

# WYNDGATE HEADWALL DETAILS

## NOTES:

1. All construction and materials shall meet the requirements of the City of O'Fallon, Missouri.
2. Installation of the corrugated metal superspan shall be in accordance with the manufacturers recommendations.
3. The soils engineer shall provide inspection reports to the City of O'Fallon and to the developer for footing subgrade and backfill compaction.
4. Reports of the results of all concrete tests shall be submitted to the City of O'Fallon and to the developer.
5. Backfill over corrugated metal superspan and to a minimum of 2 feet on each side of the structure shall be crushed limestone meeting the following gradation:

Sieve size	Percent passing
No. 10	50% max
No. 40	30% max
No. 200	15% max

The plasticity index of the fraction passing No. 40 sieve shall be no greater than 6. The maximum particle size shall not exceed 3 inches. On site mixing or blending to achieve specified gradation is not allowed.

6. Form liners will be used on all exposed sides of the concrete headwalls to provide a stone masonry finish. Form liners shall extend a minimum of 1 foot below finish grade.

7. Provide 3/4" chamfer on all exposed wall edges.

8. Seal concrete with commercial sealer/waterproofing compound after form removal. Every effort shall be made to provide uniform color and finish to the visible sections of the walls.

9. Minimum concrete cover on all steel shall be 2 inches except on bottom of footing where minimum cover shall be 3 inches.

10. Design Unit Stresses:  
Class B-1 concrete,  $f'_c=4,000$  psi.  
Reinforcing Steel (GRADE 60),  $f_y=60,000$  psi.

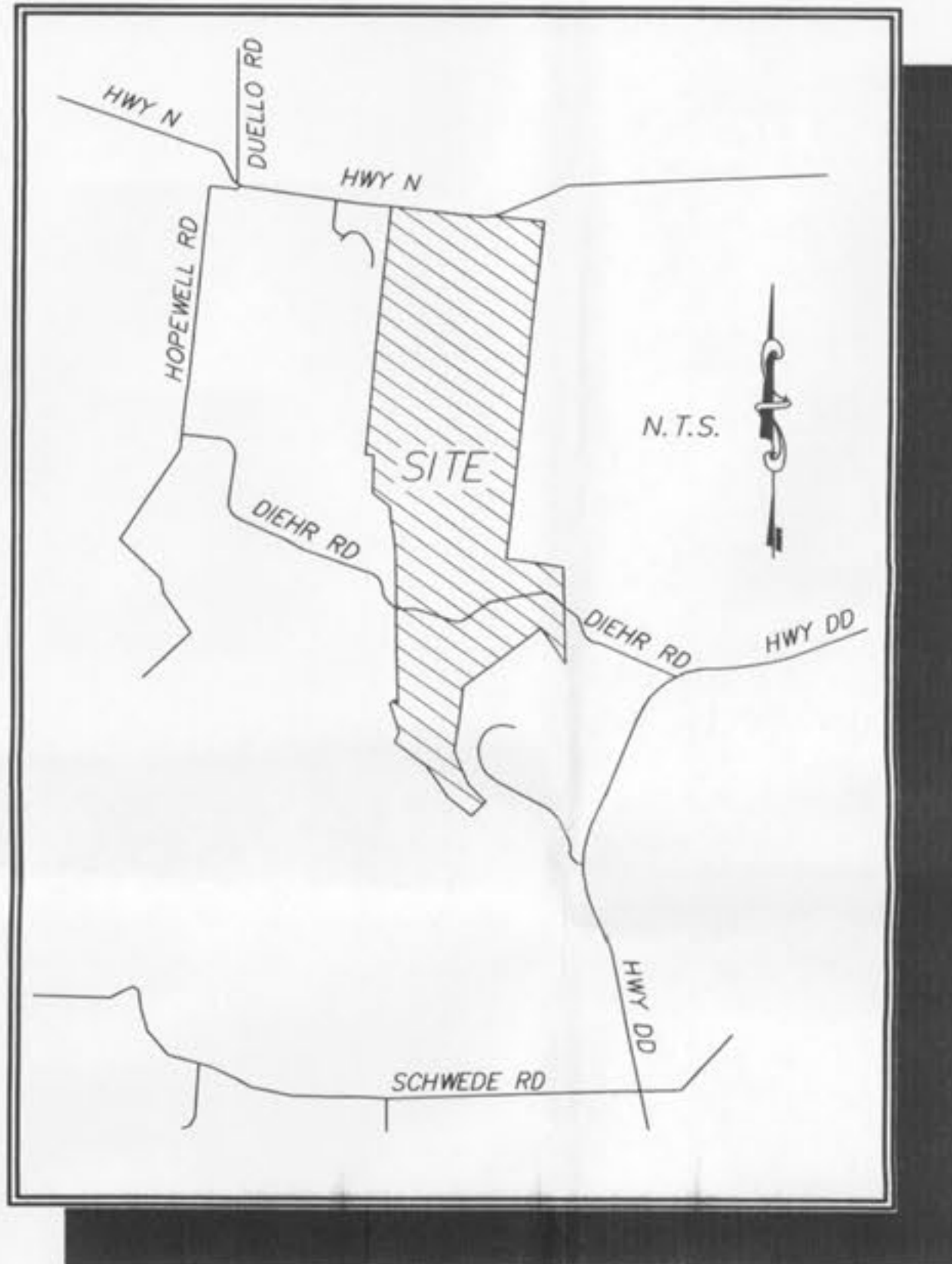
11. All dimensions shown are in inches unless otherwise noted.

12. Lap all longitudinal bars a minimum of 23" at splices.

13. Preformed fiber expansion joint material shall be securely stitched to one face of the concrete with No. 10 gage copper wire or No. 12 gage soft drawn galvanized steel wire.

14. A filter cloth 2 feet in width and double thickness shall be applied to all expansion joints. The filter cloth shall be geotextile meeting the approval of the engineer and having a grab tensile strength of 180 lbs (ASTM D-4632) and an apparent opening size of 50 to 100 (ASTM-D4751).

## TRACTS OF LAND BEING PART OF FRACTIONAL SECTIONS 16 & 17, AND U.S. SURVEYS 61 & 417, TOWNSHIP 46 NORTH, RANGE 2 EAST, ST. CHARLES COUNTY, MISSOURI LOCATION MAP



## DRAWING INDEX

Sheet	Description
1	COVER SHEET
2-3	HEADWALL DETAILS

## PROJECT BENCH MARK

U.S.G.S BENCH MARK

At Dardenne T.46N., R.2E. Near Approx. Corner  
Sections 1, 2, 11 & 12. 31' north & 20' west  
of crossroads, 49' south of S.E. corner of Catholic Church,  
2.0' north of sidewalk & in a concrete post standard  
tablet stamped "IT" 60C 1936 616".

Elev. 616.50

## LEGEND

Sanitary Sewer (Proposed)	Sanitary Structure	R.C.P. Reinforced Concrete Pipe
Sanitary Sewer (Existing)	Storm Structure	C.M.P. Corrugated Metal Pipe
Storm Sewer (Proposed)	Test Hole	C.I.P. Cast Iron Pipe
Storm Sewer (Existing)	Power Pole	P.V.C. Polyvinyl Chloride
Water Line & Size	Light Standard	V.C.P. Vitrified Clay Pipe
Existing water line	Double Water Meter Setting	
Tee & Valve	Single Water Meter Setting	C.O. Clean Out
Hydrant	Curb Inlet	V.T. Vent Trap
Cap	S.C.I. Skewed Curb Inlet	T.B.R. To Be Removed
18 Lot or Building Number	D.C.I. Double Curb Inlet	T.B.R.&R. To Be Removed & Relocated
Existing Fence Line	G.I. Gate Inlet	T.B.P. To Be Protected
Existing Tree Line	A.I. Area Inlet	T.B.A. To Be Abandoned
Street Sign	D.A.I. Double Area Inlet	B.C. Base Of Curb
Existing Contour	C.C. Concrete Collar	T.C. Top Of Wall
Proposed Contour	F.E.S. Flared End Section	T.W. Top Of Wall
Rip-Rap	E.P. End Pipe	B.W. Base Of Wall
End of Lateral	E.D. Energy Dissipater	(TYP) Typical
Asphalt Pavement	M.H. Manhole	U.N.O. Unless Noted Otherwise
Concrete Pavement	C.P. Concrete Pipe	U.I.P. Use in Place
Proposed Swale	S.A.S. Sinkhole Access Structure	Yield Sign



MoDOT LOCATOR: 314-340-4100

PICKETT RAY & SILVER



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CIVIL ENGINEERS  
PLANNERS  
LAND SURVEYORS

WYNDGATE  
HEADWALLS  
COVER SHEET

239 FOX HILL ROAD  
ST. CHARLES, MO. 63301  
(636) 940-9300

Prepared For:  
SUMMIT POINTE, L.C.

REVISIONS	
NO.	DATE
1	02/28/05

ENGINEERS AUTHENTICATION  
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.

PICKETT, RAY & SILVER, INC.



DRAWN	MAK	DATE	02/01/05
CHECKED	EAK	DATE	02/01/05
PROJECT #	01267 SUPD.02R	TASK #	3
FIELD BOOK			

WYNDGATE - PHASE 1  
COVER SHEET

SHEET 1 OF 3

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