYPE I CATCH BASIN

SCALE: NONE DATE: MARCH 2014
Approved: STD. - 403



ISOMETRIC VIEW



NOTES:

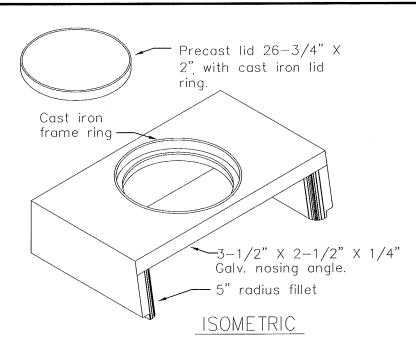
- Nosing assembly shall be hot dipped galvanized after fabrication per ASTM A-123
- 2. Concrete shall have compressive strength 4000 psi, at 28 days and meet Caltrans specifications.

TYPICAL SECTION INSTALLED

3. Install label per City Std 409.

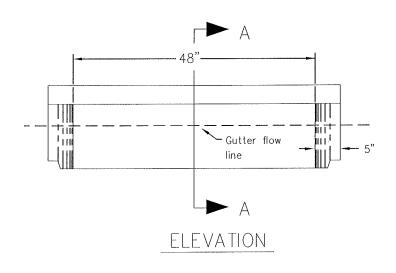
APPROVED STORM DRAIN GALLERY FORM
See Engineer's opproved list

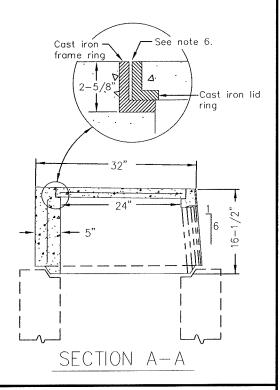
CITY OF ROHNERT PARK STORM DRAIN GALLERY SCALE: NONE DATE: MARCH 2014 Approved: STD. - 404



NOTES:

- Concrete shall have a compressive strength of 4000 PSI at 28 days.
- Nosing angle shall be galvanized in accordance with ASTM specification A-123.
- 3. Exposed concrete surface shall have broom finish.
- 4. Cast iron shall conform to ASTM 48-30.
- 5. Apply label per City Std 409.
- 6. Frame ring inside diameter to be 5/16" to 3/8" greater than lid ring outside diameter.
- 7. Cover and Frame shall be constructed to withstand H20 loading.





APPROVED PRECAST CATCH BASIN COVERS

See Engineer's approved list.

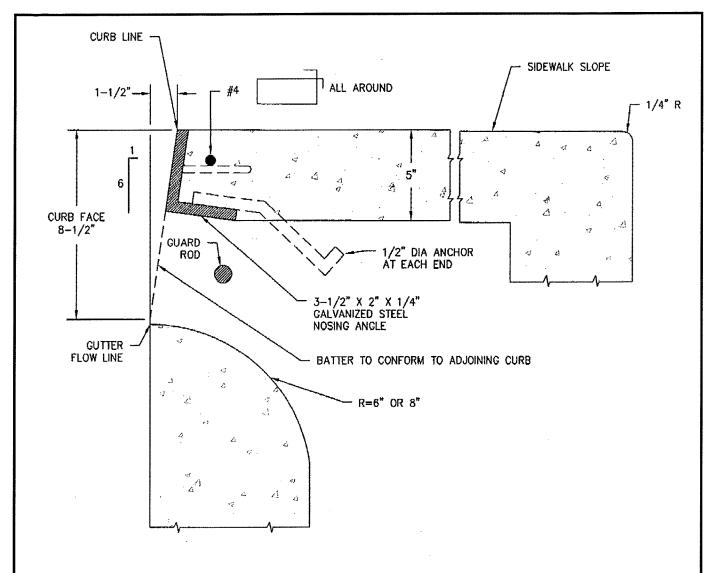
CITY OF ROHNERT PARK

PRECAST CATCH BASIN COVER

SCALE: NONE DATE:

DATE: MARCH 2014

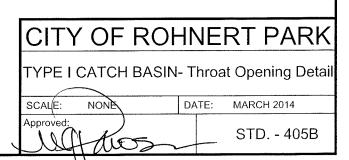
STD. - 405A

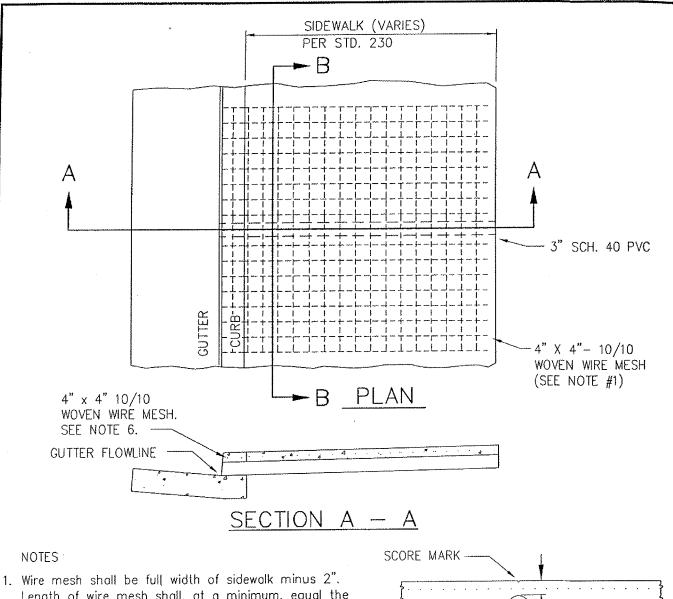


THROAT OPENING DETAIL

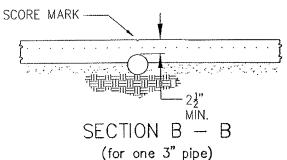
NOTES:

- 1. ALL METAL PARTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
- 2. ALL GALVANIZING DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF ALUMINUM PAINT.





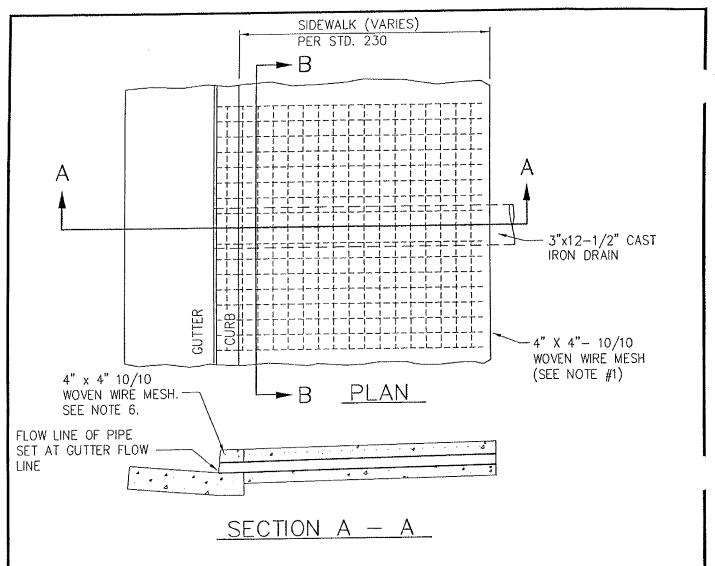
- Length of wire mesh shall, at a minimum, equal the width and be centered over the pipe.
- 2. On-site drainage and location of curb outlets shall be by owner to the satisfaction of the City Engineer.
- 3 Drain pipe shall be installed so that the top of pipe is 2;" (min.) below finished grade at back of sidewalk.
- 4. Sidewalk shall be removed to the nearest scoremark.
- 5. If sidewalk and gutter are not contiquous, curb may be cored or curb and gutter removed and replaced a minimum of one foot on each side of the drain pipe. Dowel new gutter to existing curb and gutter with (2) 12" #4 rebars, place one dowel in curb and one in gutter pan using epoxy.
- 6. If sidewalk and gutter are contiguous, pour monolithic with wire fabric extending into curb.



CITY OF ROHNERT PARK 3" SIDEWALK DRAIN

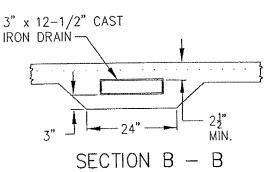
DATE JANUARY 2006 SCALE: NONE Approved: STD. - 406A

Lamplun



NOTES

- 1. Wire mesh shall be full width of sidewalk minus 2". Length of wire mesh shall, at a minimum, equal the width and be centered over the pipe.
- 2. On—site drainage and location of curb outlets shall be by owner to the satisfaction of the City Engineer.
- 3. Drain pipe shall be installed so that the top of pipe is $2\frac{1}{2}$ " (min.) below finished grade at back of sidewalk.
- 4. Sidewalk shall be removed to the nearest scoremark.
- If sidewalk and gutter are not contiguous, remove curb and gutter a minimum of one foot on each side of the drain pipe. Dowel new gutter to existing curb and gutter with (2) 12" #4 rebars, place one dowel in curb and one in gutter pan using epoxy.
- If sidewalk and gutter are contiguous, pour monolithic Approved: with wire fabric extending into curb.

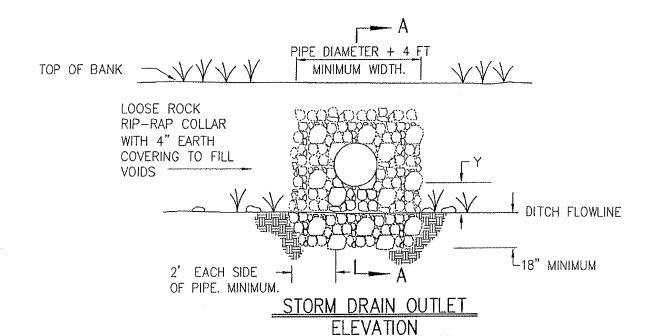


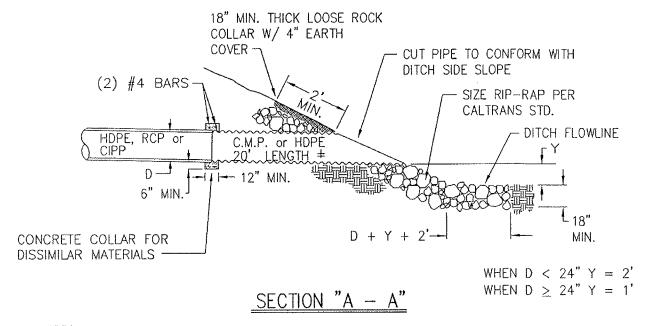
CAST IRON SIDEWALK DRAIN
See Engineer's approved list

CITY OF ROHNERT PARK

3"x121/2" CAST IRON SIDEWALK DRAIN

SCALE: NONE DATE: JANUARY 2006
Approved: STD. - 406B





NOTES:

- 1. CMP shall conform with Section 66-3 of the Standard Specifications.
- 2. HDPE pipe shall conform with Section 64 of the Standard Specifications for type S pipe.

CITY OF ROHNERT PARK

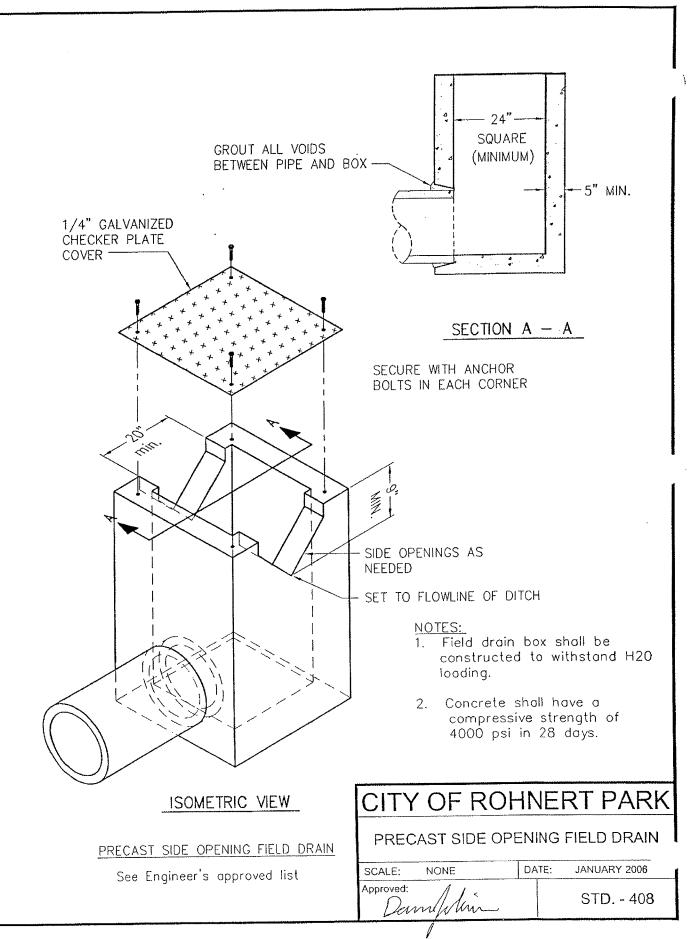
STORM DRAIN OUTLET

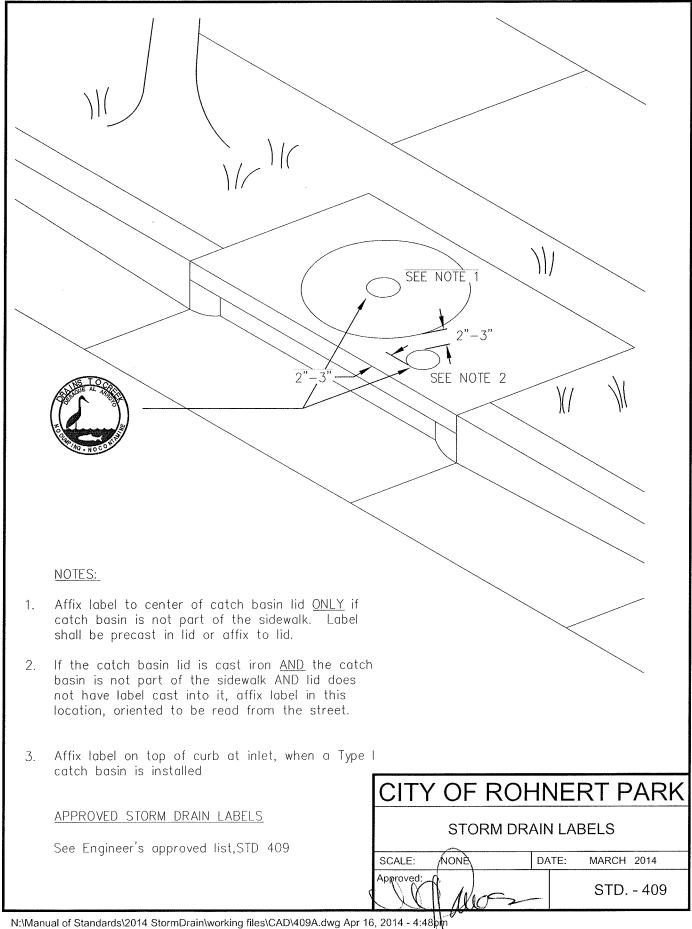
SCALE: NONE DATE: JANUARY 2006

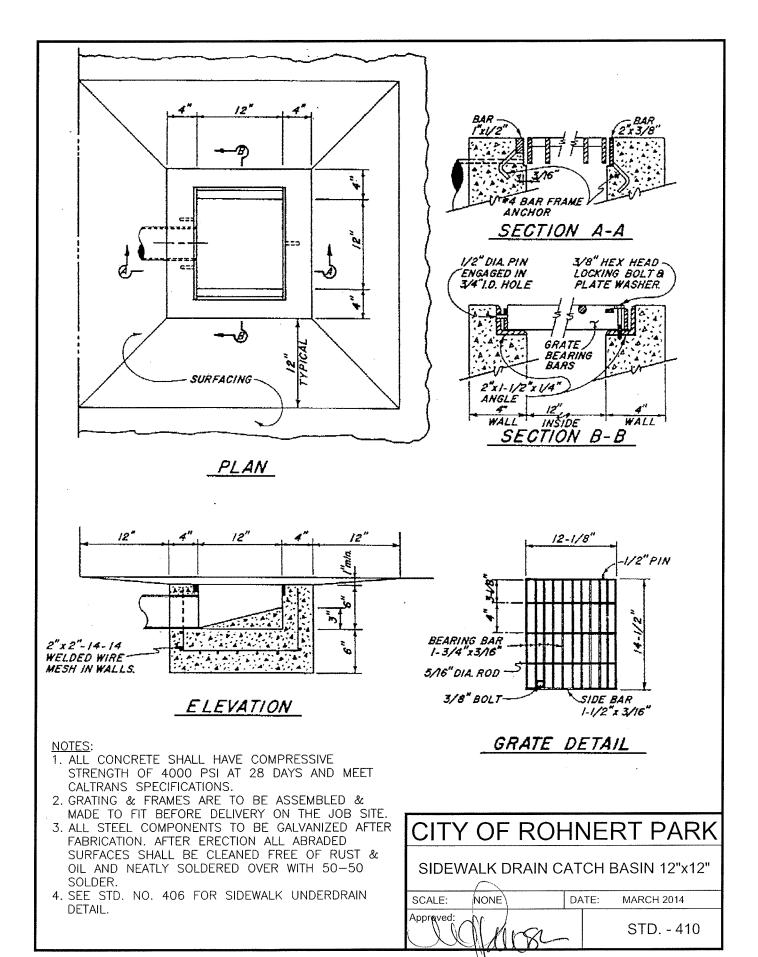
Approved: / .

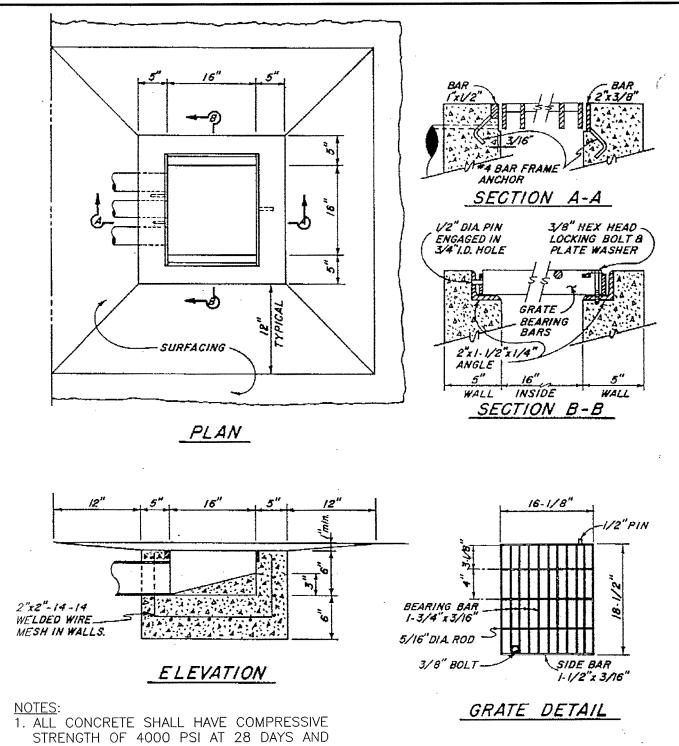
Approved:

STD. - 407









- MEET CALTRANS SPECIFICATIONS.
- 2. GRATING & FRAMES ARE TO BE ASSEMBLED & MADE TO FIT BEFORE DELIVERY ON THE JOB SITE.
- 3. ALL STEEL COMPONENTS TO BE GALVANIZED AFTER FABRICATION. AFTER ERECTION ALL ABRADED SURFACES SHALL BE CLEANED FREE OF RUST & OIL AND NEATLY SOLDERED OVER WITH 50-50 SOLDER.
- 4. SEE STD. NO. 406 FOR SIDEWALK UNDERDRAIN DETAIL.

CITY OF ROHNERT PARK

SIDEWALK DRAIN CATCH BASIN 16"x16"

SCALE: DATE: MARCH 2014 MONE STD. - 411

