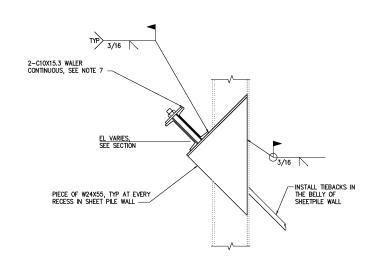


## NOTES:

- 1 TIEBACKS SHALL BE HIGH STRENGTH (150 KSI)
  DYWIDAG THREAD BARS AS MANUFACTURED BY
  WILLIAMS FORM ENGINEERING CORPORATION OR
  APPROVED EQUAL. TIEBACKS SHALL BE GROUT
  BONDED WITH STRESSING LENGTHS AND BOND
  LENGTHS AS NECSSARY TO DEVELOP MINIMUM
  ALLOWABLE LOAD OF 55 KIPS. ALLOWABLE PULLOUT
  RESISTANCE ALONG THE GROUT/ROCK INTERFACE IS
  5,500 PSF. TIEBACKS SHALL BE LOAD TESTED IN
  ACCORDANCE WITH REQUIREMENTS OF SPECIFICATION
  SECTION 02216.
- 2 THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING 36" FORCE MAIN BY EXCAVATING AT A MAXIMUM SPACING OF 25 FEET. NOTIFY THE ENGINEER IF ADJUSTMENT OF THE TIEBACK ELEVATION IS NECESSARY.
- 3 THE INFORMATION SHOWN FOR THE EXISTING 54\*
  INTERCEPTOR IS COMPILED FROM RECORD DRAWINGS
  BY CROWBER CONSTRUCTION COMPANY TITLED 54\*
  TINKER CREEK INTERCEPTOR. THE CONTRACTOR
  SHALL REVIEW EXISTING RECORD DRAWINGS OF THE 54" INTERCEPTOR AND SPACE THE TIEBACKS AT THE EXISTING 54" OUTFALL AND THE NORTH-SOUTH LEG OF THE INTERCEPTOR AS REQUIRED TO AVOID INTERFERENCES.
- 4 THE INFORMATION SHOWN FOR THE 36' FORCE MAIN IS COMPILED FROM THE FOLLOWING: DRAWINGS BY MALCOW PRINE AND MATTERN & CRAIG, INC.
  TITLED: WATER POLLUTION CONTROL PLANT UPGRADE AND EXPANSION. DATED: MAY 1997.
- 5 ALL STRUCTURAL STEEL SHALL BE PAINTED PER SPECIFICATION SECTION 09900.
- TIEBACKS AND WALERS SHALL BE INSTALLED PRIOR TO INSTALLATION OF NEW PIPES AND PLACEMENT OF FILL.
- 7 WALER BETWEEN THE PAIR OF DOUBLE TIEBACKS AT THE EXISTING 54\* OUTFALL SHALL BE 2-C15X50.
  DOUBLE TIEBACKS SHALL ATTACH TO 2-C15X50 AT
  EACH END. WHERE 2-C15X15.3 WALER ABUTS
  2-C15X50 WALER, SINGLE TIEBACK FOR 2-C15X15.3 SHALL BE LOCATED A MAXIMUM OF 6'-0" FROM ADJACENT DOUBLE TIEBACKS.
- 8 ELEVATION OF SUPPORT WALER CHANGES AT REFERENCED LOCATION. A MINIMUM OF 3'-0' OVERLAP SHALL BE PROVIDED BETWEEN UPPER AND LOWER WALLES. TIEBACKS SHALL BE SPACED A MAXIMUM OF 3'-0' APART AT THE TRANSITION.



DETAIL 1
1'=1'-0' G16

				DESIGNED BGS/DDZ
				DRAWN BGS/DDZ
				CHECKED
	RECORD DRAWNGS	MAR 2008	RLT	
l	CONSTRUCTION	MAR 2004	RLT	PROJ. ENGR. DAN
	REGULATORY APPROVAL	NOV 2003	RLT	
	PRELIMINARY DESIGN	NOV 2002	RLT	

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649

## RECORD DRAWING

THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER. THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY CHRISTOPHER T. PHILLIPS, 033796. THIS MEDIA SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

## HAZEN AND SAWYER Environmental Engineers & Scientists 4011 WestChase Blvd, Raleigh, North Carolina 27607

## CITY OF ROANOKE VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT WET WEATHER IMPROVEMENTS

SITE PLAN GENERAL SHEETING MODIFICATIONS AND MISCELLANEOUS SLABS

THE SCALE BAR DATE SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL

JULY 2003 H & S JOB 30788A CONTRACT NUMBER DRAWING NUMBER G16

DATE BY APPROVED ISSUED FOR