

July 24, 1998

Dan S. Aguirre, P.E.
Wilson & Company
4775 Indian School Road, NE - Suite 200
Albuquerque, NM 87110

Attn: Kristine Susco

**RE: YOUTH DEVELOPMENT INC. MODULAR BUILDING SITE (K20-D36).
GRADING & DRAINAGE PLAN FOR BUILDING PERMIT APPROVAL.
ENGINEER'S STAMP DATED JUNE 29, 1998.**

Dear Mr. Aguirre:

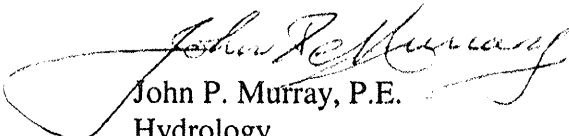
Based on the information provided on your June 30, 1998 submittal, the above mentioned project is approved for Building Permit.

As I discussed with Ms. Susco today, please note on the plan that Basins 101 / 201 and 102 / 202 are essentially the same. Also, highlight General Bradley on Location Map.

Prior to Certificate of Occupancy approval, an Engineer's Certification will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

c: ~~Andrew Garcia~~
✓ File

Good for You, Albuquerque!



DRAINAGE INFORMATION SHEET

PROJECT TITLE: YDI- MODULAR
BUILDING SITE

ZONE ATLAS/DRNG. FILE#: K-20 D3c

DRB#: _____ EPC#: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: A PORTION OF LOTS 23-30, BLOCK 3, WAGGOMAN-DENISON

140 ADDITION NE
CITY ADDRESS: GENERAL BRADLEY Albuquerque, NM 87106

ENGINEERING FIRM: Wilson & Company CONTACT: Kristine Susco

ADDRESS: 4775 Indian School Rd. Suite 200 PHONE: (505) 254-4059

Albuquerque, NM 87110

OWNER: Youth Development Inc CONTACT: _____

ADDRESS: 6301 Central Ave NW Albuquerque, PHONE: _____

NM

ARCHITECT: ACF Architects CONTACT: Wayne Connel

ADDRESS: 11930 Menaul NE suite 213 Alb. NM PHONE: 505-292-9260

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

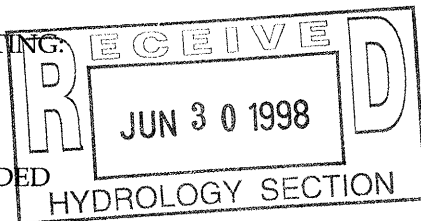
CHECK TYPE OF APPROVAL SOUGHT:

- ☒ DRAINAGE REPORT
☐ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☒ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION
☐ OTHER _____

- ☐ SKETCH PLAT APPROVAL
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D. APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER _____

PRE-DESIGN MEETING:

- ☐ YES
☒ NO
☐ COPY PROVIDED



Date Submitted: 6/29/98

By: Daniel S. Aguirre, P.E.

A handwritten signature in black ink, appearing to be "D. Aguirre", written over a horizontal line.

DIS



Martin J. Chávez, Mayor

Robert E. Gurulé, Director

May 8, 1997

Jeff Mortensen
Jeff Mortensen & Associates Inc.
6010-B Midway Park Blvd. NE
Albuquerque, New Mexico 87109

RE: DRAINAGE PLAN FOR CHICO CHILD DEVELOPMENT CENTER (K20-D36)
ENGINEER'S STAMP DATED 4/11/97

Dear Mr. Mortensen:

Based on the information provided on your April 15, 1997 submittal, the above referenced site is approved for Building Permit & Work Order.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required, along with the copy of the letter of acceptance for the Work Order.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia
File

Sincerely

A handwritten signature in cursive script that reads 'Bernie J. Montoya'.

Bernie J. Montoya CE
Associate Engineer

Good for You, Albuquerque!

P.O. Box 1293, Albuquerque, New Mexico 87103



DRAINAGE INFORMATION SHEET

CHICO CHILD

930906

PROJECT TITLE: DEVELOPMENT CNTR ZONE ATLAS/DRNG. FILE #: K20/D36DRB #: _____ EPC #: _____ WORK ORDER #: 5501.90LEGAL DESCRIPTION: LOT 23A, BLOCK 3, WAGGAMAN-DENISONCITY ADDRESS: CHICO & GENERAL BRADLEY NEENGINEERING FIRM: JEFF MORTENSEN & ASSOC. CONTACT: JEFF MORTENSENADDRESS: 6010-B MIDWAY PARK BLVD NE PHONE: 345-4250OWNER: CITY CONTACT: ARCHITECTADDRESS: DEPT OF FAMILY & COMMUNITY SERVICES PHONE: _____ARCHITECT: TERRAMAR CONTACT: TERESITA BLOCHADDRESS: 209 PALOMAS DR NE PHONE: 265-1572SURVEYOR: JEFF MORTENSEN & ASSOC CONTACT: JEFF MORTENSENADDRESS: 6010-B MIDWAY PARK BLVD NE PHONE: 345-4250CONTRACTOR: NOT SELECTED CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

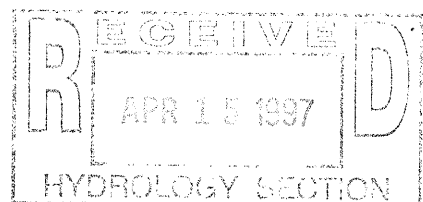
- ☐ DRAINAGE REPORT
☒ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☒ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION
☐ OTHER

PRE-DESIGN MEETING:

- ☐ YES
☐ NO
☐ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D. APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☒ OTHER WORK ORDER (SPECIFY)

DATE SUBMITTED: 04-14-97BY: JEFFREY G. MORTENSEN



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 20, 1994

Jeff Mortensen
Jeff Mortensen & Associates
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

RE: DRAINAGE PLAN FOR A SITE AT GENERAL BRADLEY NE (K20-D36)
ENGINEER'S STAMP DATED 1/17/94.

Dear Mr. Mortensen:

Based on the information provided on your January 18, 1994 submittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the D.P.M. checklist will be required.

Also, a separate permit is required for construction within City Right-of-Way. A copy of this approval letter must be on hand when applying for the excavation permit.

If I can be of further assistance, please feel free to contact me at 768-2667.

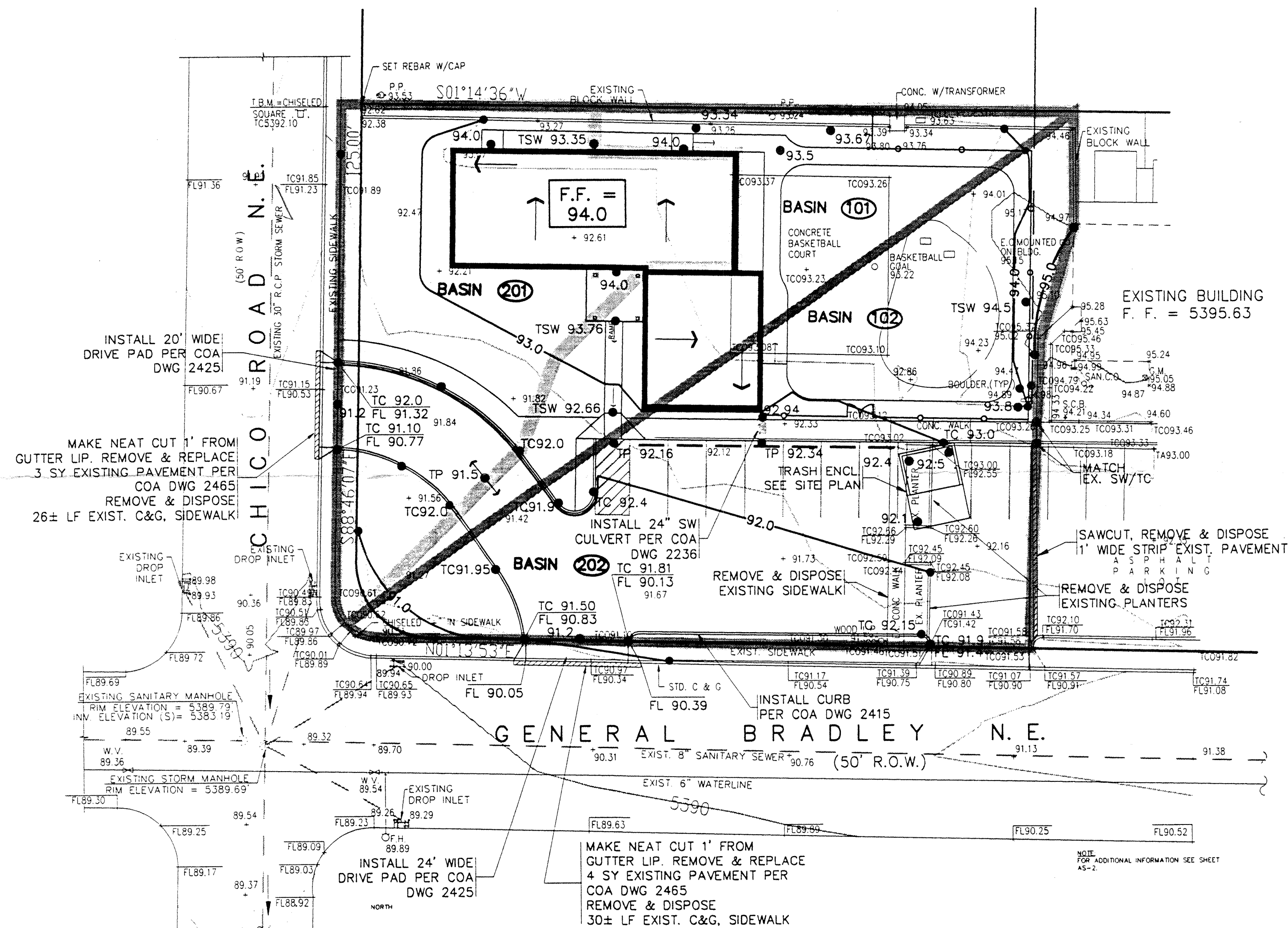
Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/8251

xc: Inspector
Darlene Saavedra
File

PUBLIC WORKS DEPARTMENT



GRADING AND DRAINAGE PLAN

SCALE: 1"=20'

DRAINAGE REPORT

Site Location: The Youth Development, Inc. Head Start Program Modular Classroom Building is located in the Southeast corner of Chico Road and General Bradley.

Existing Conditions: The existing site is an undeveloped lot. The existing lot drains from south to north with a 2 to 3 % slope. Approximately half the site drains to General Bradley and the other half to Chico NE. The discharge then enters the storm drain system through inlets at the corners of General Bradley and Chico Road.

EXISTING CONDITIONS

Basin	Area	%A	%B	%C	%D	V ₁₄₄₀ (ac-ft)	Q _p (cfs)
101	0.245	91.5%	0%	0%	8.5%	0.017	0.527
102	0.234	80.0%	0%	0%	20.0%	0.022	0.589
TOTAL	0.479	85.75%	0%	0%	14.2%	0.039	1.116

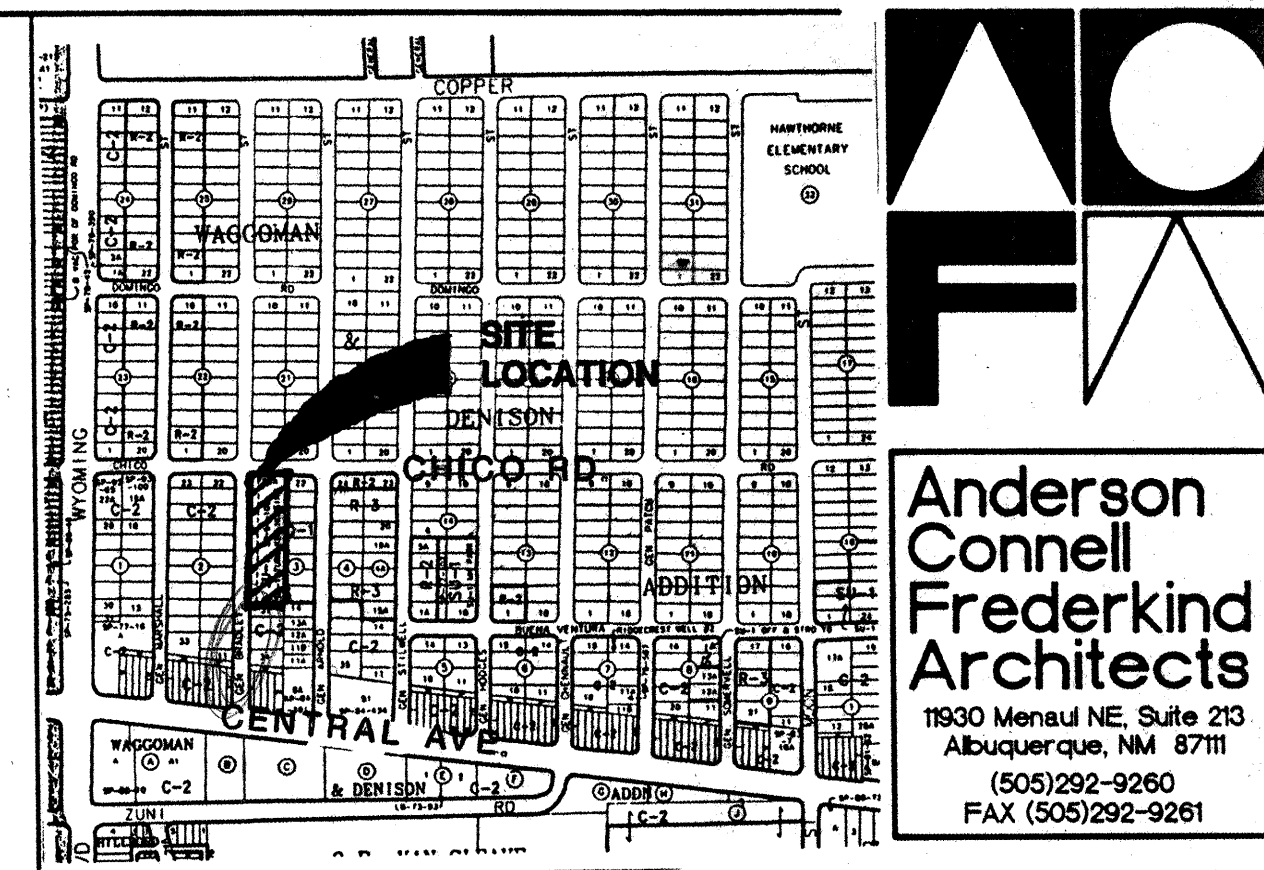
Proposed Conditions: The site will be developed as a Youth Development, Inc. Day Care Facility using a modular building, sand play area and paved parking. The lot will continue to drain to both Chico Road and General Bradley.

PROPOSED CONDITIONS

Basin	Area	%A	%B	%C	%D	V ₁₄₄₀ (ac-ft)	Q _p (cfs)
101	0.147	0	43.39	0	56.61	0.0248	0.5827
102	0.332	0	32.61	0	67.39	0.0616	1.119
TOTAL	0.479	0%	38%	0%	62%	0.0864	1.702

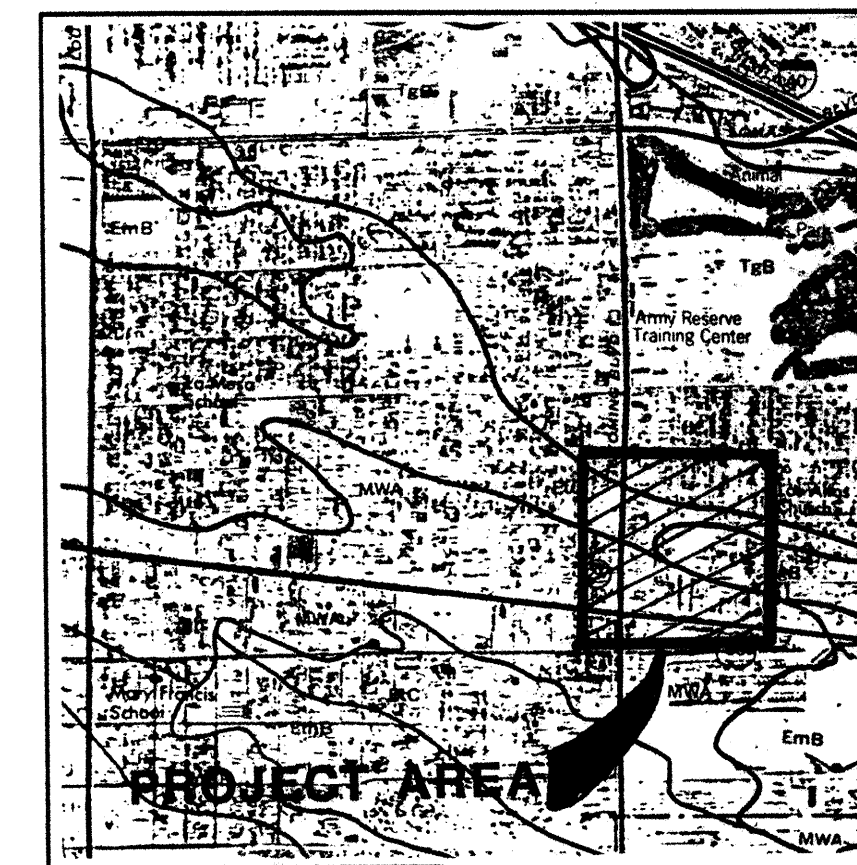
Methodology: For this site, Section 22.2 of the City of Albuquerque DPM was followed to calculate the peak rate of discharge and volume of runoff generated. The charts and formulas in Part A were followed using the 100-year frequency 6-hour rainfall volume as the design storm. The site is located in Zone 3 as determined from Table A-1. The total storm volume was calculated as per sub-section A.5. Peak discharge rate was calculated as per sub-section A.6.

Conclusions: The increase in discharge is less than 1cfs. This increase should not have a significant impact on the Chico Storm Drain System.



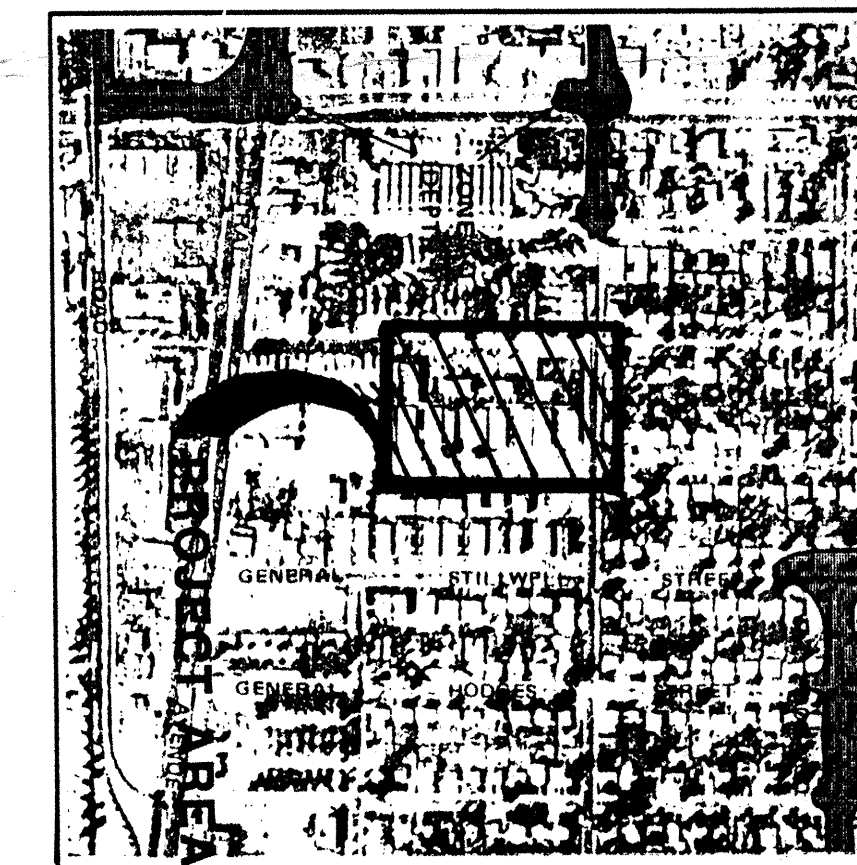
LOCATION MAP

ZONE ATLAS MAP NO. 68-Z
K-20



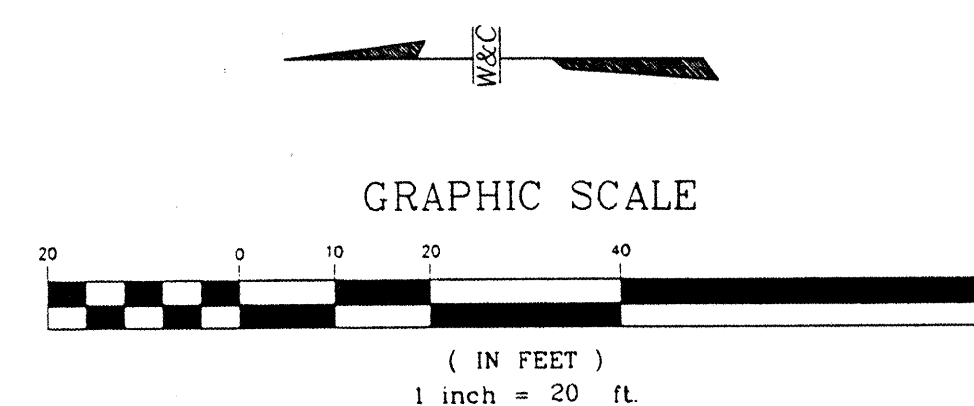
SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY
SHEET NO. 31



FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY
PANEL 30



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft

LEGAL DESCRIPTION

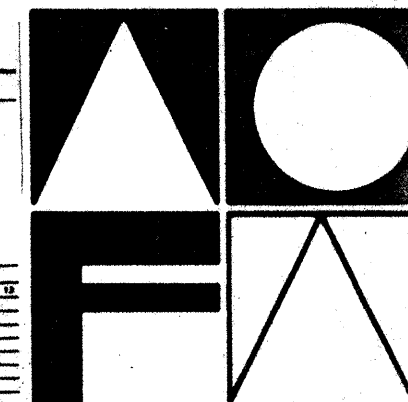
A PORTION OF LOTS 23-30 BLOCK 3
WAGGOMAN-DENISON ADDITION

BENCH MARK

A CHISLED "X" ON THE NORTHWEST CORNER OF CHICO ROAD
AND GENERAL BRADLEY, WITH A ELEVATION OF 5390.51.

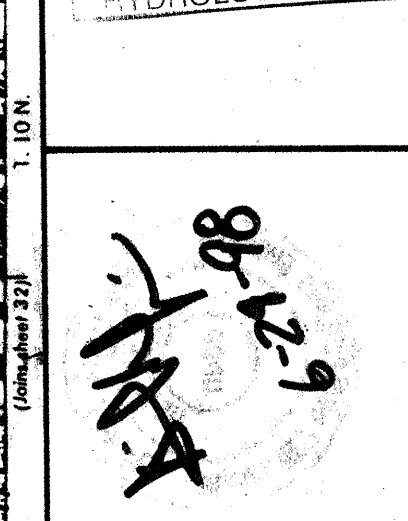
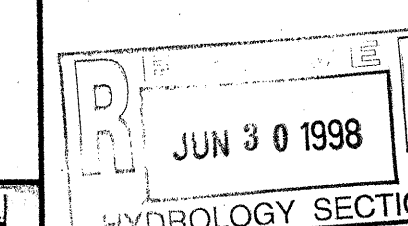
**WILSON
& COMPANY**

4775 INDIAN SCHOOL ROAD N.E.
SUITE 200
ALBUQUERQUE, NEW MEXICO
87110
(505) 254-4000



**Anderson
Connell
Frederick
Architects**

1930 Menaul NE, Suite 213
Albuquerque, NM 87111
(505) 292-9260
FAX (505) 292-9261



CHICO AND GENERAL BRADLEY
MODULAR CLASSROOM BUILDING
FOR:
YOUTH DEVELOPMENT INC. - HEAD START PROGRAM
6301 CENTRAL AVE. NW

Project No: 9801
Date: 4/20/98
Scale: AS NOTED
Drawn by: H.T.R.
Checked by: W.A.C.
Revision(s):

Sheet Title:
GRADING AND
DRAINAGE
PLAN

Sheet No:

C1

Of:

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990 (Albuquerque Area), 1-800-321-ALERT(2537) (Statewide), for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay. The Contractor shall be responsible for all interpretations it makes without first contacting the Engineer as required above.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.

6. An Excavation/Construction Permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
7. Backfill compaction shall be according to residential street use.
8. Maintenance of these facilities shall be the responsibility of the owner of the property served.
9. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures:

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.



JEFF MORTENSEN & ASSOCIATES, INC.
600-9 MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (505) 345-4250

CITY OF ALBUQUERQUE
DEPARTMENT OF FAMILY
AND COMMUNITY SERVICES

TITLE: DRAINAGE CALCULATIONS, SECTIONS & DETAILS
CHICO CHILD DEVELOPMENT CENTER
CHICO AND GENERAL BRADLEY N.E.-YDI, INC.

Design Review Committee	City Engineer Approval	Ms./Dm/Dr	Ms./Dm/Dr

City Project No.	Zone Map No.	Sheet	Of
5501.90	K-20	C2.2	

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 3
2. $P_{6,100} = P_{360} = 2.60$ in.
3. Total Area (A_T) = 20,000 sf/0.46 ac
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
A	950/0.03	06
C	7,690/0.17	37
D	11,360/0.26	57

5. Developed Land Treatment

A. Basin A (5,350 sf; 0.12 ac.)	Area (sf/ac)	%
Treatment	3,370/0.08	67
C	1,980/0.04	33

B. Basin B (14,650 sf; 0.34 ac.)	Area (sf/ac)	%
Treatment	880/0.02	06
A	1,200/0.03	09
D	12,570/0.29	85

Existing Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = (0.66)(0.03) + (1.29)(0.17) + (2.36)(0.26) / 0.46 = 1.85 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (1.85 / 12) 0.46 = 0.07 \text{ ac.ft.; } 3,090 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (1.87)(0.03) + (3.45)(0.17) + (5.02)(0.26) = 1.9 \text{ cfs}$$

Developed Condition

A. Basin A

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = (1.29)(0.08) + (2.36)(0.04) / 0.12 = 1.65 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (1.65 / 12) 0.12 = 0.02 \text{ ac.ft.; } 720 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (3.45)(0.08) + (5.02)(0.04) = 0.5 \text{ cfs}$$

3. Hydraulics

Using Feild's Hydraulics Calculator for Gravity Flow in Pipes

$$\text{For } S = 0.0220$$

$$D = 12"$$

$$n = 0.013$$

$$Q = 5.3 \text{ cfs} >> Q_{100} = 0.5 \text{ cfs}$$

B. Basin B

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = (0.66)(0.02) + (1.29)(0.03) + (2.36)(0.29) / 0.34 = 2.17 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (2.17 / 12) 0.34 = 0.06 \text{ ac.ft.; } 2,680 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (1.87)(0.02) + (3.45)(0.03) + (5.02)(0.29) = 1.6 \text{ cfs}$$

Comparison

A. Basin A

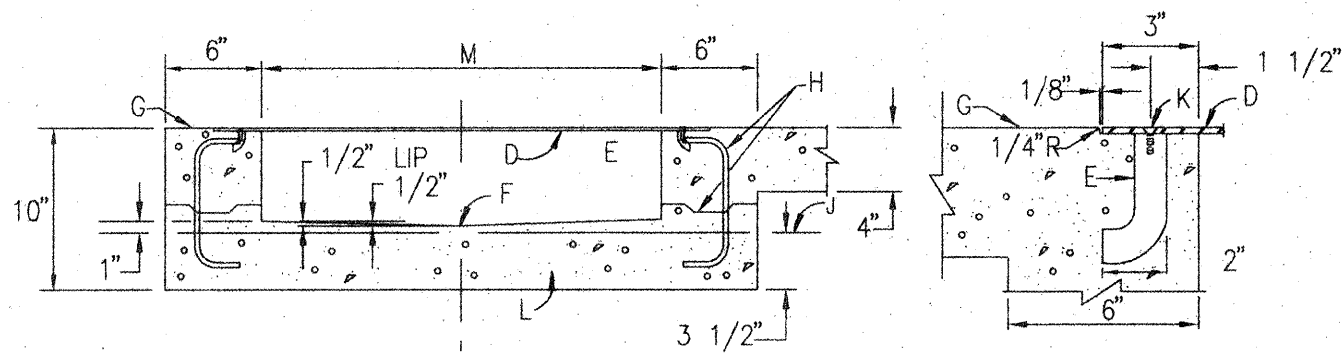
$$1. \Delta V_{100} = 720 - 0 = 720 \text{ cf (increase)}$$

$$2. \Delta Q_{100} = 0.5 - 0 = 0.5 \text{ cfs (increase)}$$

B. Basin B

$$1. \Delta V_{100} = 3,090 - 2,680 = 410 \text{ cf (decrease)}$$

$$2. \Delta Q_{100} = 1.9 - 1.6 = 0.3 \text{ cfs (decrease)}$$

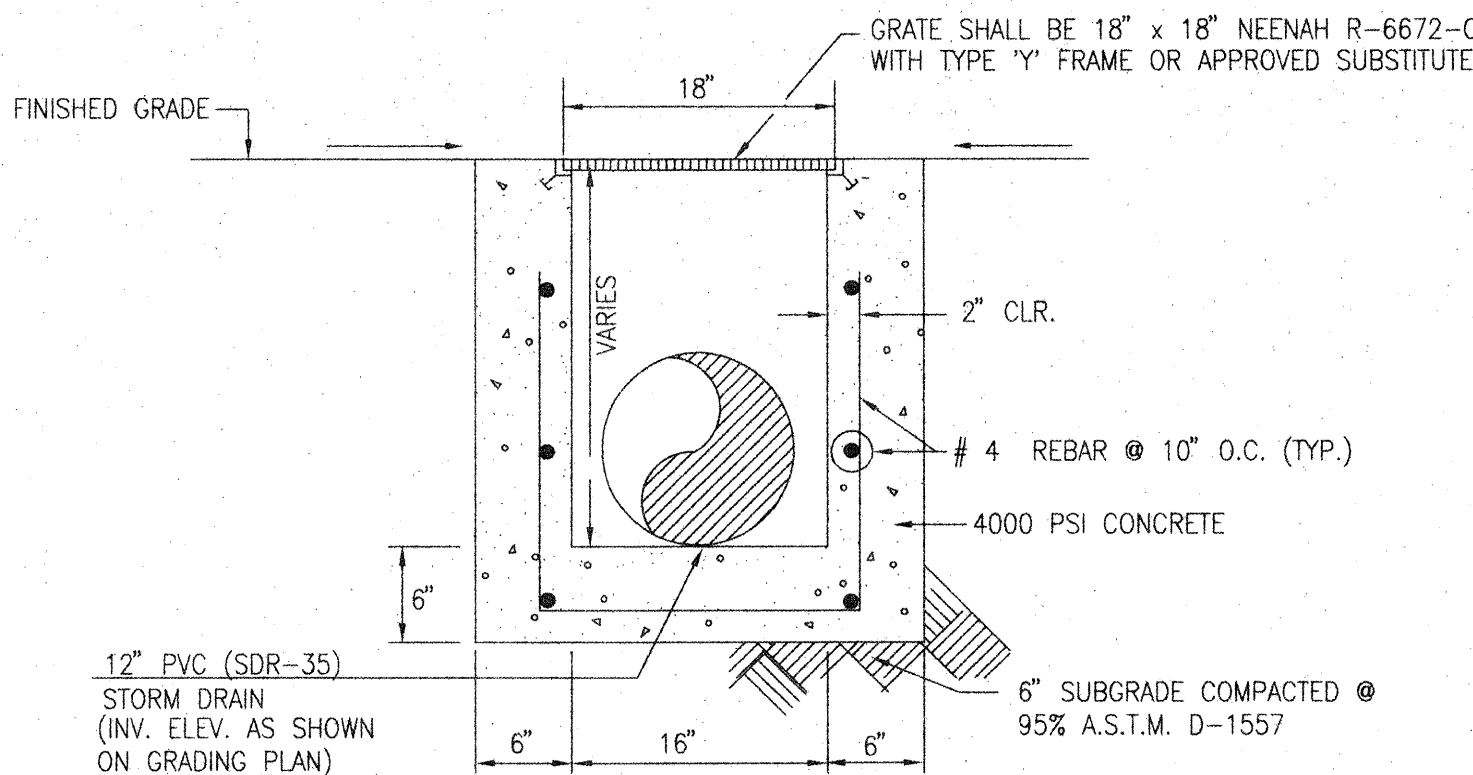


CONSTRUCTION NOTES:

- A. JOIN NEAREST SCORE LINE OR WEAKENED PLANE JOINT.
PLACE 1/2" EXPANSION JOINT MATERIAL.
B. SIDEWALK OR SETBACK, (VARIABLE).
C. 3" RADIUS, (TYPICAL).
D. 3/8" CHECKERED STEEL PLATE.
E. ROD ANCHOR 1" x 5"
F. "V" INVERT
G. SIDEWALK GRADE
H. DOWEL AND JOINT, (OPTIONAL).
J. ASPHALT PAVING GRADE
K. 3/8" x 1" F.H. C'SUNK STAINLESS STEEL MACHINE SCREW.
L. 4000 PSI CONCRETE
M. DRAIN WIDTH, 24" MAX. 12" MIN.
N. SLOPE 1/4" PER FT. MIN.

TYPICAL SIDEWALK CULVERT DETAILS

NOT TO SCALE



TYPICAL STORM INLET SECTION

SCALE: 1" = 1' - 0"

930906

T	1	DF	1
---	---	----	---