

# EDITORIAL

## Water plan is needed

As we have said before, it's only during periods of drought or like the rupture of the Cranston aqueduct some years ago – that left Warwick perilously close to running dry – are we reminded that water is a finite resource.

So it comes as a surprise, during a summer of adequate rainfall, to learn that the Kent County Water Authority (KCWA) has notified several developers and pharmaceutical manufacturer Amgen that it doesn't have the water to meet their projected needs.

The authority is looking at the long-range picture and realizes that if growth is to continue it must develop new sources of water for it to meet the requirements of projects on the drawing boards, such as the Brooks Pharmacy headquarters in East Greenwich.

This is not a revelation; the authority has seen this problem for years and proposes to address it with new wells in Coventry and West Greenwich. As the authority serves a portion of Warwick, the issue of an adequate water supply is as critical to Warwick residents as it is to development along the Route 95 corridor as well as major companies like Amgen to our south.

After four years of studies, negotiations and number crunching, the Department of Environmental Management issued the authority a permit this May to increase its well field production from its current permitted 2.9 million gallons a day to a maximum of 4.3 million per day. If it were available now (It should come on line in about three years) it would have enabled the authority to meet foreseeable increases in demand.

But DEM also had concerns over adverse environmental impacts on the Mishnock River and swamp. The permit contained provisions requiring the authority

to monitor conditions and allows for DEM to restrict well flow. Given a projected investment of \$17 million and the prospect of having the well tap partially closed, the authority abandoned the expansion project.

That foretells a precarious future.

KCWA general manager Timothy Brown says the authority is exploring options that include obtaining additional water from the Quonset system, buying more water from the Providence Water Supply Board and restricting outdoor use of water.

An outdoor ban would directly affect Warwick customers that are already on an odd-day-even-day system for outdoor water. Is it fair that they face restrictions when other sections of the city served by the city water division don't?

We raise the issue to illustrate the dire nature of the situation and how dramatically conditions can change even within the boundaries of a municipality.

Water systems require costly and intensive infrastructures. Kent County has undertaken a capital improvement project to boost pressure and improve water quality. It has properly put the needs of its existing customers first and those of future development second.

But there is more at stake than a few brown lawns and wilted vegetables. Amgen's production plans are dependent upon increased water supply. A Brooks headquarters must have sufficient water to meet fire code regulations and domestic needs. Without adequate water, the state is looking at potential job and economic development losses.

This is a statewide problem and it's time for the governor to step in. Short-term solutions are needed now, but a master plan for adequate water in the future is imperative.

## ■ Water

(Continued from page 1)

commitment.

"There are other solutions, [including] the purchase [of water] from others," he said, confirming that he was referring to the Providence Water Supply Board.

Brown said the purchase of water from Providence, which it is now doing to augment well production, is an option. He rejected McMahon's statement that the authority has an obligation to service new customers, saying the obligation is to meet the demand of its existing customers.

Asked if KCWA could provide water to a casino in West Warwick, Brown said, "If they applied today we would give them the same answer." In other words, they don't have the water.

Not only is KCWA unable to take on new customers, but Brown said they're "teetering on insufficient supply for our customers."

The goal of the expansion project was to increase the existing permitted output of 2.9 to 4.3 million gallons a day by replacing two older wells with three new wells. But while the DEM concludes there is sufficient water to meet the projection, they have concerns over the impact on Misnook Swamp and Misnook River.

Acting DEM Director Fred Vincent said Friday that his department sought to come up with a plan that would "balance" the demand for increased water yet preserve the "special recourse area" of the swamp. He said after extensive research and modeling the department concluded no more than 1.4 million gallons per day should be drawn from the wells in dry periods. Taking the maximum of 4.3 mgd in wet periods, the department arrived at an average of 3.4 mgd over the course of a year.

As the authority had planned to invest \$17 million on the project, Vincent believes the authority concluded it was too much to risk for what was gained.

"We were trying very hard to recognize their business needs," he said.

Brown doesn't see it that way.

"They're looking for control of it. They overstepped their jurisdiction," he said.

The permit issued places the burden of monitoring on the authority for years in the future and gives DEM the ability to restrict well use, although the authority claims it submitted government studies supporting its methodology and steps to protect the well field and wetlands.

Asked what options the authority is considering, Brown said in addition to the purchase of water from Providence and Warwick (Warwick buys its water from Providence and would resell it to KCWA), the authority is exploring supply from Quonset with the EDC and restricting the outdoor use of water by existing customers. Presently, customers are on an odd/even system where homeowners with even-numbered addresses are permitted to use water outside on even-numbered days. A ban on all outside watering at certain times is being considered.

Even with added sources of water, the authority needs to upgrade its infrastructure. Brown said the authority is not using the Misnook wells and that improvements, including a treatment plant to remove iron and manganese, a holding tank, piping and a booster station, need to be made. The estimated cost of these improvements, which are projected to take three years to complete, is about \$10 million.

Why is it that only now, with two major projects critically linked to the state's economy un-

derway and several others, including a Home Depot at the Centre of New England and housing developments, currently on the horizon, has the problem surfaced?

Brown said authority uses population projections in calculating future demand. The commercial and industrial growth along Route 95 was not foreseen. When faced with that growth, the authority looked to increase the permitted production of the Misnook well field.

As for a delay in arriving at a permit, Vincent says the department lacked the technical expertise to evaluate the request. He called the issues "very complicated," adding the permit process did not move as fast as it could have.

Vincent said economic development was included in the process ("We need to have that agency part of the discussions," he said.) and that when the authority balked at the regulations, "We persuaded them to file an appeal."

Following a meeting two to three weeks ago, Vincent said he came to the conclusion that "there didn't seem to be any willingness [on the part of the authority] to go further."

Vincent said DEM "is always willing to sit and talk" should the authority seek to explore the permit again.

Citing the dependence on the Providence Water Supply Board, which serves about 60 percent of the state, and concerns following the attacks of Sept. 11, Vincent said, "There is a need to diversify for the benefit of everyone."

A spokesman for Amgen said the company is reviewing the situation and would have a comment at a later time. Crossman Engineering, which is doing the design work for Brooks, did not return calls seeking comment.

## ■ Risk

(Continued from page 1)

settle in Rhode Island. At 52,

program from its inception. In a recent interview, the superintendent continued to share a pessimistic view about the financial investment being made in the po-

would not be returning to the job, Greenwood said she called all of the families herself to personally share her regrets. She said that mothers and fathers all told her

CHANGE ORDER

No. 2

DATE OF ISSUANCE 9-22-04

EFFECTIVE DATE \_\_\_\_\_

OWNER Kent County Water Authority  
 CONTRACTOR C.B. Utility Co., Inc.  
 Contract: Black Rock Road Area Transmission Mains  
 Project: Same as above  
 OWNER's Contract No. CIP-4 ENGINEER's Contract No. \_\_\_\_\_  
 ENGINEER Garofalo & Associates, Inc.

You are directed to make the following changes in the Contract Documents:

Description:  
Additional work at the Clinton Ave Pump Station.

Reason for Change Order:

Add items to contract.  
Attachments: (List documents supporting change)

Sketch of modifications w/fax cover (3 sheets), price quote (3 sheets).

CHANGE IN CONTRACT PRICE:
Original Contract Price \$ <u>5,359,886.00</u>
Net Increase ( <del>Decrease</del> ) from previous Change Orders No. <u>   </u> to <u>   </u> : \$ <u>24,539.56</u>
Contract Price prior to this Change Order: \$ <u>5,384,425.56</u>
Net increase ( <del>decrease</del> ) of this Change Order: \$ <u>23,942.56</u>
Contract Price with all approved Change Orders: \$ <u>5,408,368.12</u>

CHANGE IN CONTRACT TIMES:
Original Contract Times: Substantial Completion: _____ Ready for final payment: _____ (days or dates)
Net change from previous Change Orders No. <u>   </u> to No. <u>   </u> : Substantial Completion: _____ Ready for final payment: _____ (days)
Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____ (days or dates)
Net increase (decrease) this Change Order: Substantial Completion: _____ Ready for final payment: _____ (days)
Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____ (days or dates)

RECOMMENDED:  
GAROFALO & ASSOCIATES, INC.

APPROVED:

ACCEPTED:

By: [Signature] By: \_\_\_\_\_  
ENGINEER (Authorized Signature) OWNER (Authorized Signature)

By: [Signature]  
CONTRACTOR (Authorized Signature)  
C. B. Utility Co., Inc.

Date: 9-22-04 Date: \_\_\_\_\_ Date: 9/27/2004

# C. B. UTILITY CO., INC.

*General Contractors*

99 Tupelo Street  
Bristol, Rhode Island 02809  
TEL. (401) 253-9277 FAX (401) 253-0450

DIVISIONS:  
PIPELINE TRANSMISSION & DISTRIBUTION  
SEWER • WATER • SITEWORK  
EQUIPMENT RENTALS

Garofalo & Associates, Inc.  
85 Corliss Street  
P.O. Box 6145  
Providence R.I. 02940

RECEIVED  
SEP - 1 2004

August 30, 2004

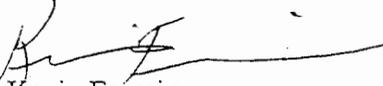
Re: K.C.W.A. Black Rock Road  
Area Transmission Mains CIP - 4  
Coventry and Scituate, RI

Subject: Proposed Modification at Clinton Ave. P.S.

Attn: William J. Cotter, PE

In response to your fax received on 8-4-04 to modify connection work at the Clinton Ave. Pump Station Area of work the attached cost breakdown is per the sketch drawing received with the facsimile. The total cost for these modifications is \$ 23,942.56. Please forward a response as soon as possible so we can order required materials.

Respectfully Yours;

  
Kevin Ferreira.

KCWA CIP - 4 BLACK ROCK ROAD

COST BREAKDOWN - MODIFICATION AT CLINTON AVE. P.S.

LABOR AND EQUIPMENT

COST

CREW COST FOR CONNECTION = \$4,792.04 x 2 days = \$ 9,584.08  
NOTE : 2 DAYS IS THE TOTAL EXTRA TIME NEEDED TO INSTALL  
THE ADDED FITTINGS AND CONNECTIONS REQUIRED.

MATERIALS

24" x 20" M.J. CROSS ( C-110 ) 1 EA.	\$ 4,039.59
20" x 20" M.J. TEE 1 EA.	\$ 1,460.19
20" x 16" M.J. REDUCER 1EA.	\$ 722.70
24" MEG A LUGS 7 EA. X \$ 224.25 =	\$ 1,569.75
20" MEG A LUGS 11 EA. X \$ 194.41 =	\$ 2,138.51
16" MEG A LUGS 10 EA. X \$ 130.48 =	\$ 1,304.80

SUB - TOTAL = \$20,819.62

15% \$ 3,122.94

TOTAL = \$23,942.56 LUMP SUM

Make note that all materials and units that have items will be paid under the contract items.

Materials are based on today's prices.

K.C.W.A. CIP - 4 BLACK ROCK ROAD INSTALLATION CREW

LABOR

	<u>HOURS</u>	<u>RATE</u>	<u>DAY</u>
SUPERINTENDENT	4	\$ 52.50	\$ 210.00
FOREMAN	8	\$ 52.53	\$ 420.24
LABORERS - 2	16	\$ 45.15	\$ 722.40
PIPELAYER	8	\$ 45.53	\$ 364.24
BACKHOE OPERATOR	8	\$ 53.21	\$ 425.68
LOADER OPERATOR	8	\$ 51.61	\$ 412.88
<b>TOTAL =</b>			<b>\$ 2,555.44</b>
<u>EQUIPMENT</u>			
CAT 345 BL BACKHOE	8	\$ 130.00	\$ 1,040.00
CAT 936 LOADER	8	\$ 35.00	\$ 280.00
FOREMAN UTILITY TRUCK	8	\$ 8.50	\$ 68.00
SUPER. PICK UP	4	\$ 8.15	\$ 32.60
<b>TOTAL =</b>			<b>\$ 1,420.60</b>
<u>RENTAL TRUCKS</u>			
RENTAL TRUCKS - 2	16	\$ 51.00	\$ 816.00
<b>TOTAL =</b>			<b>\$ 816.00</b>
<b>CREW TOTAL =</b>			
			<b>\$ 4,792.04</b>

## KENT COUNTY WATER AUTHORITY

FAX TRANSMITTAL

DATE: 8/2/04  
TO: Bill Cotta  
COMPANY: Carofalo  
FAX #: 273-1000

NUMBER OF PAGES TO TRANSMIT: 3  
(including cover letter)

FROM: Kevin Fitka  
KENT COUNTY WATER AUTHORITY  
P. O. BOX 192  
WEST WARWICK, RHODE ISLAND 02893-0192  
(401) 821-9300  
Fax # (401) 823-4810

COMMENTS: Bill,  
Attached is a proposed revision to the piping  
configuration in front of Clinton Ave. P.S. We  
would like to get a price from C.B. Utility for  
these revisions - it appears most work is covered under  
existing unit items, several are not. Let's discuss

Thanks  
Kevin

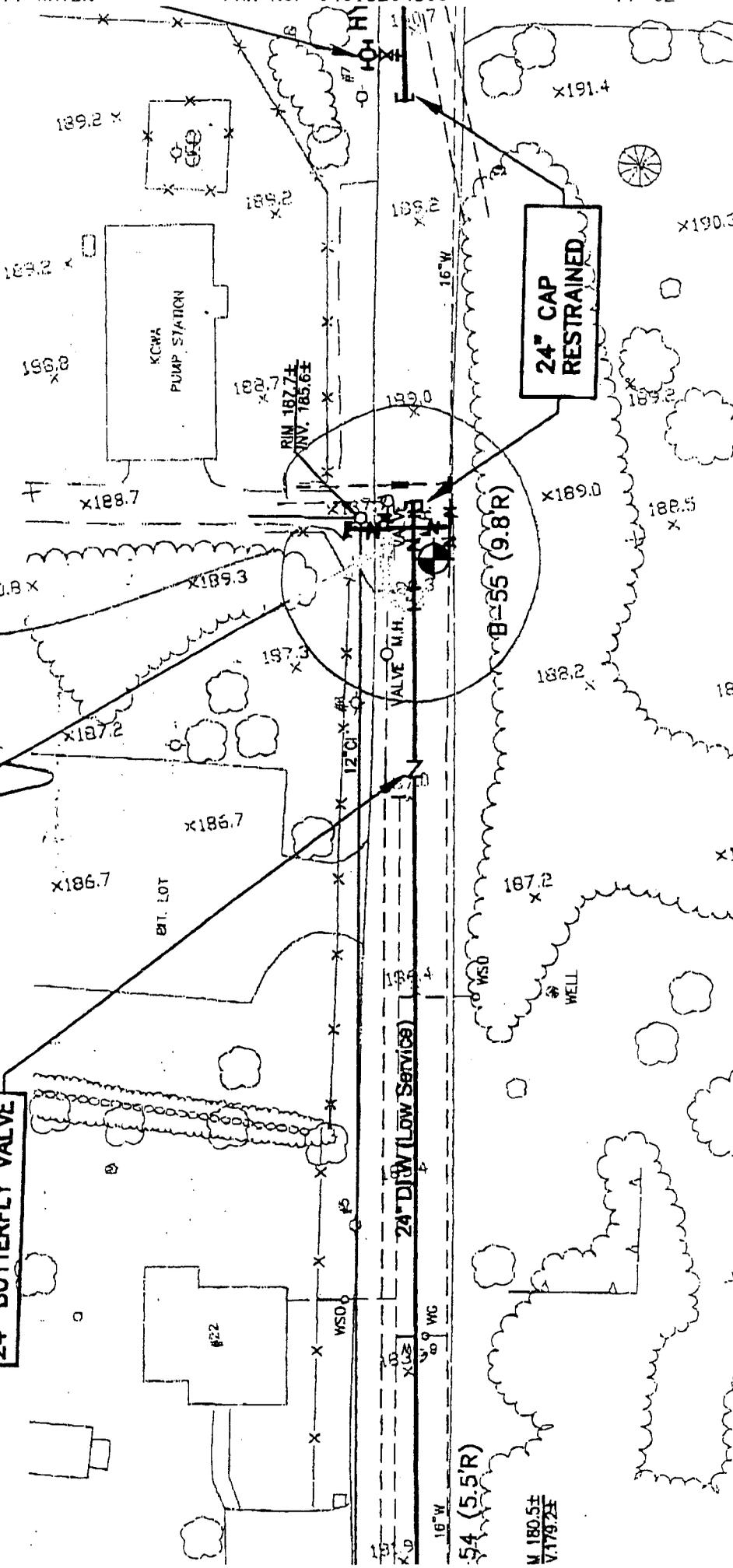
IF THERE IS DIFFICULTY IN RECEIVING THIS TRANSMISSION OR THE # OF PAGES TRANSMITTED DOES NOT AGREE, PLEASE CALL (401) 821-9300 AS SOON AS POSSIBLE.

*see attached for material*

20" COUPLING  
20" DI PIPE  
20" 1/4 BEND  
20" DI PIPE  
24" x 20" TEE

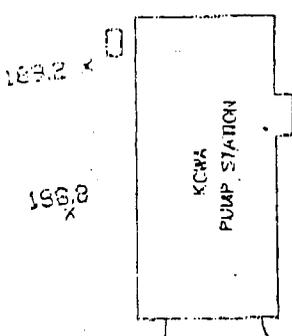
24" BUTTERFLY VALVE

24" CAP RESTRAINED



54 (5.5'R)

M 180.5±  
V 179.2±



RIM 187.7±  
INV. 785.6±

VALVE M.H. #2  
#2

B=55 (9.8'R)

187.2

WELL

BT. LOT

#22

189.2

189.2

189.8

188.7

180.8

189.3

187.2

186.7

186.7

187.2

188.2

189.0

188.5

190.3

191.4

16" W

WSO

12" CI

16" W

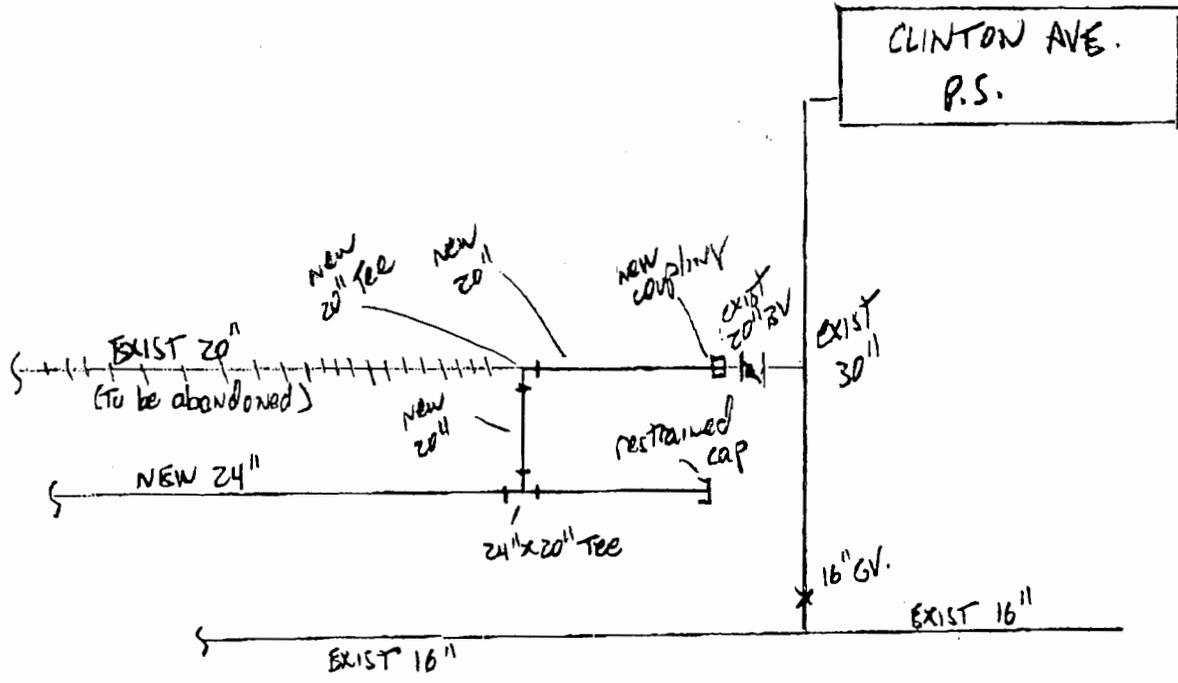
16" W

16" W

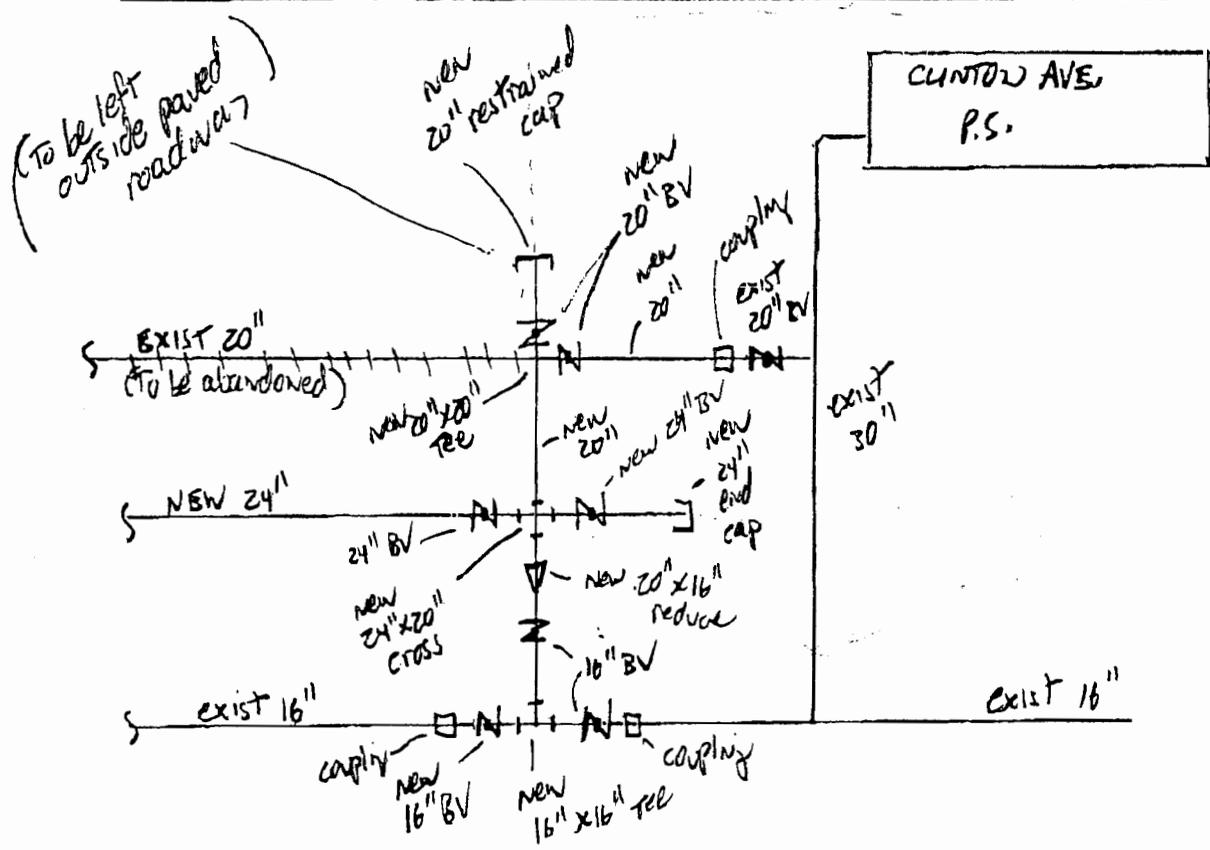
16" W

16" W

16" W



AS-DESIGNED



Proposed Design Revision