



CITY OF HOUSTON

Administration and Regulatory Affairs Department
Strategic Purchasing Division

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Mayor

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December 12, 2011

Subject: Letter of Clarification No. 1 to Invitation to Bid No. S50-C23560, Concrete Repair Services for Various Departments

To: All Prospective Bidders:

This letter of Clarification is being issued for the following reasons:

- **To extend the opening, revise the Scope Work/Specifications, revise the Electronic Bid Form and to provide responses to questions posed by prospective bidders:**

1.) **NOTICE TO BIDDER:**

The bid opening date has changed from 10:30 A.M. December 22, 2011 to 10:30 A.M., December 29, 2011.

- 2.) Section B, Scope of Work/Specifications has been revised: Remove pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113 & 114 of 141 *and replace with the attached pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113 & 114 of 141 marked, "Revised 12/12/2011".*
- 3.) The Electronic Bid Form has been revised; Group No. 1 has been revised and Group No. 2 has been deleted in all five years. (See the revised electronic bid form for specifics.)
- 4.) The following questions and City of Houston responses are hereby incorporated and made a part of the Invitation to Bid:

Question No. 1 Line Item 5: The description is mixed up. The unit is shown "Foot" which is incorrect. Reference drawing is #100, there is no such drawing in the document?

Answer: The unit of measure is as shown "Square Foot" which is correct. Drawing No. 100 is now attached. (*See the attachments*)

Question No. 2 Line Item 6: Reference Drawing is #103, there is no such drawing in the bid document. Please provide quantity?

Answer: Drawing No. 103 is attached hereto. Also, see the revised electronic bid form for estimated quantities.

Partnering to better serve Houston

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Question No. 3 Line Item 14: Please provide quantity?

Answer: See the revised electronic bid form for estimated quantities.

Question No. 4 Line Item 15: The description is mixed up. The unit is shown "Foot" which is incorrect. Reference drawing is #100, there is no such drawing in the document?

Answer: The unit of measure is as shown "Square Foot" which is correct. Drawing No. 100 is now attached. (*See the attachments*)

Question No. 5 Line Item 18: Reference drawing is #101, there is no such drawing in the document?

Answer: See the attachments.

Question No. 6 Line Item 19: Reference drawing is #104, there is no such drawing in the document?

Answer: See the attachments.

Question No. 7 Line Item 20: Reference drawing is #103, there is no such drawing in the document? Please provide quantity?

Answer: Drawing No. 103 is attached hereto. Also, see the revised electronic bid form for estimated quantities.

Question No. 8 Line Item 21: Reference drawing is #102, there is no such drawing in the document? Please provide quantify?

Answer: Drawing No. 102 is attached hereto. Also, see the revised electronic bid form for estimated quantities.

Question No. 9 Line Item 26: Reference drawing is #106, there is no such drawing in the document? Please provide quantity?

Answer: Drawing No. 106 is attached hereto. Also, see the revised electronic bid form for estimated quantities.

Question No. 10 Line Item 30: Reference drawing is #107, there is no such drawing in the document?

Answer: Drawing No. 107 is attached.

Question No. 11 Line Item 31: Reference drawing is #108, there is no such drawing in the document? Please provide quantity?

Answer: Drawing No. 108 is attached hereto. Also, see the revised electronic bid form for estimated quantities.

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- Question No. 12** Line Item 32 through 46: Reference drawing is #109, there is no such drawing in the document? Please provide quantity?
- Answer:** Drawing No. 109 is attached hereto. Also, see the revised electronic bid form for estimated quantities.
- Question No. 13** Line Item 47 through 49: Please provide quantity?
- Answer:** See the revised electronic bid form for estimated quantities.
- Question No. 14** Line Items 53 through 60 are repeated items; please provide quantify or delete.
- Answer:** See the revised electronic bid form.
- Question No. 15** What is the “Maximum” dollar amount of the “Work Orders” that may be issued to successful bidder during the five (5) year term of the Contract?
- Answer:** The estimated spend amount during the five-year contract term is \$3,000,000.00. Refer to Page 14 of 141, see Provision 17.0 “Estimated Quantities Not Guaranteed”
- Question No. 16** What is the “Minimum Guaranteed Dollar Amount “of the “Work Orders” that will be issued to successful bidder during each year?
- Answer:** Reference: Page 9 of 113, **SECTION “B”, PART I, Scope of Work, Section 1.0 GENERAL**, Subsection 1.3.
(The minimum dollar amount of any work order shall be \$7,000.00.)
- Question No. 17** Does the performance the work of each “Work Order” require “Construction Permit”?
- Answer:** Yes.
- Question No. 18** Is the Owner providing “Partial Substantial Completion Certificate” at the completion of each “Work Order”? Is the one year warranty of each “Work Order” starts from the date of completion of that “Work Order”?
- Answer:** Yes, the one year warranty of each work order starts after the date of final completion and acceptance by the City.
- Question No. 19** Is the Owner deducting 5% of each pay application as “Retainage”? If the answer is yes, at what point such Retainage will be released?
- Answer:** The Owner will retain 5% of each pay application, and each retainage will be released in the next following monthly pay period.
- Question No. 20** What is the specification for the concrete to be used in different area, 3,500 PSI or 3,000 PSI etc.?

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Answer: The standard PSI's for concrete are as follows:

- a. Sidewalks & equipment pads = 3,500 psi,
- b. The 6" and 8" pavements = 4,000 psi,
- c. On rare occasions a 6,000 to 7,000 psi mix is used when it is imperative that the area be reopened to traffic in three days or less.

Note: No further questions will be accepted after the publication of this Letter of Clarification.

When issued, Letter(s) of Clarification shall automatically become a part of the bid documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. It is the responsibility of the bidders to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidders shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this solicitation.

Furthermore, it is the responsibility of each Contractor to obtain any previous Letter of Clarification associated with this solicitation.

Arturo Lopez

Arturo Lopez
Senior Procurement Specialist
832-393-8731

Attachments: Revised pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113 & 114 of 141

**SECTION B-1
STANDARD DRAWINGS FOR CONCRETE PAVEMENT REPAIR**

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Table of Contents

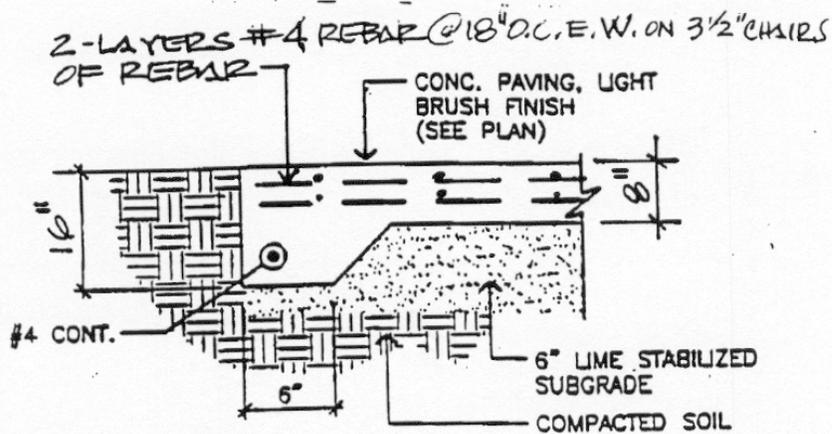
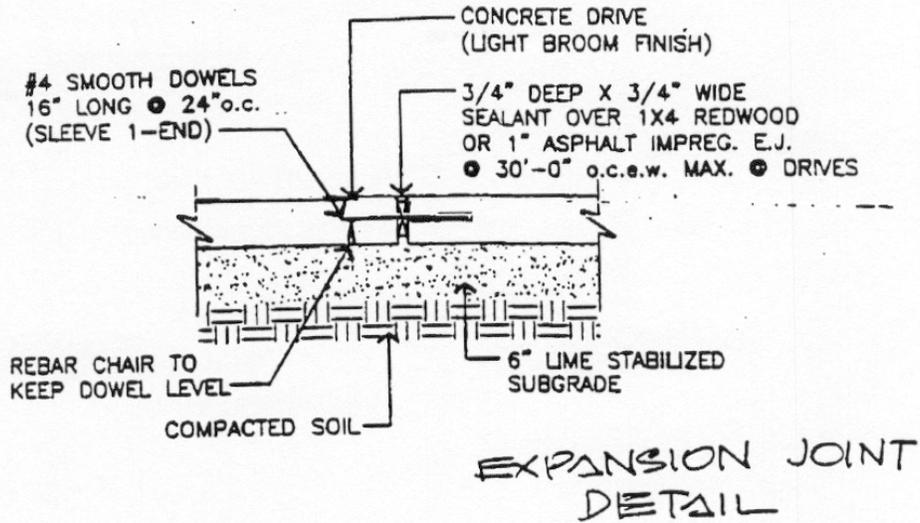
This is a Work Order contract. Additional drawings may be provided to the Contractor with each Work Order, and at that time will become part of the Contract Documents.

| Sheet Number | Drawing Title | |
|---------------------|--|----------|
| 547-S | Concrete Headwalls Details (Attachment A) | |
| 02751-01 | Concrete Pavement Details | |
| 02754-01 | Driveway Details (Streets with Curbs) | |
| 02754-02 | Driveway Details (Open Ditches) | |
| 02775-02 | Wheelchair Ramp Details | |
| 2902-01 | Pavement Repair Detail | |
| 100 | <i>Fire Station Driveway: 8" Driveway</i> | 1 |
| 101 | <i>Communications Bldg. Slab</i> | 5 |
| 102 | <i>Grade Beam</i> | 1 |
| 103 | <i>Foundation Repair</i> | 1 |
| 104 | <i>Generator Bldg. Slab</i> | 2 |
| 105 | <i>Typical Guard Post Detail</i> | 1 |
| 106 | <i>Pipe Protector Detail</i> | 1 |
| 107 | <i>Storm Inlet Detail</i> | 1 |
| 108 | <i>Trench Detail</i> | 1 |
| 109 | <i>Storm Pipe Detail</i> | 1 |
| 110 | <i>Trench & Inlet Detail</i> | 1 |
| COHTA1-2 | <i>Type-A Grate Inlet</i> | 1 |
| 110A | <i>Reinforced Concrete Culvert Pipe</i> | 2 |
| 111 | <i>Typical drilled pier</i> | 1 |
| 112 | <i>Typical existing foundation, new stabilizing pier</i> | 1 |
| 113 | <i>Slotted drain</i> | 5 |
| 114 | <i>Pavement under-cut detail where drive meets street</i> | 2 |
| 115 | <i>Pavement detail where drive meets street</i> | 1 |

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1713 2472136 # 7 / 18



Dwg. # 100 Sheet 1 of 1 Fire Station Driveway

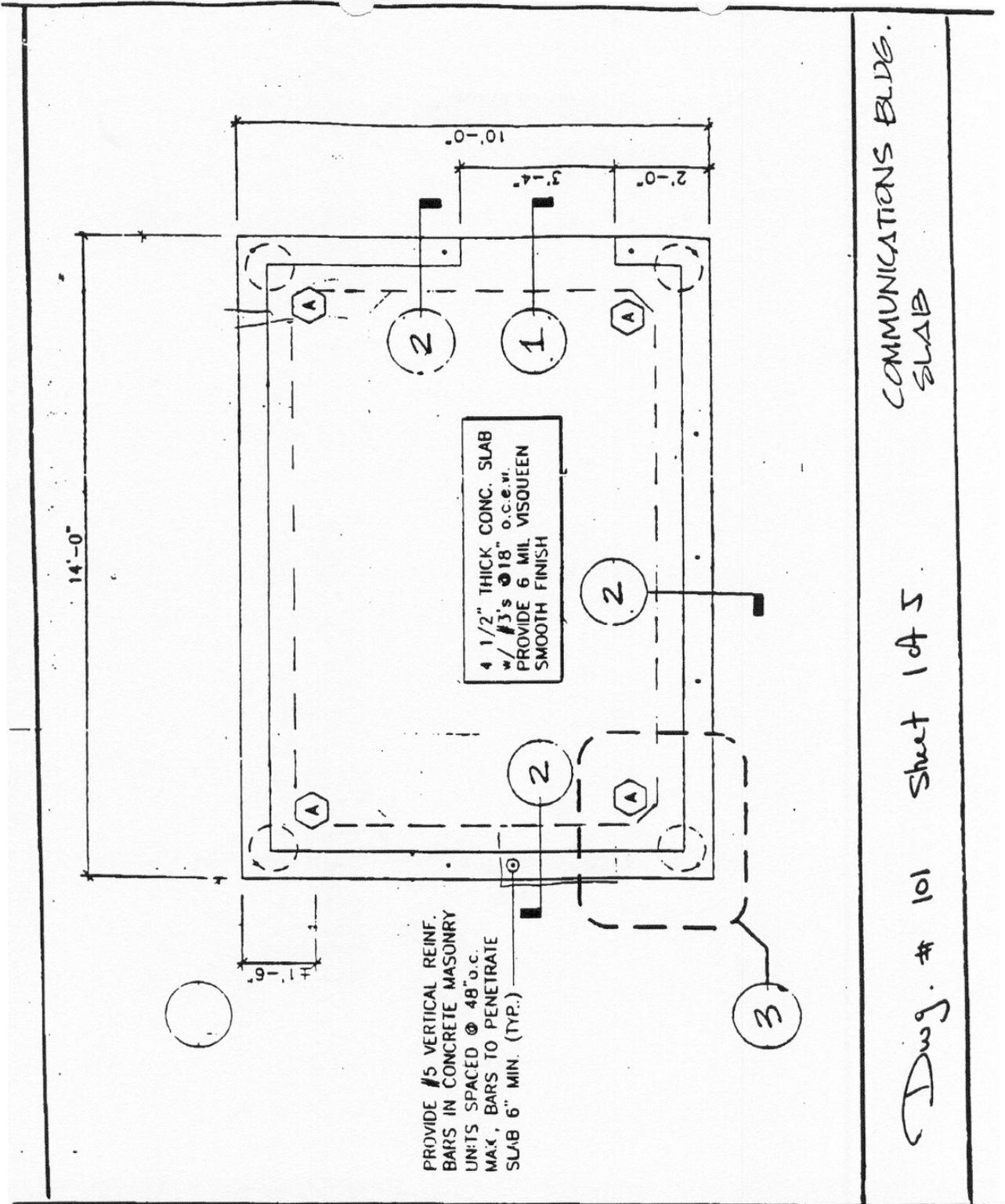
Letter of Clarification No. 1
 Invitation to Bid No. S50-C23560,
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6-13-03;12:48PM;City of Houston

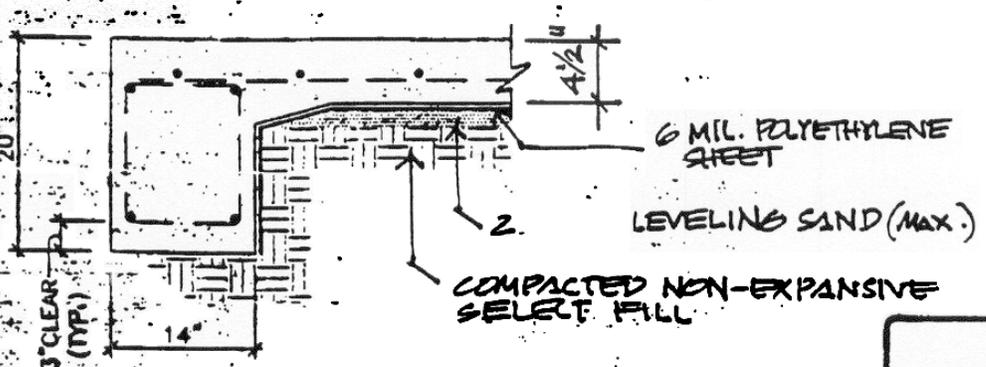
;713 2472136

8/18



GRADE BEAM

NOTE: ADDITIONAL FILL MATERIAL WITHIN THE BUILDING AREA SHOULD BE A SILTY OR SANDY CLAY HAVING A PLASTICITY INDEX (P.I.) OF TEN (10) TO TWENTY (20) AND A LIQUID LIMIT OF 28 OR MORE. FILL MATERIALS SHOULD BE PLACED IN SIX (6) TO EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO NINETY-FIVE (95) PERCENT OF THEIR MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 698).

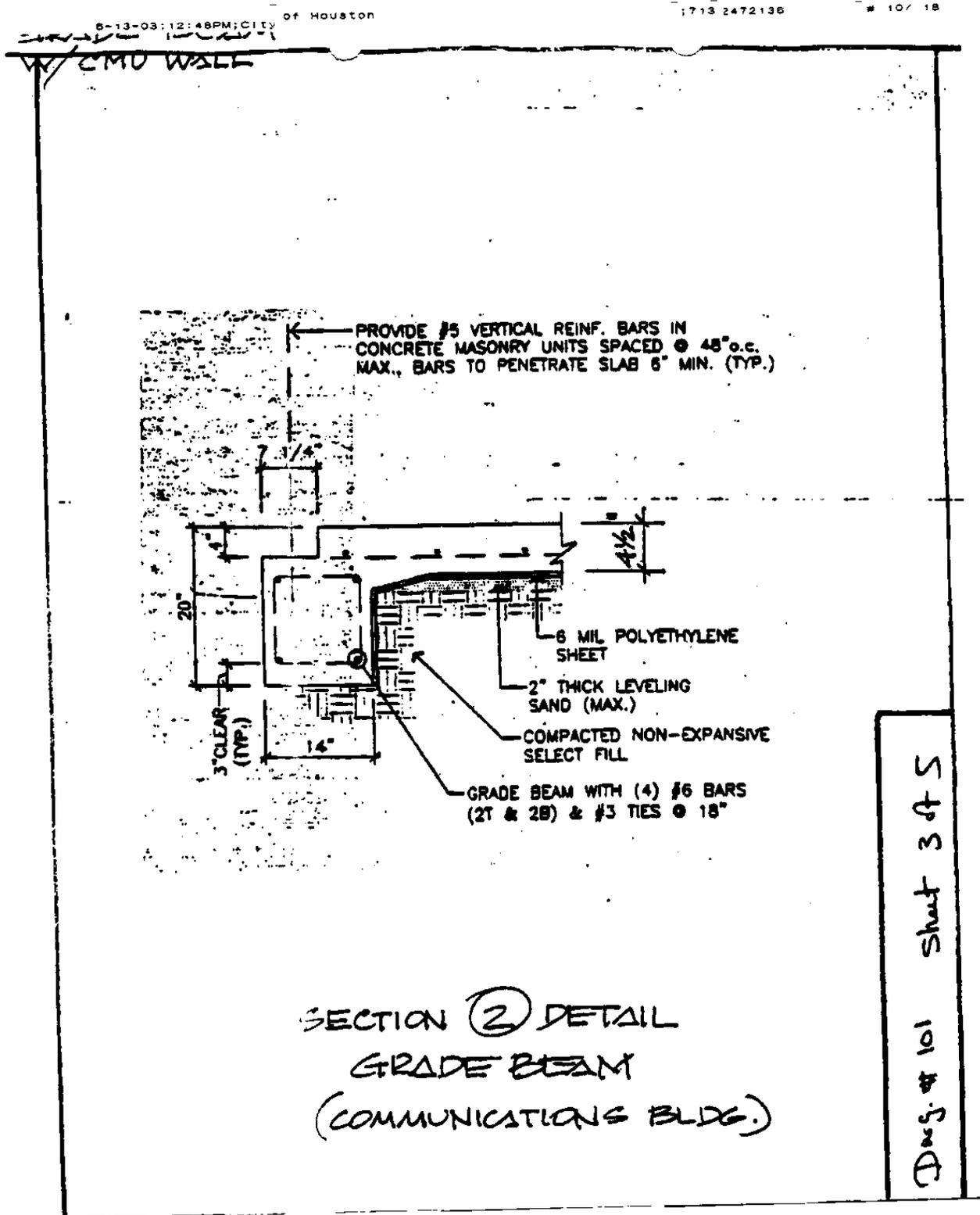


SECTION ① DETAIL
GRADE BEAM

Dwg. # 101
Sheet 2 of 5

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Change sentence at top of drawing to read: "Provide #5 vertical reinforcement bars in concrete masonry units spaced 32" o.c. maximum, bars to penetrate slab 6" minimum (typical).



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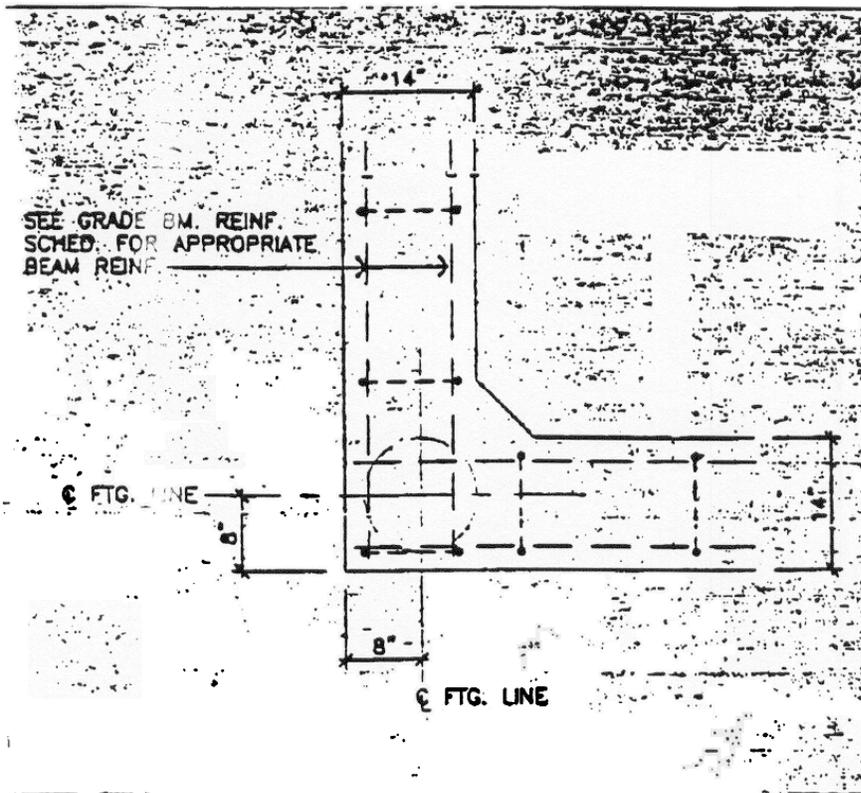
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* 18

NOTE: PROVIDE CORNER BARS EQUAL IN SIZE AND NUMBER TO THE ONE IT LAPS WITH. CORNER BAR TO BE 3 FT. LONG (EACH LEG), IN EXTERIOR FACE OF BEAMS.



③ HAUNCH PLAN VIEW
(COMMUNICATIONS SLAB)

Dwg. # 101 Sheet 4 of 5

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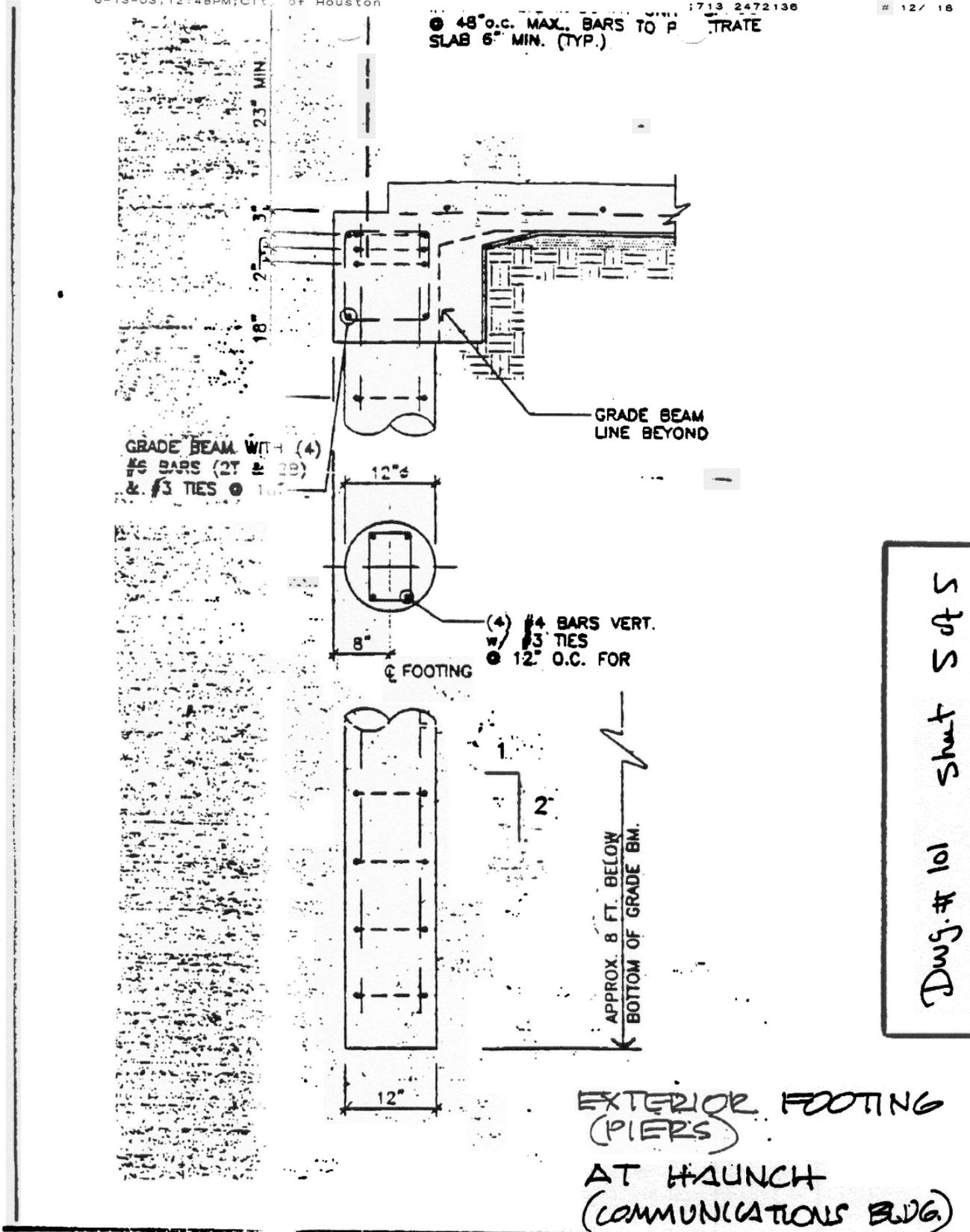
REVISED 12/12/2011

6-13-03; 12:48PM; City of Houston

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① 48" O.C. MAX. BARS TO PERMITS
 SLAB 6" MIN. (TYP.)



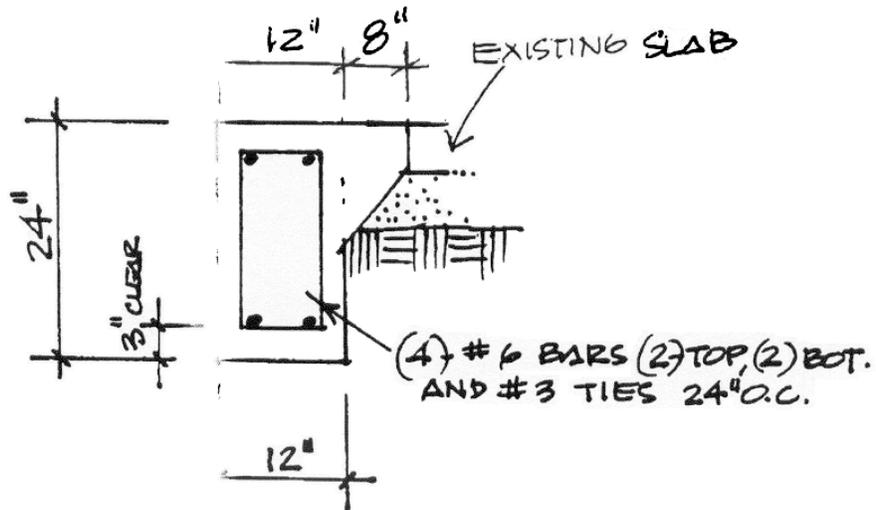
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TYPICAL G IRON BEAM



Grade Beam

Sheet 1 of 1

Dwg. # 102

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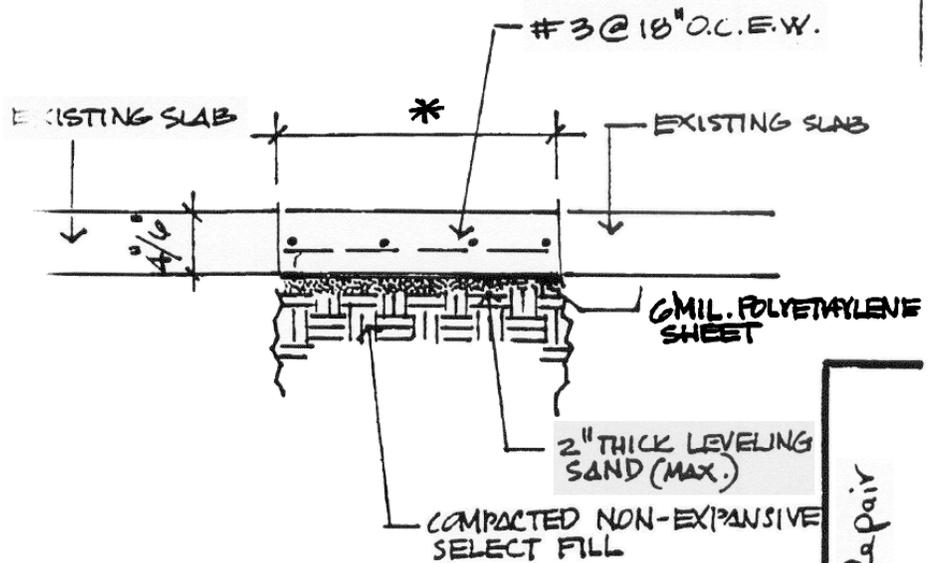
REVISED 12/12/2011

6-13-03; 12:48PM; C:\
FOUNDATION

of Houston
KE 212

: 713 2472136

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* SQUARE FOOTAGE VARIES.
FIELD MEASURE AT SITE.

NOTE: LOCATION INSIDE BUILDING
RESTRICTS ACCESS.
WHEELING CONCRETE IN
WHEN NECESSARY.

Dwg # 103
Foundation Repair
Sheet 1 of 1

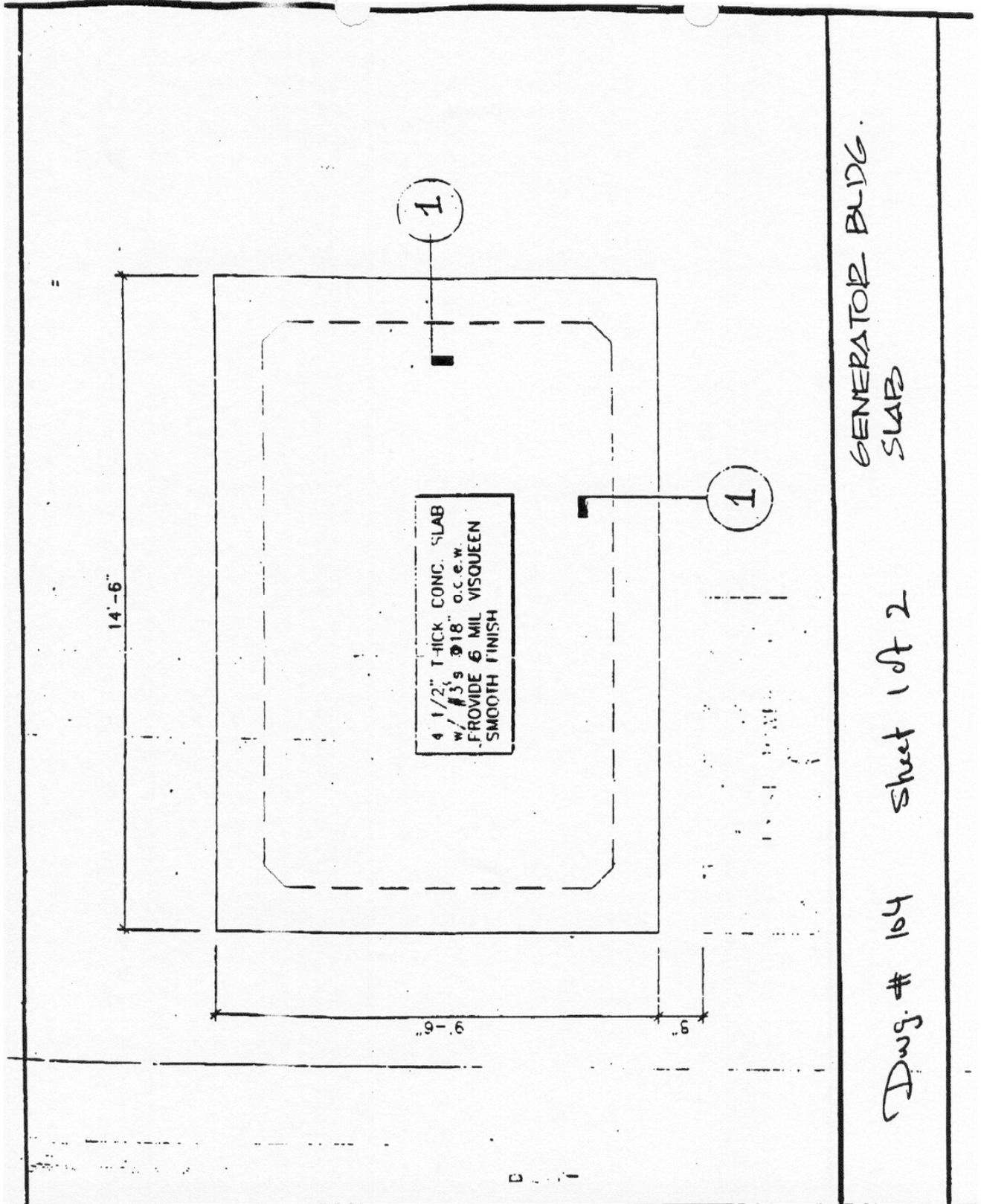
Letter of Clarification No. 1
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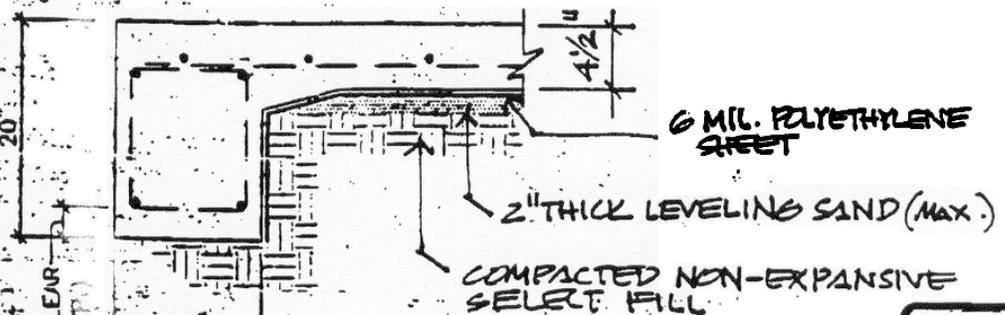
6-13-03;12:48PM;City of Houston

:713 2472136

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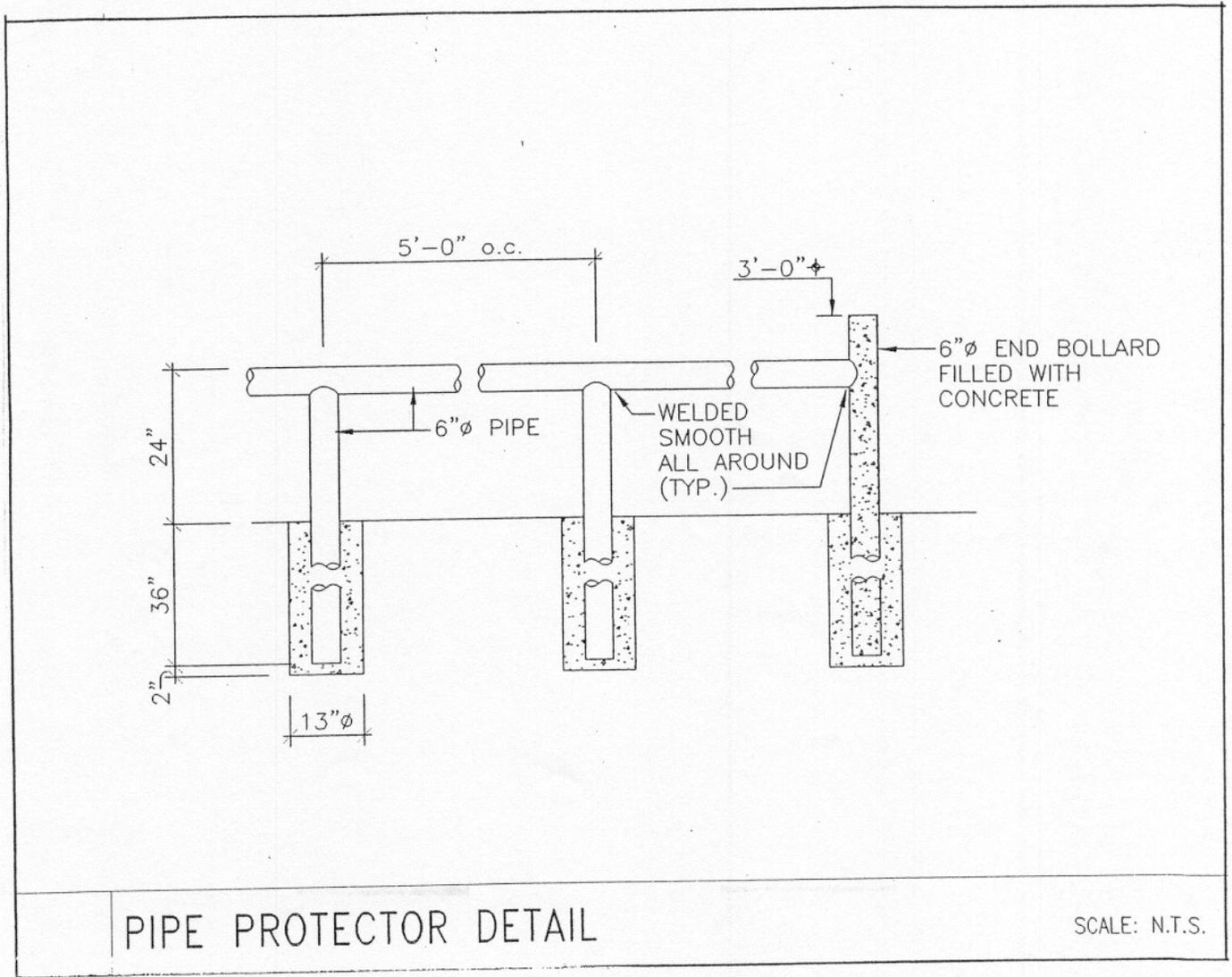
NOTE: ADDITIONAL FILL MATERIAL WITHIN THE BUILDING AREA SHOULD BE A SILTY OR SANDY CLAY HAVING A PLASTICITY INDEX (P.I.) OF TEN (10) TO TWENTY (20) AND A LIQUID LIMIT OF 28 OR MORE. FILL MATERIALS SHOULD BE PLACED IN SIX (6) TO EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO NINETY-FIVE (95) PERCENT OF THEIR MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 698).



SECTION (1) DETAIL
GRADE BEAM

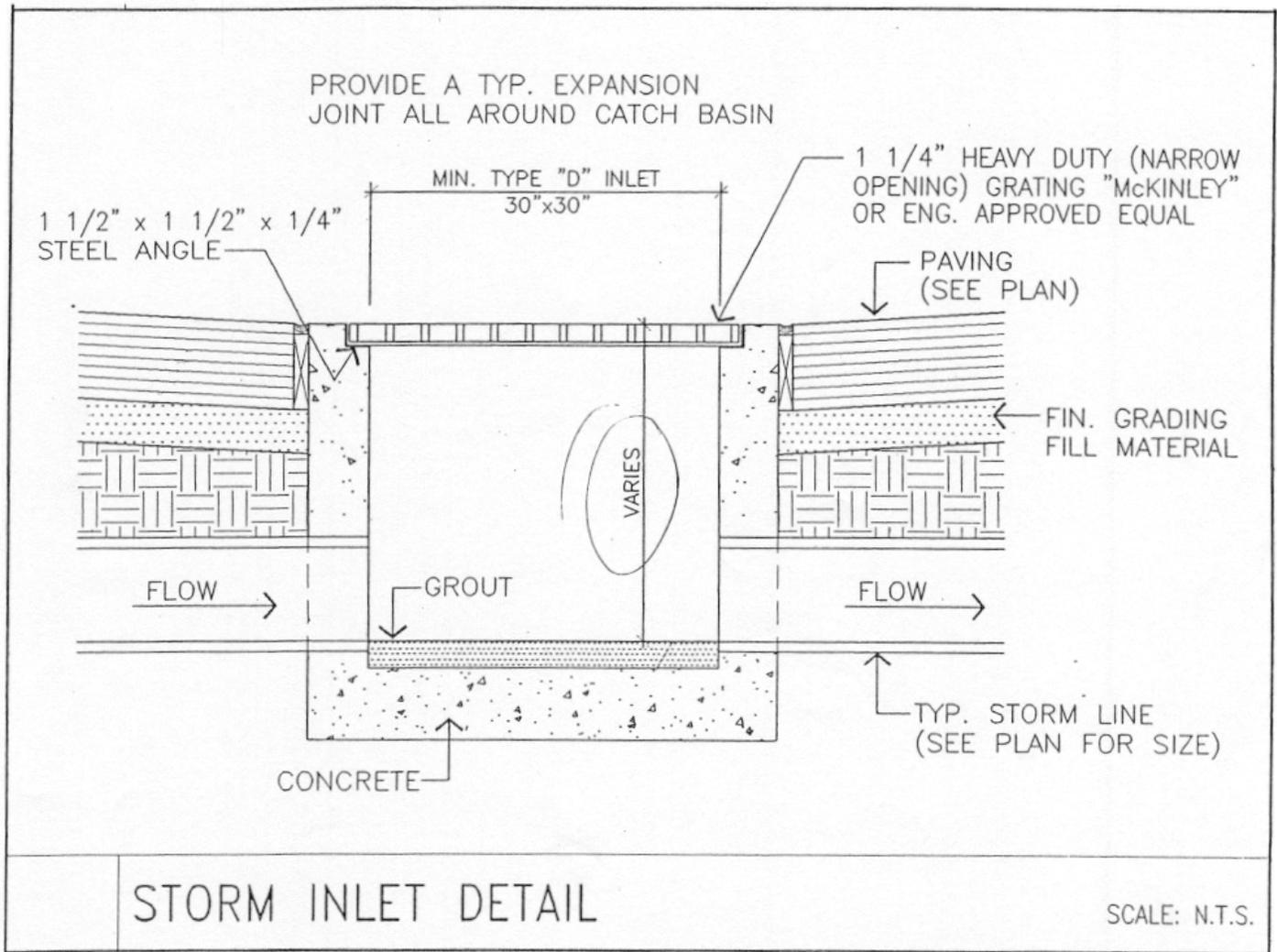
Dwg # 104
Sheet 2 of 2

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DRAWING No. 106

REVISED 12/12/2011

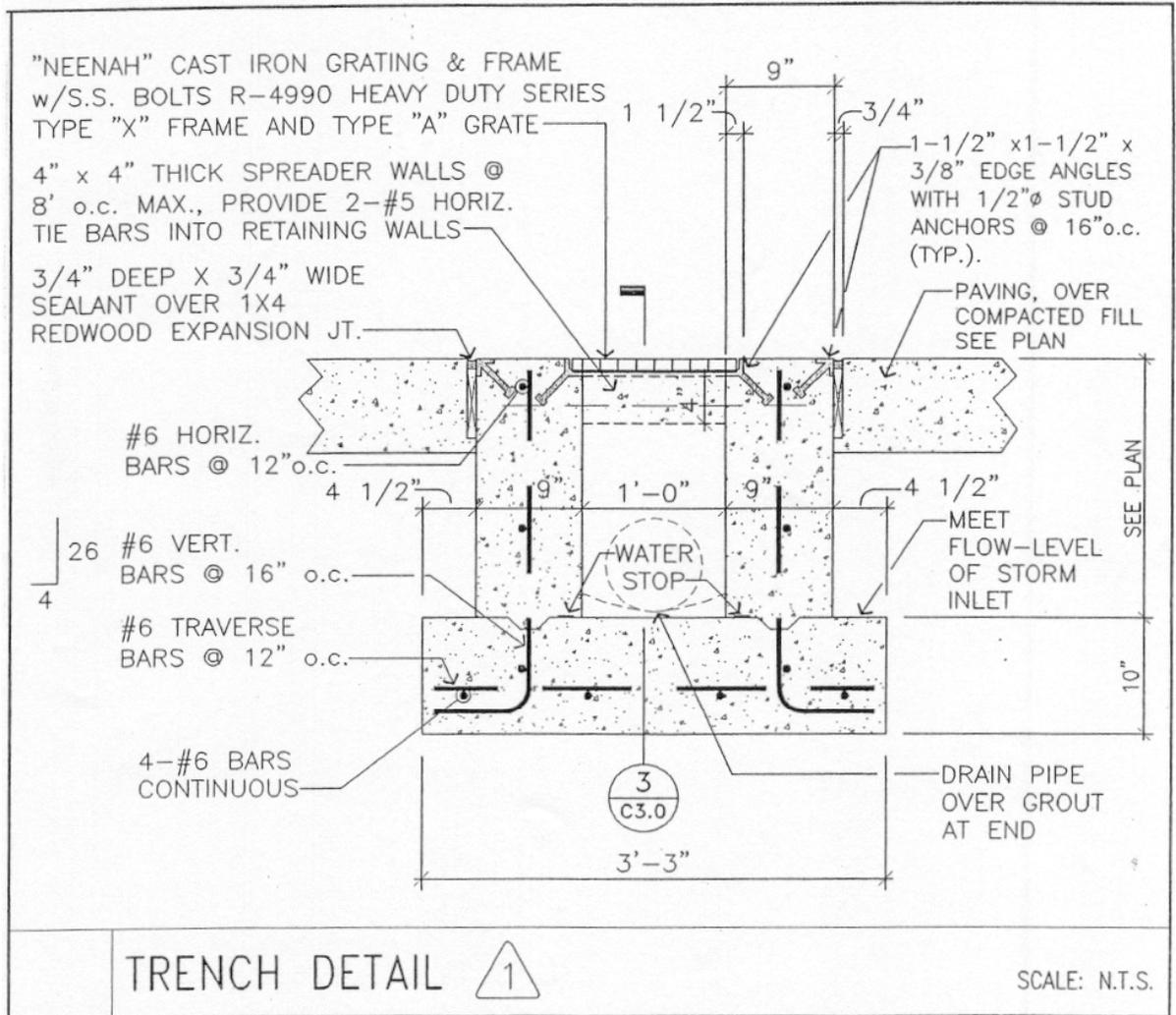


See drawing No. 110 for Storm Inlet connection with Trench Drain.

DRAWING No. 107

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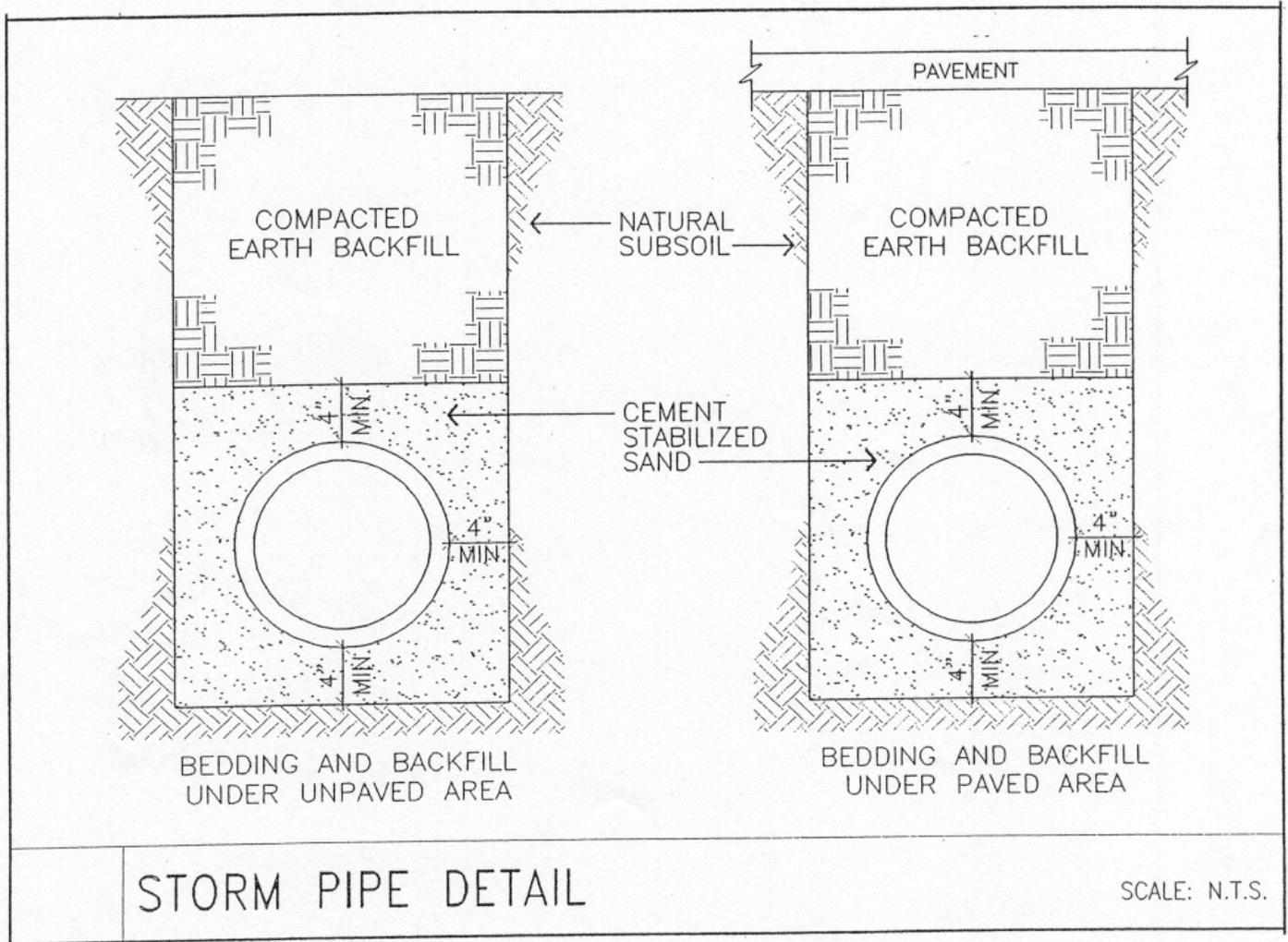
REVISED 12/12/2011



See drawing No. 110 for Trench Drain connection with Storm Inlet.

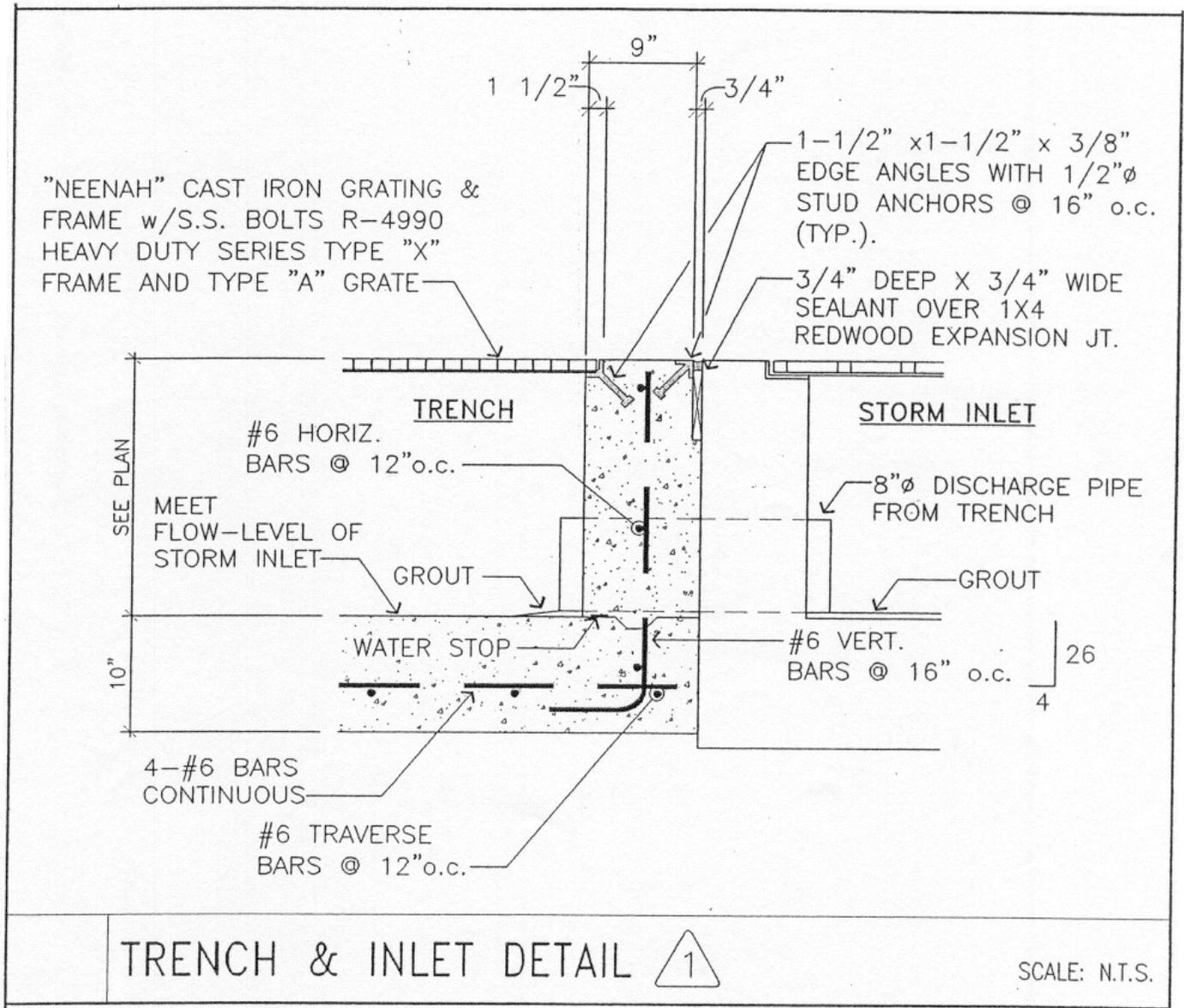
DRAWING No. 108

REVISED 12/12/2011



DRAWING No. 109

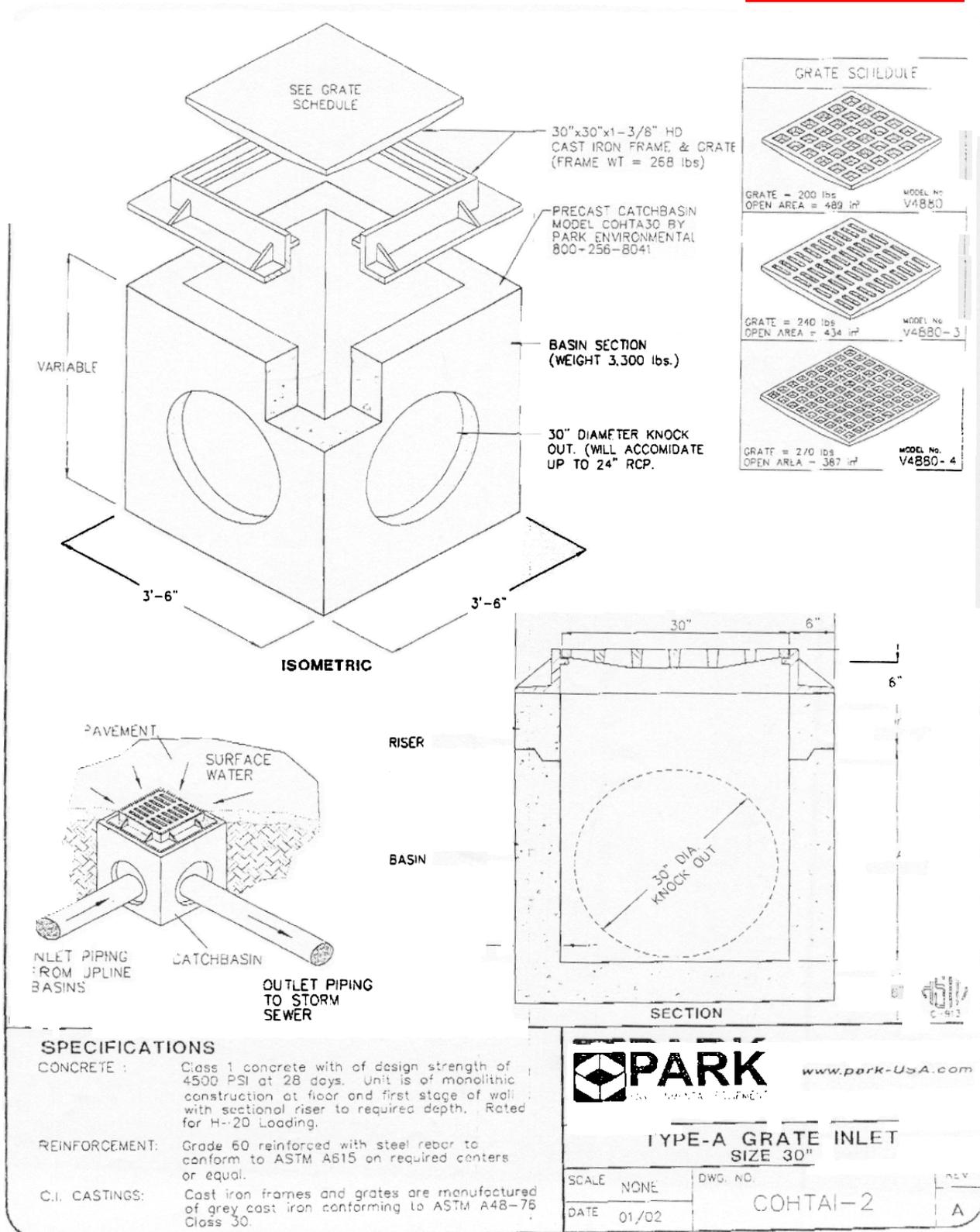
REVISED 12/12/2011



DRAWING No. 110

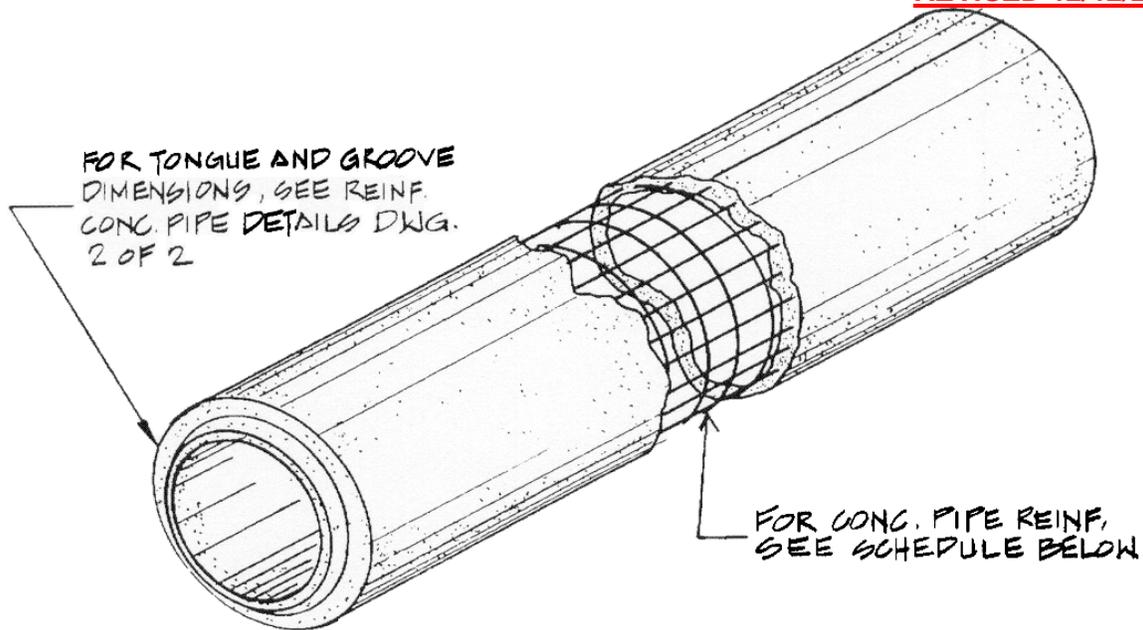
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| PIPE REINFORCEMENT SCHEDULE | | | |
|-----------------------------|---------|---------|-----------------|
| I.D | O.D. | WT./FT. | REINFORCEMENT |
| 12" | 16" | 100# | W 2.0x2.5 3"x8" |
| 15" | 19 1/2" | 125# | W 2.0x2.5 3"x8" |
| 18" | 23" | 160# | W 2.0x2.5 3"x8" |
| 24" | 30" | 260# | W 2.0x2.5 3"x8" |
| 30" | 37 1/4" | 395# | W 3.0x2.0 2"x8" |
| 36" | 44" | 520# | W 3.5x2.0 2"x8" |

NOTE: ALL PIPE AVAILABLE IN 6 FOOT LENGTH
 (12" INCH - 24" INCH IN 4 FOOT LENGTHS)

CONG. NOTE: R.C.P. ASTM DESIGNATION: C76
 CLASS III WALL B

DWG. 1 OF 2

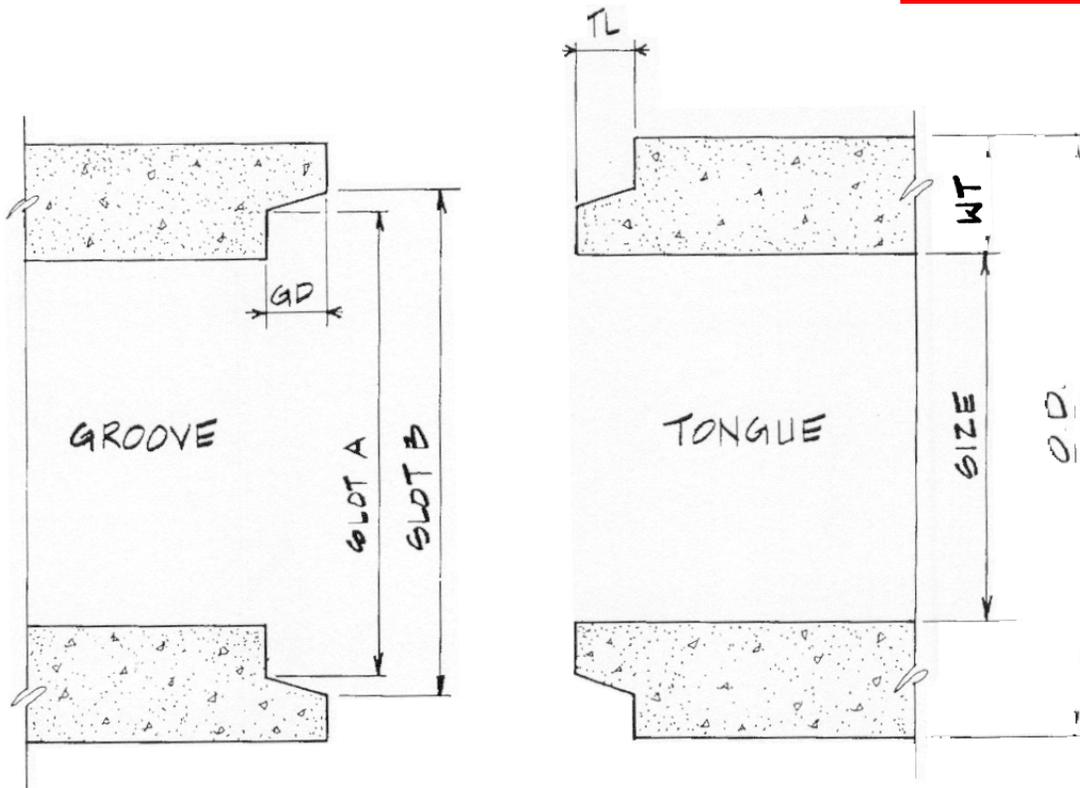
REINFORCED CONCRETE
 CULVERT PIPE

828 GENOA RED BLUFF • HOUSTON, TEXAS 77034 • P. O. BOX 101 • (713) 946-2831
 SOUTH HOUSTON, TEXAS 77587

SHEET 1 of 2

Drawing # 110A – RE-INFORCED CONCRETE CULVERT PIPE

REVISED 12/12/2011



| DIMENSION SCHEDULE OF C-76 T&G. PIPE | | | | | | |
|--------------------------------------|--------------|----------------|---------------|--------------|-----------|---------|
| SIZE | OUTSIDE DIM. | WALL THICKNESS | TONGUE LENGTH | GROOVE DEPTH | SLOT DIM. | |
| | | | | | A | B |
| 12" | 16" | 2" | 2" | 2" | 13 1/2" | 14 1/8" |
| 15" | 19 1/2" | 2 1/4" | 2 1/8" | 2 1/8" | 16 1/2" | 17 3/8" |
| 18" | 23" | 2 1/2" | 2" | 2 1/4" | 19 5/8" | 20 1/2" |
| 24" | 30" | 3" | 2 3/8" | 2 3/4" | 26 3/8" | 27 3/8" |
| 30" | 37 1/4" | 3 5/8" | 3 3/8" | 3 1/2" | 31 3/4" | 33 3/8" |
| 36" | 44" | 4" | 2" | 2 1/4" | 32 3/4" | 34 3/8" |

CONC. NOTE: ASTM DESIGNATION: C-76
 CLASS III WALL B PIPE

DWG. 2 OF 2

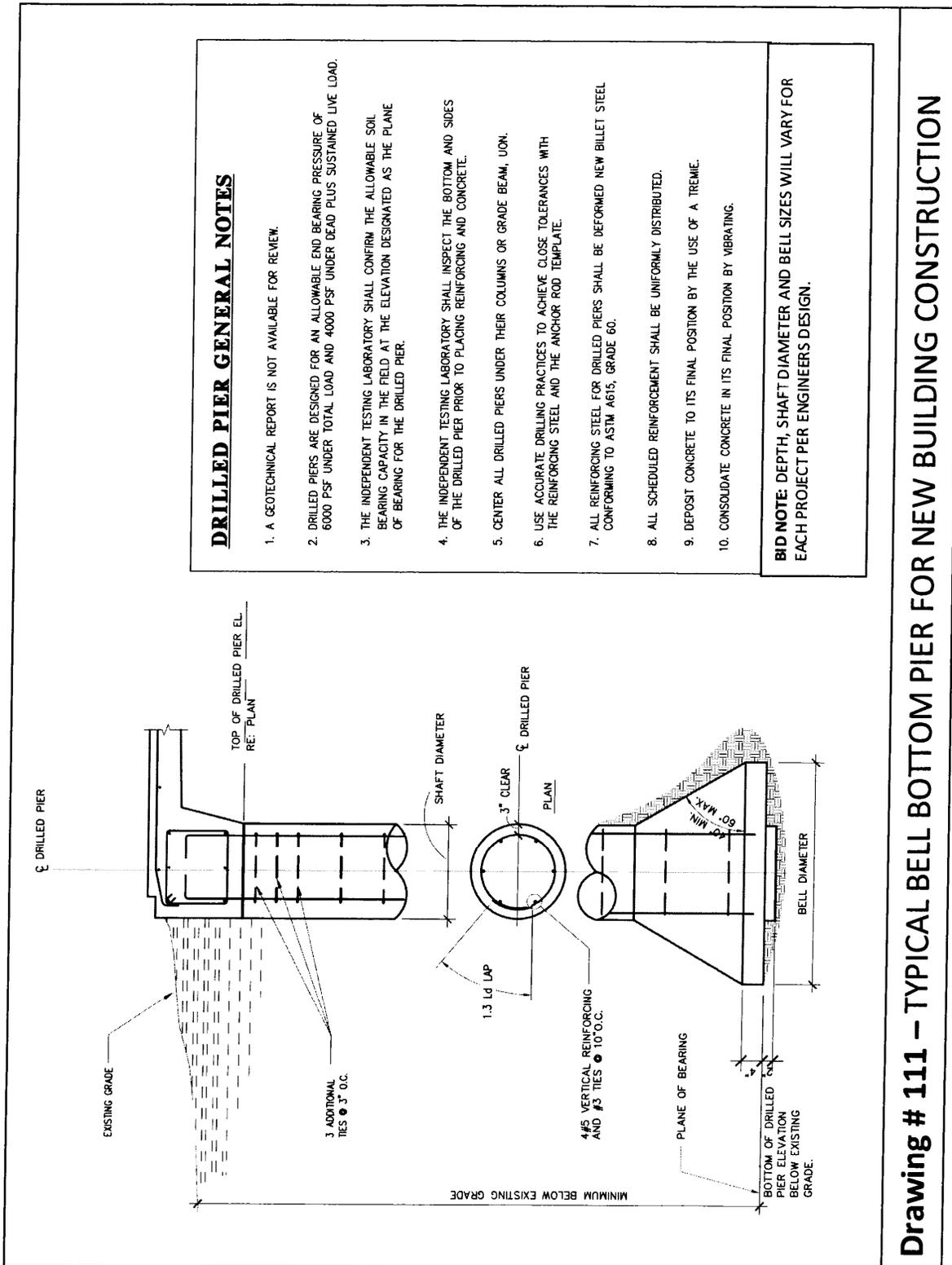
REINFORCED CONG. PIPE
 DIMENSION DETAILS

828 GENOA RED BLUFF • HOUSTON, TEXAS 77034 • P. O. BOX 101 • (713) 946-2831
 SOUTH HOUSTON, TEXAS 77587

SHEET 2 of 2

Drawing # 110A – RE-INFORCED CONCRETE CULVERT PIPE

REVISED 12/12/2011



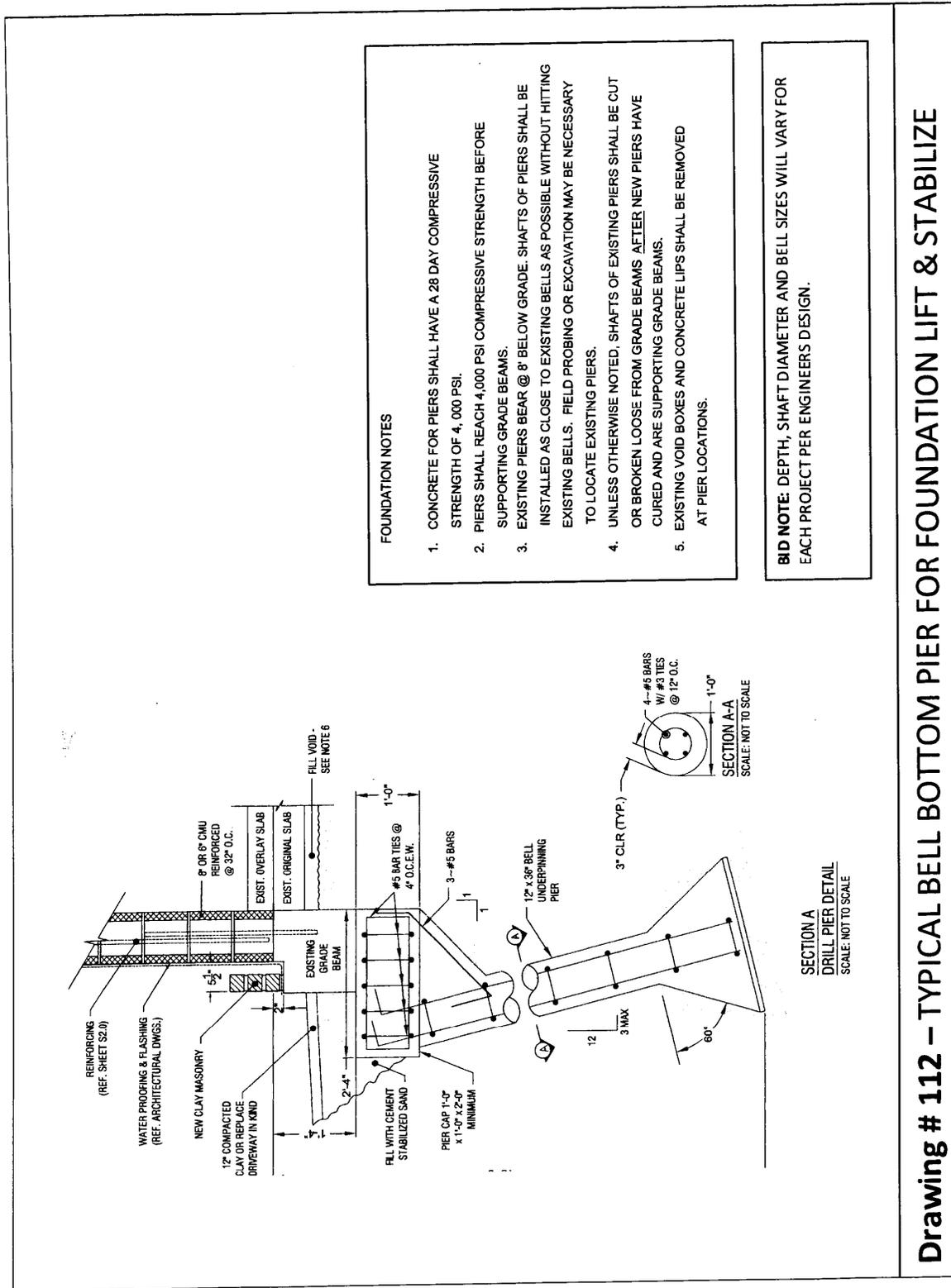
DRILLED PIER GENERAL NOTES

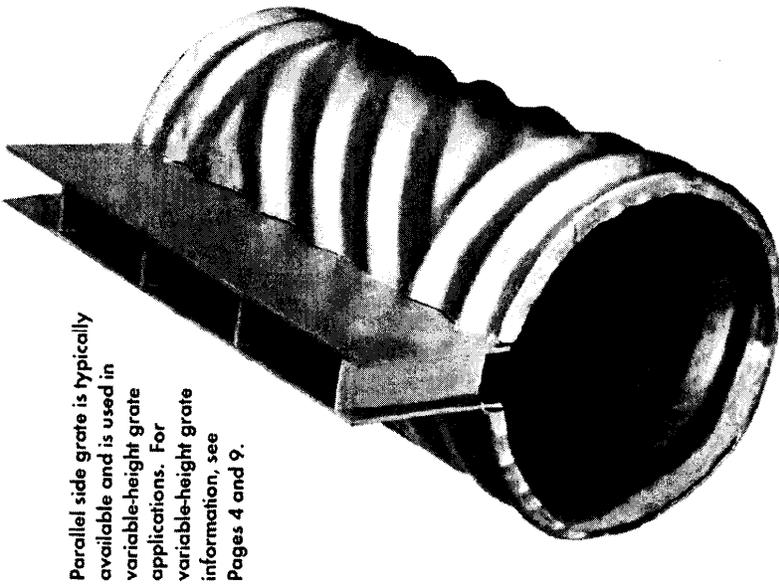
1. A GEOTECHNICAL REPORT IS NOT AVAILABLE FOR REVIEW.
2. DRILLED PIERS ARE DESIGNED FOR AN ALLOWABLE END BEARING PRESSURE OF 6000 PSF UNDER TOTAL LOAD AND 4000 PSF UNDER DEAD PLUS SUSTAINED LIVE LOAD.
3. THE INDEPENDENT TESTING LABORATORY SHALL CONFIRM THE ALLOWABLE SOIL BEARING CAPACITY IN THE FIELD AT THE ELEVATION DESIGNATED AS THE PLANE OF BEARING FOR THE DRILLED PIER.
4. THE INDEPENDENT TESTING LABORATORY SHALL INSPECT THE BOTTOM AND SIDES OF THE DRILLED PIER PRIOR TO PLACING REINFORCING AND CONCRETE.
5. CENTER ALL DRILLED PIERS UNDER THEIR COLUMNS OR GRADE BEAM, UON.
6. USE ACCURATE DRILLING PRACTICES TO ACHIEVE CLOSE TOLERANCES WITH THE REINFORCING STEEL AND THE ANCHOR ROD TEMPLATE.
7. ALL REINFORCING STEEL FOR DRILLED PIERS SHALL BE DEFORMED NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
8. ALL SCHEDULED REINFORCEMENT SHALL BE UNIFORMLY DISTRIBUTED.
9. DEPOSIT CONCRETE TO ITS FINAL POSITION BY THE USE OF A TREMIE.
10. CONSOLIDATE CONCRETE IN ITS FINAL POSITION BY VIBRATING.

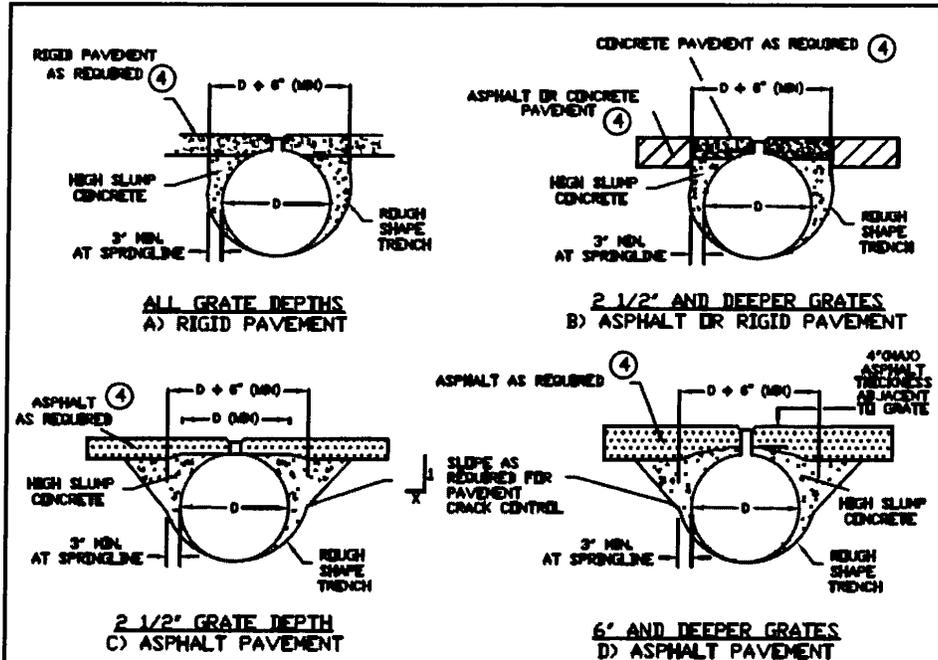
BID NOTE: DEPTH, SHAFT DIAMETER AND BELL SIZES WILL VARY FOR EACH PROJECT PER ENGINEERS DESIGN.

Drawing # 111 – TYPICAL BELL BOTTOM PIER FOR NEW BUILDING CONSTRUCTION

REVISED 12/12/2011



| | |
|---|--|
|  |  |
| <p>The trapezoidal design of the slot plus slanted spacer plates improve the hydraulic efficiency of CONTECH Slotted Drain, and provide for easier maintenance.</p> | <p>Parallel side grate is typically available and is used in variable-height grate applications. For variable-height grate information, see Pages 4 and 9.</p> |
| <p>SHEET 1 of 5</p> | |
| <p>Drawing # 113 – TWO TYPICAL TYPES OF SLOTTED DRAINS</p> | |



REQUIREMENTS:

- ① EITHER 2-1/2" OR 6" DEEP GRATING IS ACCEPTABLE FOR STANDARD HIGHWAY (H10 THROUGH H25) LOADS USING THE GAGES IN TABLE 1, SEE DRAWING NO. 1009776. HIGH SLUMP CONCRETE BACKFILL IS REQUIRED, WITH THE ENVELOPE EXTENDING A MINIMUM OF 3 INCHES BEYOND THE SPRINGLINE, AS SHOWN ABOVE. THE HIGH SLUMP CONCRETE MUST PROVIDE A MINIMUM 750 PSI COMPRESSIVE STRENGTH.
- ② FOR INSTALLATIONS SUBJECTED TO OCCASIONAL LIGHT VEHICLE (LESS THAN H10) LOADS, SELECT GRANULAR BACKFILL MAY BE USED, HOWEVER, THE DRAIN MUST BE SET IN A TRENCH WIDE ENOUGH TO PROPERLY HAUNCH THE PIPE (TYPICALLY D + 36"). THE GRANULAR BACKFILL MUST BE A CLEAN, NON-PLASTIC, WELL GRADED MATERIAL, COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ③ DURING INSTALLATION, RECESS THE TOP OF THE GRATE 1/4" BELOW THE FINISHED GRADE OF THE PAVEMENT.
- ④ PAVEMENT DESIGNS AS REQUIRED FOR LOADING CONDITIONS. FOR REINFORCED CONCRETE PAVEMENTS, CONTINUE THE REINFORCEMENT OVER THE SLOTTED DRAIN. FOR UNREINFORCED CONCRETE PAVEMENTS, MINIMUM SHRINKAGE STEEL IS RECOMMENDED.
- ⑤ HEAVIER WHEEL LOADS DICTATE THE USE OF A MINIMUM 6" DEEP GRATING AND TYPICALLY A LARGER HIGH SLUMP CONCRETE EMBEDMENT ZONE. (SEE DRAWING 1008136)

CONTECH[®]
 CONSTRUCTION PRODUCTS INC.

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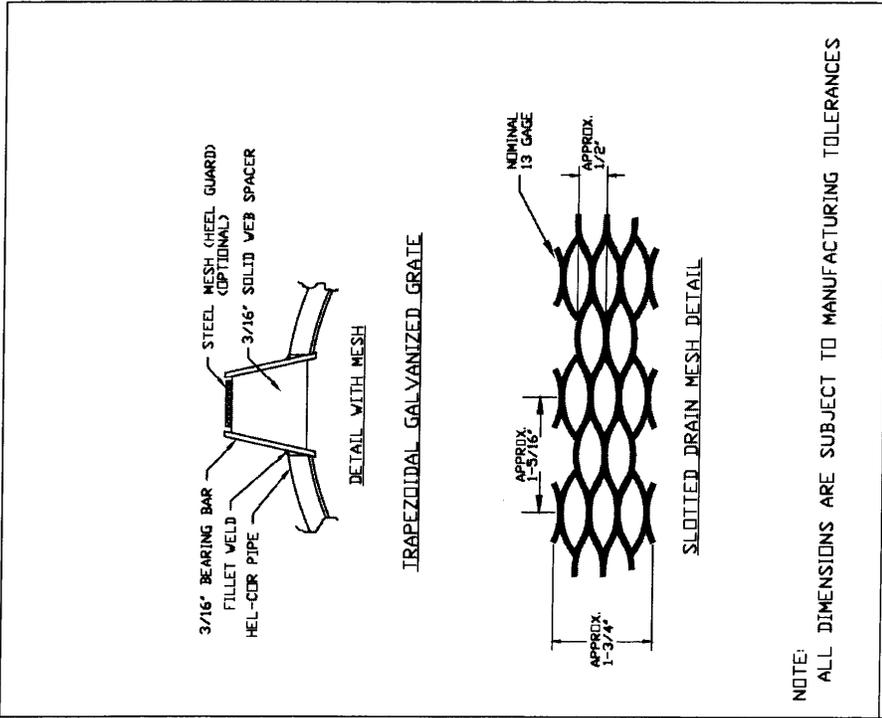
**SLOTTED DRAIN INSTALLATION
 HIGHWAY WHEEL LOADINGS**

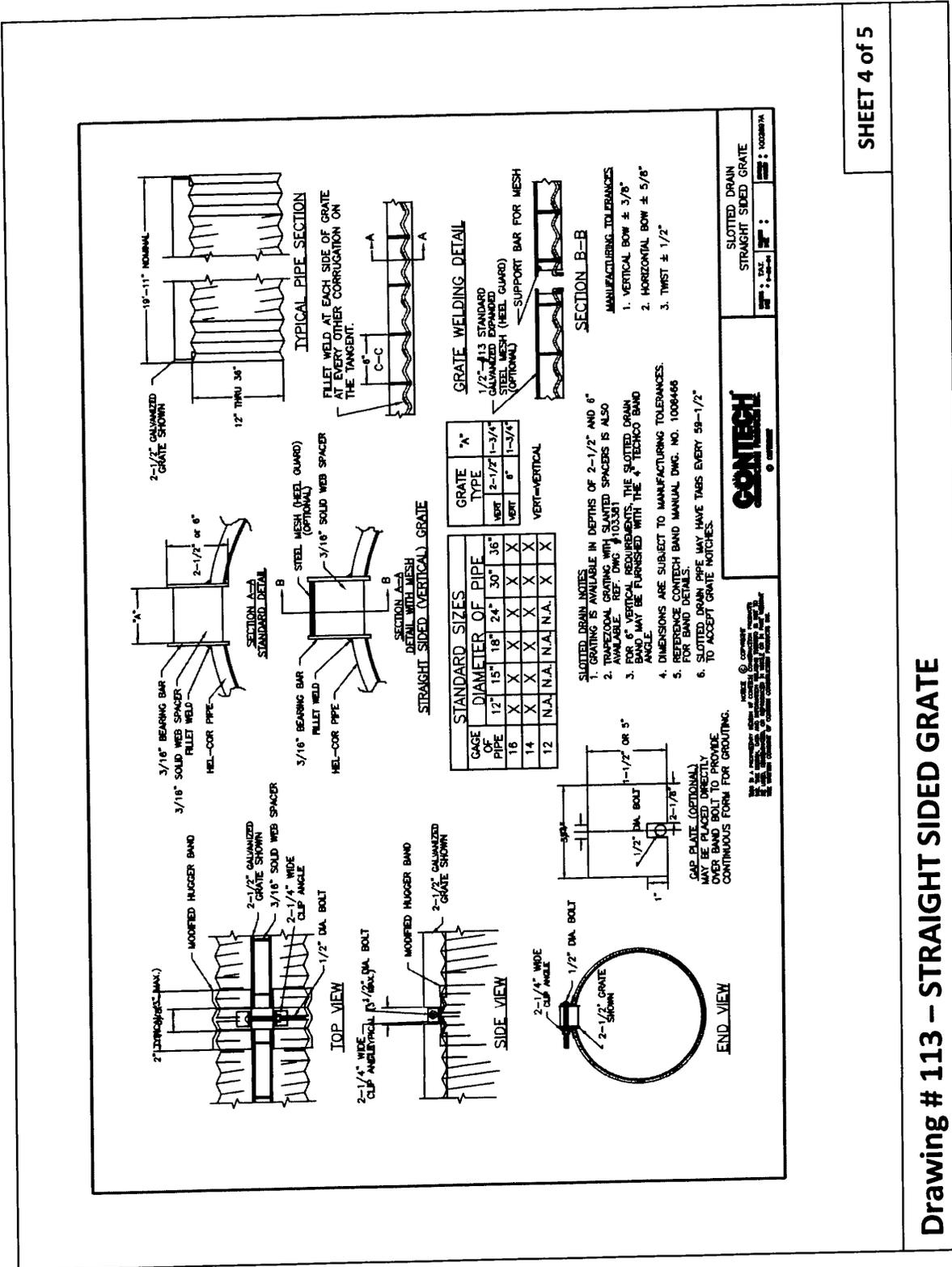
| | | |
|----------------|-----------------|------------|
| DRAWN BY: F.S. | REV. BY: D.E.N. | SCALE: N/A |
| DATE: 3-20-82 | DATE: 7-19-85 | 1008607C |

SHEET 2 of 5

Drawing # 113 – HWY LOADING

REVISED 12/12/2011

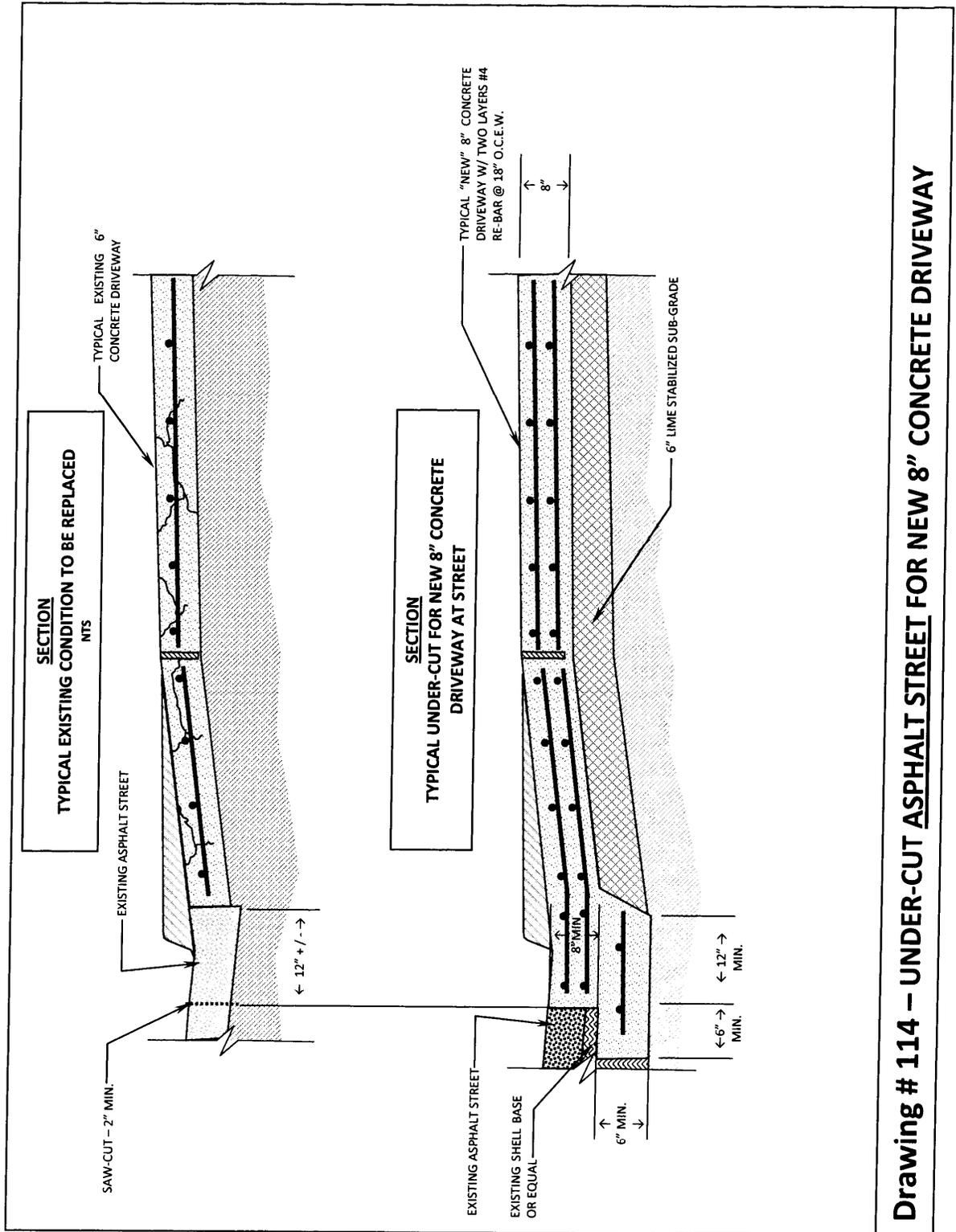
| | | | | | | | |
|--|--|--|------------------------------|-----------------------------|-------------------------------|------------|----------|
|  <p style="text-align: center;">TRAPEZOIDAL GALVANIZED GRATE</p> <p style="text-align: center;">SLOTTED DRAIN MESH DETAIL</p> <p>NOTE: ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">CONTECH CONSTRUCTION PRODUCTS INC.</td> <td style="text-align: center;">SLOTTED DRAIN MESH DETAIL</td> </tr> <tr> <td style="font-size: small;">DRAWN BY: F.B. DATE: 9-4-81</td> <td style="font-size: small;">REV. BY: D.E.K. DATE: 2-19-88</td> </tr> <tr> <td style="font-size: small;">SCALE: N/A</td> <td style="font-size: small;">10085078</td> </tr> </table> | CONTECH CONSTRUCTION PRODUCTS INC. | SLOTTED DRAIN MESH DETAIL | DRAWN BY: F.B. DATE: 9-4-81 | REV. BY: D.E.K. DATE: 2-19-88 | SCALE: N/A | 10085078 |
| CONTECH CONSTRUCTION PRODUCTS INC. | SLOTTED DRAIN MESH DETAIL | | | | | | |
| DRAWN BY: F.B. DATE: 9-4-81 | REV. BY: D.E.K. DATE: 2-19-88 | | | | | | |
| SCALE: N/A | 10085078 | | | | | | |
| Drawing # 113 – MESH DETAIL | | | | | | | |
| SHEET 3 of 5 | | | | | | | |



SHEET 4 of 5

Drawing # 113 - STRAIGHT SIDED GRATE

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