PLAN APPROVALS

APPROVED BY THE CITY OF MASSILLON ENGINEER THIS 4/6 DAY OF Novembe-	, 20 <u>05</u> .
50 de 1/2	
CITY OF MASSILLON ENGINEER	
WATERLINE IS APPROVED BY AQUA OHIO THIS 17 DAY OF NOVEMBER 2005	
SUBJECT TO AGREEMENT WITH AQUA OHIO	
Donald Long ter	
AQUA OHIO INC.	
SANITARY SEWER PERMIT-TO-INSTALL HAS BEEN RECEIVED FROM THE OhioEPA	
THISDAY OF, 20	
WATERLINE PERMIT-TO-INSTALL HAS BEEN RECEIVED FROM THE OhioEPA	
THISDAY OF, 20	

INDEX OF SHEETS

- 1. TITLE SHEET & QUANTITIES
- 2. TYPICAL SECTIONS AND NOTES
- 3. WEST POINTE CIR. PLAN AND PROFILE & INTERSECTION DETAIL SHEET
- 4. GRADING PLAN
- 5. MISCELLANEOUS DETAILS

"AS-BUILT" DIMENSION OR ELEVATION

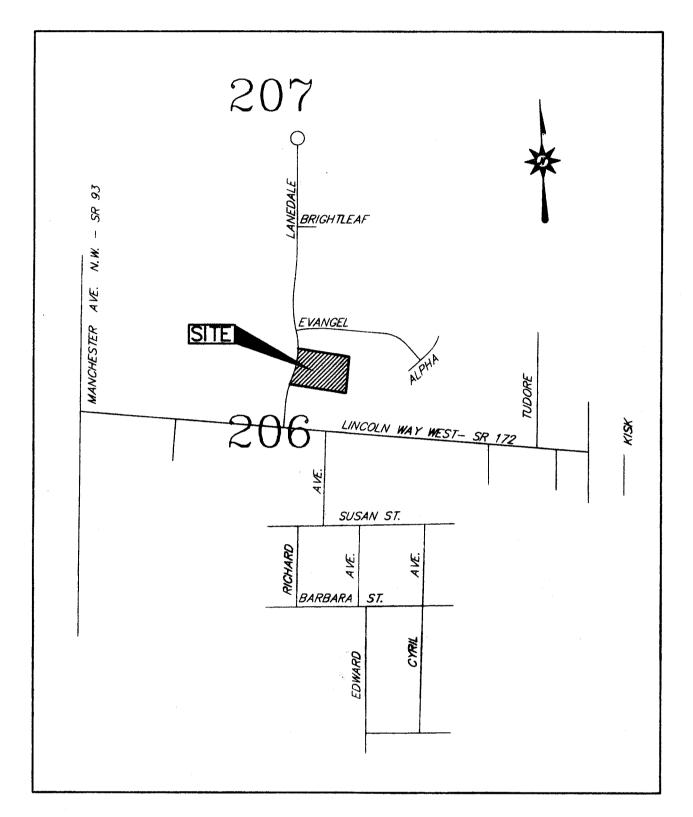
ONVENTIONAL SYMBOLS	
6" STORM LATERAL, COMPLETE	D
6" SANITARY LATERAL, COMPLETE	S
PROPOSED WATERLINE	-8" W
1" WATER SERVICE AND CURB BOX COMPLETE	-o- W
EXISTING WATERLINE	EX8"₩
EXISTING STORM SEWER	- EX15" STM-
EXISTING SANITARY SEWER	– EX8"-SAN –
EXISTING GAS LINE	- EX. GAS -

WEST POINTE **CONDOMINIUMS**

LOCATED IN THE CITY OF MASSILLON STARK COUNTY, OHIO

FOR: BRENDL & CROSS

8215 ARLINGTON AVE, NORTH NORTH CANTON OHIO 44720



LOCATION MAP

2 WORKING DAYS BEFORE YOU DIG CALL TOLL FREE 800-362-2764 OHIO UTILITIES PROTECTION SERVICE

ESTIMATED QUANTITIES NOTE

ITEM NUMBERS SHOWN IN THE QUANTITY TABLE REFER TO SPECIFICATION ITEMS IN THE 1997 EDITION OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS". THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THE PROPOSED WORK IN ACCORDANCE WITH THESE REFERENCED SPECIFICATIONS.

	SUPPLEMENTAL SPECIFICATIONS
WEDERY CERTIES THAT THESE IMPROVEMENTS HAVE SEEN	
HEREBY CERTIFY THAT THESE IMPROVEMENTS HAVE BEEN COMPLETED, AS INDICATED BY THE "AS-BUILT" DIMENSIONS SHOWN ON THESE PLANS.	
THIS DAY OF, 20	
BRYAN J. ASHMAN	
REGISTERED ENGINEER No. E-043804	

	SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION D	RAWINGS
CITY OF MASSILLON	O.D.O.T.	CONSUMERS OHIO WATER COMPANY
TRENCH DETAIL	M.H. No. 3	TYPICAL BLOWOFF DETAIL
	CATCH BASIN 2-2B	LONG SERVICE LINE TAP
		SHORT SERVICE LINE TAP
		CONCRETE THRUST BLOCK DETAIL
		TYP. FIRE HYDRANT ASSY. TYPE I
		,

EM	QTY.	UNIT	DESCRIPTION
201	T .	T.,	ROADWAY
201	1878	CU. YD.	CLEARING AND GRUBBING SITE AND ROADWAY EXCAVATION NOT INCLUDING EMBANKMENT
203	1878	CU. YD.	District Modern Line Market
203	1260	SQ. YD.	
202	63	LIN. FT.	
659	1	LUMP	SEEDING AND MULCHING (ALL DISTURBED AREAS)
			EROSION CONTROL
207	1	LUMP	EROSION CONTROL
			PAVEMENT
301	121	CU. YD.	
304	210	CU. YD.	
404	45	CU. YD.	
408	434	GAL.	BITUMINOUS PRIME COAT @ 0.40 GAL. PER SQ. YD.
			
608	871	SQ. FT.	CONCRETE WALK
608	2	EACH	CURB RAMP
609	629	LIN. FT.	MASSILLON STANDARD CURB AND GUTTER(ODOT TYPE 2)
			DRAINAGE
603	130	LIN. FT.	6" DOWNSPOUT HEADER
603	186	LIN. FT.	12" CONDUIT; TYPE B
603	213	LIN. FT.	12" CONDUIT; TYPE C
603	185	LIN. FT.	15" CONDUIT; TYPE B
604	2	EACH	CATCH BASIN; ODOT 2-2B
604	2	EACH	CATCH BASIN; TYPE A
604	1	EACH	CONNECTION TO EX. STORM C.B.
604	Signal 1	EACH	STORM M.H., ODOT MH-3, 48" DIA.
	****	AN .	
			Part Course
			WATED WORKS
		s	WATER WORKS
638	260	LIN. FT.	8" WATER MAIN; DUCTILE CAST IRON (PC 350 W/POLYWRAP)
638	12	EACH	1" COPPER TYPE K SERVICE W/CURB BOX COMPLETE
220		EACH	HVDDANT ACCENDING COMPLETE TO THE
638	1	EACH	HYDRANT ASSEMBLY COMPLETE; TYPE B
638 638	1	EACH EACH	8" 45° BEND 8" 22-1/2° BEND
638	1	EACH	8" 22-1/2" BEND 12"x8" TAPPING SLEEVE & VALVE
638	120	LF	2" HDPE TUBING W/TRACKING WIRE & MARKING TAPE
638	1	EACH	BLOW OFF ASSEMBLY COMPLETE
538	1	EACH	2" CURB STOP
			SANITARY SEWER
303	240		
603 603	240 6	LIN. FT. EACH	8" SANITARY SEWER (INCL. LANDALE PAV'T REPLACEMENT) 6" SERVICE BUILDING CONNECTIONS COMPLETE
303 303	4	EACH	6" SERVICE BUILDING CONNECTIONS COMPLETE 8"x6" WYE
504	1	EACH	CONNECT TO EXISTING SAN. M.H.
	•	(OII'	
304	1	EACH	SAN. M.H.; STD. TYPE A; COMPLETE
			TRAFFIC CONTROL
330	1	EACH	STOP SIGN
630	1	EACH	STREET SIGN
,00	I	LAUT.	OTIVE TOTAL
			MICCELLANEOUC
			MISCELLANEOUS TRENCHING FOR PRIVATE UTILITIES **XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3.03	629	LIN. FT.	77 E. Brief William II.
			X
			X A REPORTECTION AGENCY
			X OHIO ENVIRONMENTAL PROTECTION AGENCY X OHIO ENVIRONMENTAL PROTECTION AGENCY X AS EVIDENCED BY COPY OF X AS EVIDENCED BY COPY OF X LETTER OF APPROVAL X LETTER OF APPROVAL

02-21666

RECEIVED DEC 23 2005

DRAWN BY: M.J.S.

OHIO EPA NEDO

TITLE SHEET & QUANTITIES PROJ.#

CHECKED BY: B.J.A. FIELD BOOK No._ of 5

- 1 ITEM 404 1 1/2" ASPHALT CONCRETE SURFACE
- 2 ITEM 301 4" BITUMINOUS AGGREGATE BASE
- (3) ITEM 304 6" AGGREGATE BASE
- (4) ITEM 203 COMPACTED SUBGRADE
 (5) ITEM 408 BITUMINOUS PRIME COAT
- 6) ITEM 609 MASSILLON STANDARD CURB AND GUTTER

WEST POINTE CIRCLE TYPICAL HALF SECTION

WATERLINE NOTES

- 1.) THE WATER LINE SHALL BE INSTALLED SO THAT 4'-0" OF COVER, FROM GRADE TO THE TOP OF THE WATER LINE, IS MAINTAINED AS A MINIMUM.
- 2.) WATER LINE MATERIALS AND INSTALLATION PROCEDURES SHALL MEET OR EXCEED ALL APPLICABLE A.W.W.A. STANDARDS INCLUDING BUT NOT LIMITED TO C600 AND C651.
- 3.) THE CONTRACTOR SHALL CAREFULLY LAYOUT THE WATER LINE AND ALL RELATED FACILITIES TO INSURE THAT THEY ARE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY AND/OR DESIGNATED UTILITY EASEMENTS AS INDICATED.
- 4.) MEGALUG RETAINERS REQUIRED AT ALL FITTINGS.
- 5.) THE PROPOSED FACILITIES WILL MAINTAIN A MINIMUM PRESSURE OF 35 P.S.I. DELIVERED TO THE CURB STOP DURING NORMAL OPERATING
- 6.) BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS. C.O.W.C. MAY GRANT SPECIAL PERMISSION FOR BUILDINGS SIX STORIES AND HIGHER
- 7.) A TYPE 1 TRENCH SHALL BE USED AND BACKFILLED WITH EXCAVATED MATERIAL PROVIDED THAT SAID MATERIAL CONSISTS OF LOAM, CLAY, SAND, GRAVEL, OR OTHER SUITABLE MATERIAL. BACKFILLING FOR ROAD AND DRIVEWAY CUTS SHALL BE AS A MINIMUM PROPERLY COMPACTED O.D.O.T. 304 AGGREGATE OR AS SPECIFIED BY THE LOCAL JURISDICTION.
- 8.) WATER SERVICES SHALL EXTEND 12' INTO THE LOTS OR BEYOND FURTHEST UTILITY, WHICHEVER IS GREATER, WITH THE CURB BOX INSTALLED 0.50' WITHIN THE RIGHT-OF-WAY. THE COWC POINT OF DELIVERY IS THE OUTLET SIDE OF THE CURB STOP.
- 9.) CONTRACTOR MUST CONSTRUCT ALL WATER LINES AND WATER SERVICE LINES SUCH THAT A MINIMUM OF 10' HORIZONTAL CLEARANCE, 18"
 VERTICAL CLEARANCE ABOVE SANITARY SEWER AND A MINIMUM OF 12" VERTICAL CLEARANCE BELOW STORM SEWER IS MAINTAINED.

CITY OF MASSILLON GENERAL NOTES

- 1.) CONTRACTOR SHALL CHECK DETAIL DRAWINGS FOR MINIMUM GRADE AND BACKFILL REQUIREMENTS.
- 2.) ALL COMBINATION CONCRETE CURB AND GUTTER TO BE MASSILLON STANDARD EXCEPT WHERE VARIATIONS ARE TO BE EXTENDED OR MET SEE SPECIFICATION BOOK AND PLANS.
- 3.) EXCAVATION FOR CONCRETE CURB AND GUTTER SHALL BE INCLUDED IN THE COST PER LINEAL FOOT OF SAID CURB AND GUTTER.
- 4.) ALL CATCH BASINS AND MANHOLES TO BE ADJUSTED TO GRADE WHERE NECESSARY.
- 5.) ALL CONCRETE TO BE 1:2: 4-6 BAG MIX. 28 DAY 3000 PSI COMPRESSIVE STRENGTH: MAX. SLUMP TO BE 4".
- 6.) CONTRACTOR SHALL PAY CITY OF MASSILLON AT THE RATE OF TIME AND ONE-HALF OF REGULAR RATE AFTER 4: 30 P.M. MONDAY THROUGH FRIDAY. SATURDAYS ALL DAY AT TIME AND ONE-HALF.
- 7.) ALL MATERIALS USED WILL BE NEW NO SALVAGED MATERIAL WILL BE ACCEPTED EXCEPT CASINGS, AS APPROVED.
- 8.) IF CONTRACTOR EXCAVATES DEEPER THAN NECESSARY FOR CURB AND GUTTER, CONTRACTOR WILL FURNISH ODOT 304 AGGREGATE AND TAMP BEFORE CURB AND GUTTER IS CONSTRUCTED.
- 9.) IF SUBGRADE IS UNSUITABLE, CONTRACTOR WILL EXCAVATE AND REPLACE SUCH MATERIAL WITH CRUSHER RUN GRAVEL, AT THE DISCRETION OF THE INSPECTOR OR CITY ENGINEER. THIS FILL TO BE PLACED IN 6" LAYERS OR LESS. SAID FILL TO BE COMPACTED TO 95% LABORATORY DRY WEIGHT BEFORE ADDITIONAL LAYERS ARE ADDED. CONTRACTOR WILL BE PAID FOR EXTRA GRAVEL AND EXCAVATION. THIS COMPACTION TO BE DONE BEFORE FORMS ARE PLACED.
- 10.) ALL EXTRA PAY ITEMS WILL HAVE THE APPROVAL OF THE BOARD OF CONTROL BEFORE EXTRA ITEMS ARE INSTALLED.
- 11.) CONTRACTOR TO BACKFILL CURB IMMEDIATELY AFTER CURB HAS BEEN IN PLACE FOR 48 HOURS.
- 12.) CONTRACTOR WILL NOTIFY ENGINEER WHEN HE IS IN NEED OF CONSTRUCTION STAKES AND THIS OFFICE WILL COMPLY WITHIN A PERIOD OF 48 HOURS.
- 13.) ALL STORM SEWER PIPES WITHIN PAVEMENT LIMITS SHALL BE REINFORCED CONCRETE PIPE (ODOT 706.02) AND SHALL BE TYPE 'B' CONDUIT IN ACCORDANCE WITH ODOT 603 CLASS 'B' BEDDING AND GRANULAR BACKFILL. ALL STORM SEWER OUTSIDE PAVEMENT LIMITS SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE (ODOT 944) OR REINFORCED CONCRETE PIPE (ODOT 706.02) AND SHALL BE TYPE 'C' CONDUIT IN ACCORDANCE WITH ODOT 603 WITH CLASS 'C' BEDDING AND SUITABLE SOIL BACKFILL.
- 14.) DOWNSPOUT HEADERS SHALL BE 6" PVC (SDR 21) PIPE (UNLESS OTHERWISE NOTED ON THE PLANS) AND SHALL BE DIRECTLY CONNECTED TO THE STORM SEWER WITH APPROVED TEE OR SADDLE CONNECTIONS. HEADERS SHALL EXTEND 12' INTO THE LOTS OR BEYOND FURTHEST UTILITY, WHICHEVER IS GREATER.
- 15.) CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES BEFORE ANY WORK IS BEGUN. THE CITY OF MASSILLON IS NOT RESPONSIBLE FOR ANY LOST TIME DUE TO UTILITY RELOCATION.
- 16.) MANHOLES AND CATCH BASINS SHALL BE CONSTRUCTED IN CONFORMANCE WITH MASSILLON CITY STANDARDS.
- 17.) CONTRACTOR SHALL CONTACT THE CITY OF MASSILLON ENGINEERING DEPARTMENT

 (GREG McCUE) AT (330)830-1722 AT LEAST 2 DAYS PRIOR TO THE INITIATION OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING.
- 18.) STREET LIGHTING IS REQUIRED. DEVELOPER SHALL COORDINATE WITH ELECTRIC UTILITY COMPANY FOR POLE LOCATION AND TYPE. THE DEVELOPER SHALL INSTALL, AT HIS COST, STREET SIGNS REPRESENTING THE NAMES OF ALL STREETS AT ALL INTERSECTIONS. DEVELOPER ALSO RESPONSIBLE FOR STOP SIGNS AND DIRECTIONAL SIGNS AS NECESSARY. ALL SIGNS SHALL CONFORM WITH CITY OF MASSILLON REGULATIONS.
- 19.) WHEN SPECIFIED ON PLANS OR SPECIFICATIONS, CONTINGENCY ITEMS ARE TO BE PERFORMED ONLY UNDER THE DIRECTION OF THE CITY ENGINEER. THE CONTRACTOR SHALL NOT ORDER ANY CONTINGENCY MATERIAL OR PERFORM ANY WORK UNTIL DIRECTED BY THE ENGINEER. THE ACTUAL WORK LOCATION AND QUANTITIES FOR SUCH ITEMS SHALL BE DOCUMENTED BY THE CONTRACTOR AND THE ENGINEER. THE DEVELOPER IS RESPONSIBLE FOR THE COST OF SUCH ITEMS AND SHALL NOT BE PART OF THE BID DOCUMENT.
- 20a.) BEFORE ACCEPTANCE OF THE ROAD PAVEMENT SUBGRADES BY THE CITY OF MASSILLON ENGINEER, SUBGRADES SHALL BE TESTED IN ACCORDANCE WITH ODOT ITEM 203.13. IN LIEU OF SUBGRADE TESTING PER ITEM 203.13, PROOF ROLLING IN ACCORDANCE WITH ODOT ITEM 203.14 MAY BE SUBSTITUTED.
- 20b.) WHEREVER UNSTABLE SOIL SUBGRADE CONDITIONS ARE ENCOUNTERED THAT ARE UNSUITABLE PER ODOT 203 SPECIFICATIONS AND/OR DETERMINED BY THE CITY OF MASSILLON ENGINEERING DEPARTMENT, ADDITIONAL EXCAVATION AND SUBSEQUENT BACKFILLING SHALL BE DONE BY THE DEVELOPER'S CONTRACTOR AND PAID FOR BY THE DEVELOPER UNTIL SUCH CONDITIONS ARE CORRECTED AND APPROVED BY THE CITY OF MASSILLON ENGINEER.
- 20c.) SUBGRADE TESTING OR PROOF ROLLING MUST BE WITNESSED AND APPROVED BY THE CITY OF MASSILLON ENGINEERING DEPARTMENT PRIOR TO THE PLACEMENT OF THE PAVEMENT SUBBASE MATERIAL. CONTRACTOR SHALL CONTACT THE CITY ENGINEERING DEPARTMENT AT (330) 830-1722 TO SCHEDULE.
- 21.) AS BUILT DRAWINGS ARE REQUIRED AND SHALL BE SUBMITTED TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT UPON COMPLETION OF THE PROJECT.
- 22.) CURBS SHALL BE DROPED FOR HANDICAP RAMPS AT ALL INTERSECTIONS. SEE THE INTERSECTION DETAILS FOR THE GENERAL LOCATION OF THE RAMPS AND SHEET 3 FOR A HANDICAP RAMP DETAIL.
- 23.) DRIVE AND SIDEWALK PERMITS ARE REQUIRED FOR WORK IN THE RIGHT-OF-WAY OF LANEDALE ST., CONTACT MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.

SANITARY SEWER NOTES

- 1.) SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS AND DETAILS IN EFFECT AT TIME OF CONSTRUCTION.
- 2.) ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
- 3.) THE CONTRACTOR SHALL NOTIFY ALL PROPERTY OWNERS ALONG THE ROUTE OF THE SANITARY SEWER AT LEAST THREE (3) DAYS PRIOR TO START OF CONSTRUCTION.
- 4.) THE CONTRACTOR SHALL ALERT THE UTILITIES PROTECTION SERVICE AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
- 5.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY MAINTAINING EXISTING SANITARY FLOW DURING THE CONSTRUCTION AND TESTING OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR'S METHODS FOR MAINTAINING FLOW MUST BE APPROVED BY THE CITY OF MASSILLON ENGINEERING DEPARTMENT AT THE PRE-CONSTRUCTION MEETING.
- 6.) ALL ROUGH GRADING TO WITHIN SIX (6) INCHES OF FINISHED GRADE SHALL BE COMPLETED WITHIN THE RIGHT-OF-WAY AND EASEMENTS PRIOR TO SANITARY SEWER CONSTRUCTION.
- 7.) BULKHEADS SHALL BE ERECTED IN EXISTING MANHOLES WHERE TAPS FOR NEW MAINLINE SEWERS ARE MADE AND SHALL REMAIN IN PLACE UNTIL THE NEW SEWERS ARE COMPLETE, TESTED AND APPROVED. IN CASES WHERE A BULKHEAD WOULD INTERRUPT THE FLOW FROM EXISTING SERVICE CONNECTIONS, THE BULKHEAD SHALL BE PLACED IN THE FIRST NEW MANHOLE UPSTREAM OF THE EXISTING MANHOLE.
- 8.) MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATERLINE SHALL BE 18 INCHES. MINIMUM HORIZONTAL SEPARATION SHALL BE 10 FT.
- 9.) SANITARY SEWER SERVICE LATERALS SHALL BE 6-INCH DIAMETER AND BE LAID AT NO LESS THAN 1.0% GRADE.
- 10.) FOR NEW SUBDIVISION CONSTRUCTION, SEWER SERVICE LATERALS SHALL EXTEND 12 FT. INTO EACH LOT WHEN THE MAIN SEWER IS IN A STREET RIGHT-OF-WAY, AND SHALL TERMINATE AT THE EASEMENT LINE WHEN THE MAIN SEWER IS IN AN EASEMENT. FOR OTHER SEWER EXTENSIONS, SEWER SERVICE LATERALS SHALL TERMINATE AT THE RIGHT-OF -WAY LINE OR THE EASEMENT LINE, WHICHEVER IS APPLICABLE.
- 11.) SERVICE STACKS SHALL BE DUCTILE IRON PIPE REGARDLESS OF MAIN SEWER MATERIAL. A CAST IRON TEE SHALL BE INSTALLED IN THE MAIN SEWER. CONCRETE ENCASEMENT WILL NOT BE REQUIRED.
- 12.) MINIMUM COVER OVER SANITARY SEWER SHALL BE 4 FT.
- 13.) ACCEPTABLE SANITARY SEWER PIPE MATERIALS ARE AS FOLLOWS:

	SPECIFICATIONS		
MATERIAL BESCRIPTION	PIPE	JOINT	INSTALLATION
PVC SMOOTH EXTENSE:	ASTM D-3034	ASTM D-3212	ASTM D-2321
VCP EXTRA STRENGTH	ASTM C-700	ASTM C-425	ASTM C-12
DCIP (CLASS 52)	AMMA C-151	AWWA C-110/C-111	AWWA C-151

- 14.) ALL SANITARY SEWERS, 8-INCH DIAMETER AND LARGER, MUST PASS AN INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE INTERNAL INSPECTION VIDEOTAPE TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT. THE VIDEOTAPING PROCEDURE SHALL BE IN ACCORDANCE WITH CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS.
- 15.) A DEFLECTION TEST SHALL BE REQUIRED FOR ALL FLEXIBLE PIPE OF 8-INCH DIAMETER AND LARGER. THE TEST SHALL BE CONDUCTED AT LEAST 30 DAYS AFTER COMPLETION OF BACKFILL AND SHALL BE IN ACCORDANCE WITH CITY OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED FIVE (5%) PERCENT. TESTING SHALL BE IN ACCORDANCE WITH ASTM D-3034.
- 16.) ALL SANITARY SEWERS MUST PASS A LOW PRESSURE AIR TEST, WHICH SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM F-1417 (PLASTIC PIPE) OR ASTM C-828 (CLAY PIPE). THE MAXIMUM ALLOWABLE TEST LEAKAGE SHALL BE 100 GAL/INCH OF DIAMETER/MILE/DAY.
- 17.) MANHOLE CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ASTM C-478 AND C-443. ALL MANHOLES SHALL BE AIR/VACUUM TESTED IN ACCORDANCE WITH AND MEET ALL THE REQUIREMENTS OF ASTM C-1244.
- 18.) CONNECTIONS TO EXISTING MANHOLES SHALL BE CORE DRILLED, WITH BENCHES AND CHANNELS FORMED AND REPAIRED AS NECESSARY.
- 19.) ANY MANHOLE DROP ATTACHMENTS SHALL BE "OUTSIDE" TYPE.
- 20.) MANHOLE TOP OF CASTING ELEVATIONS MAY REQUIRE ADJUSTMENT DURING SITE GRADING.
 MANHOLE COVERS MAY NOT BE BURIED. UPON COMPLETION OF CONSTRUCTION AND RESTORATION,
 ALL MANHOLES, PROPOSED AND EXISTING, SHALL BE IN CONFORMANCE IN ALL RESPECTS WITH CITY
 OF MASSILLON ENGINEERING DEPARTMENT SPECIFICATIONS AND DETAILS.
- 21.) ALL SANITARY SEWER TRENCHES BENEATH PROPOSED OR EXISTING PAVEMENT SHALL BE COMPACTED IN LIFTS, IN A MANNER, AND WITH MATERIAL AS SPECIFIED BY THE CITY OF MASSILLON ENGINEERING DEPARTMENT AND ALL APPLICABLE O.D.O.T. SPECIFICATIONS.
- 22.) SANITARY TAP PERMITS ARE REQUIRED FOR EACH UNIT, CONTACT MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIRMENTS.

REVISIONS

A AQUA OHIO INC. COMMENTS M.J.S. 5/10/2004

A WASSILLON ENGINEER COMMENTS M.J.S. 5/10/2004

A WASSILLON ENGINEER COMMENTS M.J.S. 5/10/2004

CALE: NONE

DRAWN BY: M.J.S.

CHECKED BY: B.J.A.

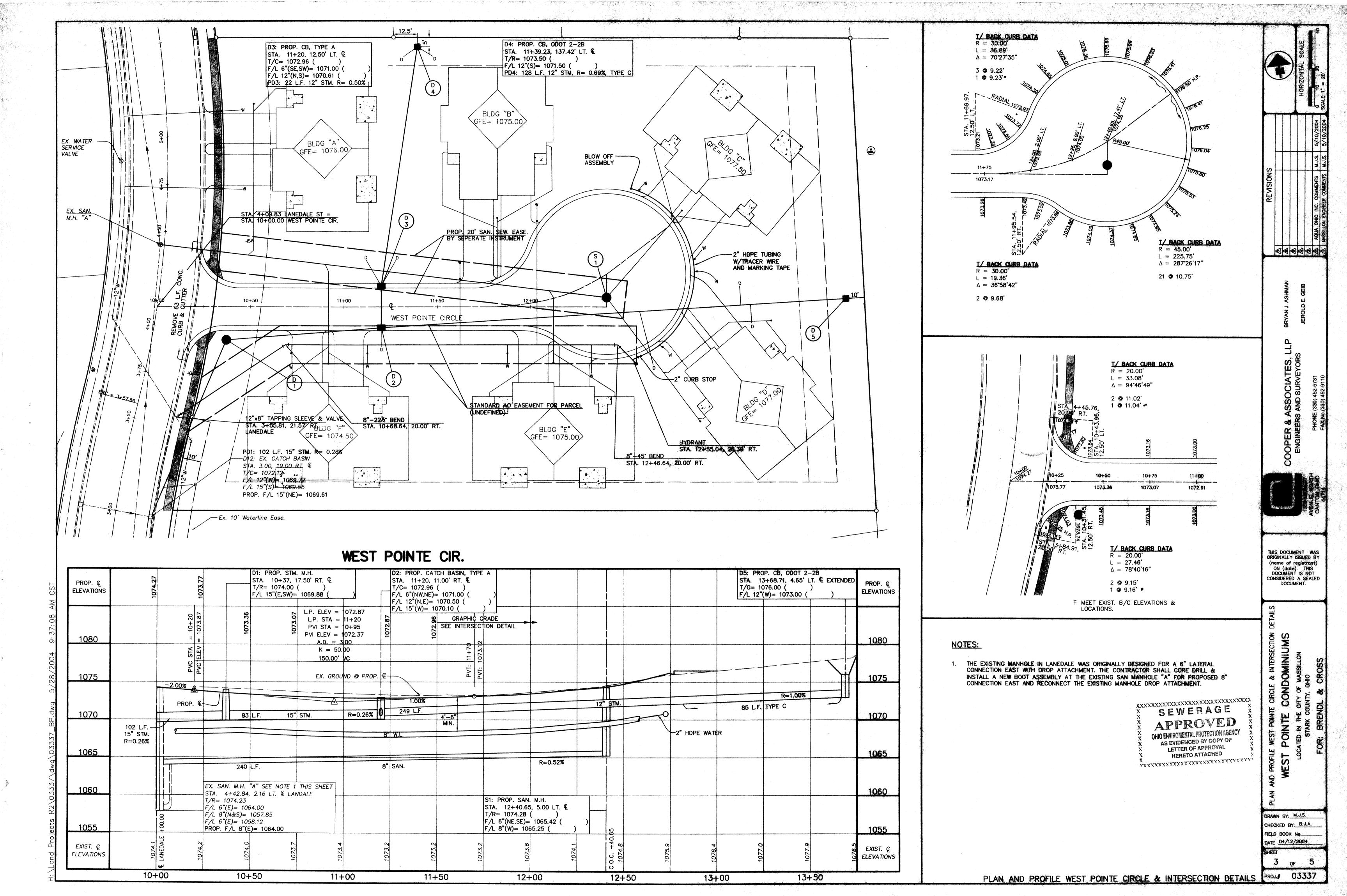
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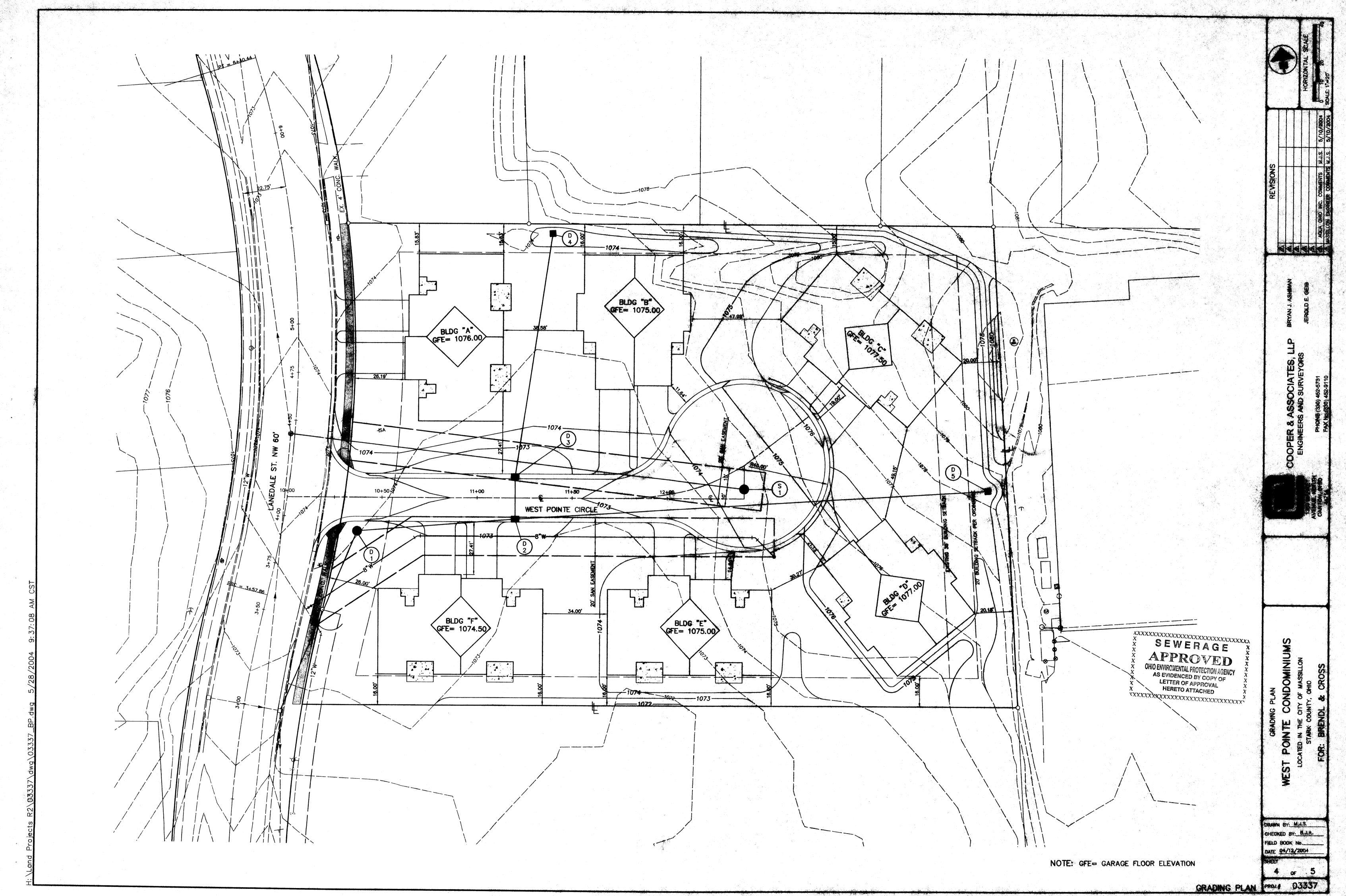
DATE 04/12/2004

SHEET

2 of 5

03337





MASSILLON STANDARD CURB AND GUTTER DETAIL

NOTES

FOR A "SINGLE" STRUCTURE, GRATE, FRAME AND BACK SHALL BE EAST JORDAN IRON WORKS CATALOG No. 7030 CURB INLET FRAME, GRATE AND BACK (OR EQUIVALENT) WITH "DUMP NO WASTE" LETTERING. GRATE SHALL BE TYPE M2 AND BACK SHALL

FOR A "DOUBLE" STRUCTURE, GRATE, FRAME AND BACK SHALL BE EAST JORDAN IRON WORKS CATALOG No. 7031 DOUBLE INLET FRAME, GRATE AND CURB BOX (OR EQUIVALENT) WITH "DUMP NO WASTE" LETTERING. GRATE SHALL BE TYPE M2 AND BACK SHALL

APPROVED EQUIVALENT

TYPE "A": NEENAH FOUNDRY CATALOG No. R-3246 CURB INLET FRAME, GRATE, CURB BOX. GRATE SHALL BE TYPE "C" AND CURB BOX SHALL HAVE A 2" RADIUS CURB FACE. TYPE "A" DOUBLE: NEENAH FOUNDRY CATALOG No. R-3295-A DOUBLE UNIT INLET FRAME, GRATE AND CURB BOX. GRATE SHALL BE TYPE "C" AND CURB BOX SHALL HAVE A 2" RADIUS CURB

GRATES SHALL BE BICYCLE SAFE.

CASTINGS THE DESIGN SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THE SPECIFIED CASTINGS. THE MINIMUM COMBINED WEIGHT OF THE FRAME, GRATE AND BACK SHALL BE 400 LBS.

THE FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT. NO PROJECTIONS SHALL EXIST ON BEARING AREAS OF EITHER CASTING AND THE GRATE SHALL SEAT WITHOUT ROCKING.

WHEN USED IN PLACE OF CONCRETE, BRICK SIDE WALLS SHALL BE 8" NOMINAL THICKNESS WITH 1/2 INCH CEMENT MORTAR PLASTERED INSIDE AND OUT.

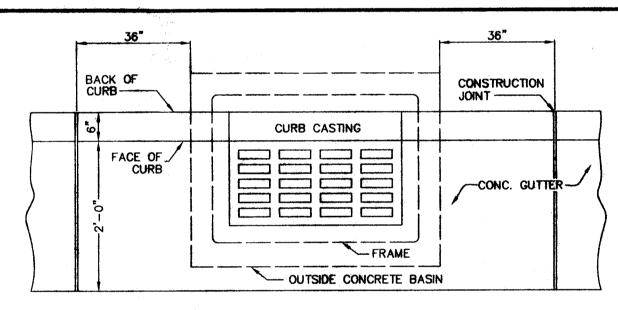
PRECAST CONSTRUCTION

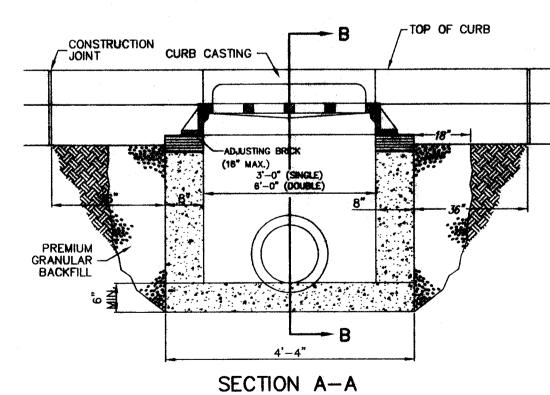
CONCRETE SHALL MEET THE REQUIREMENTS OF CMS 706.13 WITH A MINIMUM OF 4% ENTRAINED AIR IN THE HARDENED CONCRETE. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 8" AND REINFORCING SHALL BE SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE.

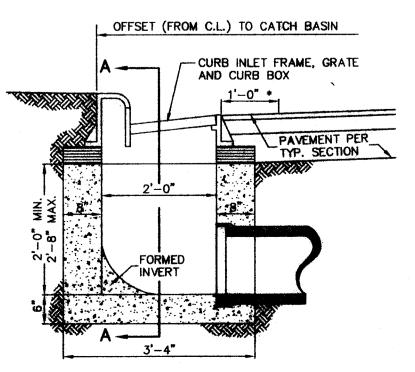
PIPE OPENINGS SHALL BE THE O.D. OF THE PIPE BEING SUPPLIED PLUS 2" WHEN FABRICATED OR FIELD CUT. THE INTERSTITIAL SPACE SHALL BE FILLED WITH GROUT PER CMS 601.

PORTION BLOCKED OUT OF THE PAVEMENT SHALL BE PLACED AFTER THE CASTING HAS BEEN SET. PAYMENT SHALL BE INCLUDED AS PART OF THE ASPHALT PRICE.

ALL MATERIALS AND LABOR, INCLUDING EXCAVATION AND BACKFILLING, SHALL BE PAID FOR UNDER ITEM 604 - CATCH BASIN, TYPE "A" OR CATCH BASIN, TYPE "A" DOUBLE.



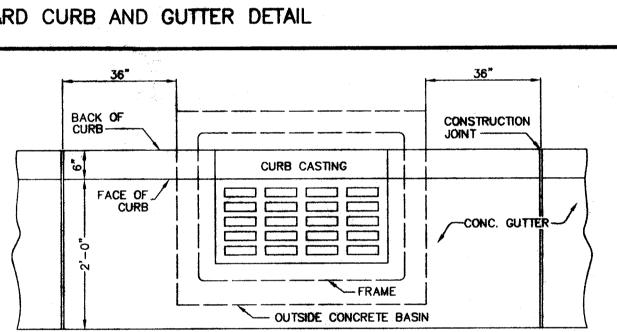


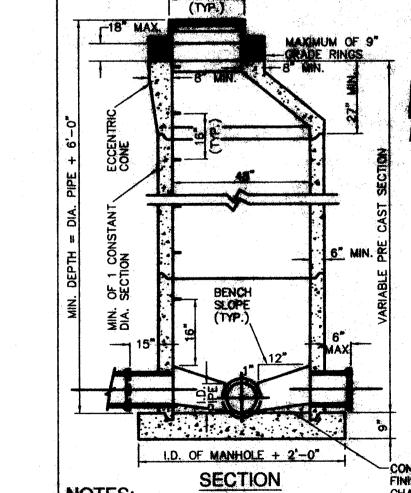


SECTION B-B

ASPHALT PAVEMENT MUST BE HAND RAKED FOR 1'-0"
TRANSITION

TYPE "A" CATCH BASIN





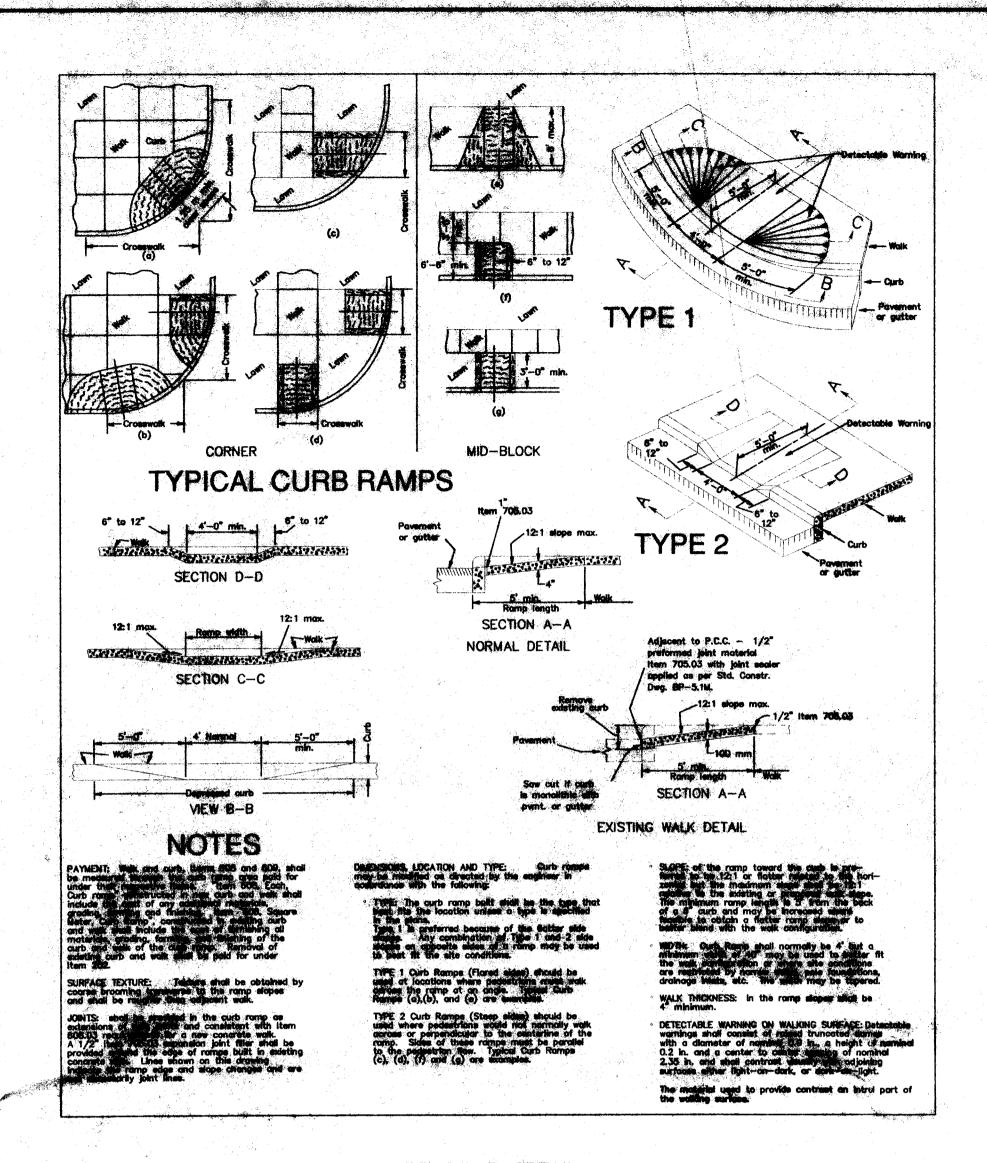
-CONGRETE WITH STEEL TROWEL FINISHED OR PRE-CAST INVERT CHANNELS AND BENCH 1. IF TOP STEP IS IN 24" DIA. OPENING IT MAY PROJECT NO MORE THAN 3 1/2". 2. M.A. IND. PS-1-PF STEPS OR APPROVED EQUAL.

3. FOR SPECIFICATIONS REGARDING CONCRETE TO BE USED IN MANHOLES SEE ITEM NO. 4&16. 4. FOR PVC & ABS PIPE CONNECTIONS USE ASTM C-923 FLEMBLE GASKET SUCH AS A-LOK, DURA SEAL III, KOR-N-SEAL OR APPROVED EQUAL. THIS METHOD ALSO ACCEPTABLE FOR VCP

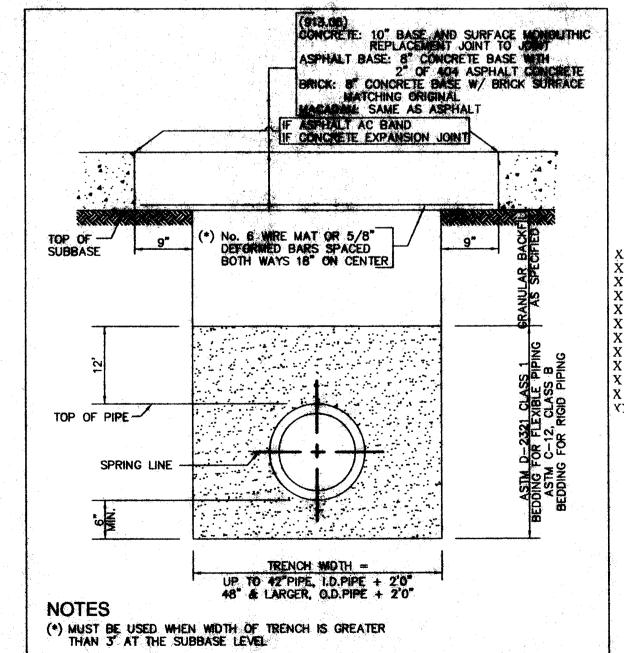
5. PRE CAST MANHOLES SECTIONS SHALL MEET ASTM C478. 6. MANHOLE JOINTS SHALL MEET ASTM C443.

7. MANHOLE ADJUSTMENTS TO GRADE WILL BE NO GREATER THAN 18", USING PRECAST COLLARS MEETING ASTM 6-32

SANITARY MANHOLE TYPE 3 (STD. MASSILLON DETAIL)



CURB RAMP DETAIL (STD. MASSILLON DETAIL)



OPEN CUT BETAIL (STD. MASSILLON DETAIL)

CONCRETE BASE SHALL BE OF 1:2:4, 6 BAG MIX, PORTLAND CEMENT COMMENTE USING HIGH EARLY STRENGTH CEMENT AND IT MUST BE CURED AT LEAST 48 MRS.

SEWERAGE APPROVED

OHIO ENVIROMENTAL PROTECTION AGENCY AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

> DRAWN BY: M.U.S. CHECKED BY: B.J.A. FIELD BOOK No.__ DATE 04/12/2004

5 or 3

MISCELLANEOUS DETAILS PROJ 03337

PROPOSED SEQUENCE OF OPERATION

THE CONTRACTOR SHALL PERFORM NO WORK ON THIS SITE UNTIL A PRE-CONSTRUCTION MEETING IS HELD ON-SITE WITH THE STARK SOIL AND WATER CONSERVATION DISTRICT, URBAN RESOURCE COORDINATOR. [Phone: (330) 830-7700 (#127)]

MARK LIMITS OF DISTURBANCE AND INSTALL PERIMETER CONTROLS. INSTALL CONSTRUCTION ENTRANCE(S) AND PREPARE THE SUPPORT AREA.

PERFORM CLEARING AND GRUBBING OPERATIONS. TOPSOIL REMOVAL AND STOCKPILING.

2. PROTECT SOIL STOCKPILES. CONSTRUCT SEDIMENT TRAPPING FACILITIES AND NECESSARY DIVERSIONS. PREPARE STREAM CROSSINGS, TEMPORARY AND PERMANENT, AS NECESSARY.

PERFORM EXCAVATION AND EMBANKMENT OPERATIONS

3. APPLY EROSION CONTROL STABILIZATION TO GRADED AREAS TO REMAIN TEMPORARILY DORMANT.

INSTALL DRAINAGE FACILITIES INSTALL APPROPRIATE INLET PROTECTION AND OUTLET PROTECTION AS REQUIRED BY THIS PLAN. STABILIZE OPEN STORMWATER CONVEYANCE CHANNELS. ENERGY DISSIPATERS, AND OTHER VELOCITY CHECKS AS REQUIRED.

INSTALL UNDERGROUND UTILITIES AND

ROADWAY PAVEMENT.

ESTABLISH PERMANENT SOIL STABILIZATION AT ALL FINISHED LOCATIONS. TEMPORARILY STABILIZE ALL LOTS TO BE TRANSFERRED BY INDIVIDUAL LOT NOIS.

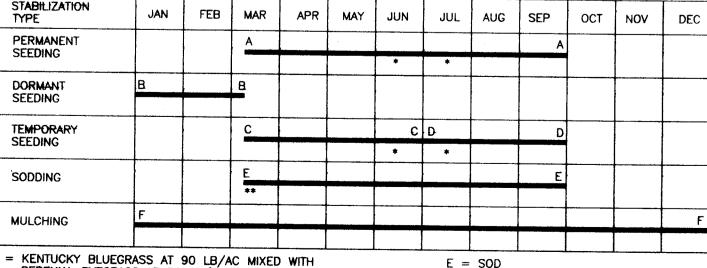
PROCEED WITH OFF-ROAD FINISHED GRADING AND CONSTRUCTION.

COMPLETE PERMANENT STABILIZATION OF ALL DISTURBED AREAS. REMOVE ACCUMULATED SEDIMENT FROM SEDIMENT BARRIERS AND TRAPPING FACILITIES. REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES. GRADE AND STABILIZE LOCATIONS.

REQUEST FINAL INSPECTION 45 DAYS AFTER FINAL SITE STABILIZATION IS COMPLETE.

(SITE STABILIZATION EXISTS WHEN NO GROUND IS LEFT EXPOSED BUT IS STABILIZED WITH PAVEMENT, ROOF AREAS AND/OR PERMANENT VEGETATIVE COVER WITH A MINIMUM OF 70% ESTABLISHED DENSITY.)

TYPICAL SOIL PROTECTION CHART



A = KENTUCKY BLUEGRASS AT 90 LB/AC MIXED WITH PERENIAL RYEGRASS AT 30 LB/AC

B = KENTUCKY BLUEGRASS AT 135 LB/AC MIXED WITH

F = STRAW MULCH AT 2 TONS/AC

PERENIAL RYEGRASS AT 45 LB/AC PLUS 2 TONS/AC STRAW MULCH C = SPRING OATS AT 100 LB/AC

D = WHEAT OR CEREAL RYE AT 150 LB/AC

* = IRRIGATION NEEDED DURING JUNE AND JULY

** = IRRIGATION NEEDED FOR 2-3 WEEKS AFTER APPLYING SOD

STORMWATER POLLUTION PREVENTION PLAN WEST POINTE CONDOMINIUMS

INTRODUCTION:

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NPDES PERMIT FOR CONSTRUCTION SITES IN OHIO AND WITH THE APPLICABLE LOCAL EROSION AND SEDIMENT CONTROL REGULATIONS.

THIS PLAN ADDRESSES THE THREE SIGNIFICANT WATER QUALITY AND QUANTITY ASPECTS OF THE LAND DEVELOPMENT CONSTRUCTION PROCESS: EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION. POST-CONSTRUCTION STORMWATER MANAGEMENT, AND NON-SEDIMENT POLLUTANT CONTROLS. OTHER CONSIDERATIONS.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE PRACTICES INDICATED IN ACCORDANCE WITH THE INCLUDED SEQUENCE OF CONSTRUCTION AND THE DETAILS AND SPECIFICATIONS CONTAINED IN RAINWATER AND LAND DEVELOPMENT ODNR. DIV. OF SOIL AND WATER CONSERVATION, AND OTHER REFERENCED MANUALS AND HANDBOOKS.

PROJECT DESCRIPTION:

WEST POINTE CONDOMINIUMSIS A PROPOSED RESIDENTIAL DEVELOPMENT WHICH INCLUDES THE CONSTRUCTION OF STREETS AND UTILITIES TYPICAL OF THIS TYPE OF DEVELOPMENT AND OF THE RESIDENTIAL CONSTRUCTION AND LANDSCAPING ACTIVITIES NECESSARY TO COMPLETE THE DEVELOPMENT.

THE SITE CONSISTS OF APPROXIMATELY 2.01 ACRES OF WHICH APPROXIMATELY 1.98 PERCENT WILL BE DISTURBED BY GRADING, THE CONSTRUCTION OF THE ROADWAYS AND UTILITIES AND FINAL BUILDING AND LANDSCAPING.

THE EXISTING AVERAGE RUNOFF COEFFICIENT IS ASSUMED TO BE 0.2. THE FULLY DEVELOPED RUNOFF COEFFICIENT IS EXPECTED TO BE 0.5. THE ANTICIPATED INCREASE IN RUNOFF IS 150 PERCENT.

DEVELOPMENT WILL RESULT IN APPROXIMATELY 1 ACRES OF IMPERIOUS COVER. OR 50 PERCENT IMPERVIOUSNESS.

THE SITE SLOPES GENTLY FROM NORTHEAST TO SOUTHWEST.

THE SOILS OF THE SITE ARE CHILL SILT LOAMS WITH A SLIGHT TO MODERATE

THERE ARE NO SURFACE WATERS OR CRITICAL AREAS WITNIN OR ADJACENT TO

THE PRIOR LAND USE IS AGRICULTURAL.

WITH APPROPRIATE PRECAUTIONS, THE QUALITY OF RUNOFF SHOULD BE UNCHANGED FROM WHAT IS PRODUCED BY THE EXISTING CONDITIONS.

THE INITIAL RECEIVING WATER FOR RUNOFF FROM THIS SITE IS THE CITY OF MASSILLON AND THE SUBSEQUENT RECEIVING WATER IS THE WEST SIPPO CREEK.

EROSION AND SEDIMENT CONTROL MEASURES: EROSION AND SEDIMENT CONTROL PRACTICES INDICATED ON THIS PLAN SHALL MEET THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE CURRENT EDITION OF RAINWATER AND LAND DEVELOPMENT, ODNR, DIV. OF SOIL AND WATER

ALEX BRENDL SHALL BE RESPONSIBLE FOR THE INSTALLATION AND FOR THE MAINTENANCE OF PERIMETER CONTROLS UNTIL FINAL STABILIZATION.

SEQUENCE OF EROSION AND SEDIMENT CONTROL PRACTICE IMPLEMENTATION:

1. PRIOR TO THE BEGINNING OF DISTURBANCE, THE CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE STARK SOIL AND WATER CONSERVATION DISTRICT, URBAN RESOURCE COORDINATOR. [PHONE: 330-830-7700 (#127)]

2. INSTALL CONSTRUCTION ENTRANCES AT EVERY POINT OF ACCESS FOR CONSTRUCTION VEHICLES ONTO PAVED PUBLIC ROADWAYS.

3. PRIOR TO ANY GRADING ACTIVITIES TAKING PLACE. SILT FENCING AND OTHER SEDIMENT BARRIERS INDICATED ON THE PLAN, OR AS SHALL BE DEEMED NECESSARY UPON INSPECTION, SHALL BE INSTALLED AND FUNCTIONAL

4. PRIOR TO ANY MAJOR GRADING ACTIVITY TAKING PLACE. THE APPROPRIATE SEDIMENT TRAPPING FACILITIES INDICATED ON THIS PLAN SHALL BE IMPLEMENTED.

5. ALL TOPSOIL STOCKPILES SHALL: BE STABILIZED AS SOON AS THE STOCKPILING ACTIVITY IS COMPLETE. (SEE SOIL STOCKPILE PROTECTION NOTE ON SHEET 2E.)

6. ALL DISTURBED AREAS SHALL BE TEMPORARILY OR PERMANENTLY SEEDED, AS INDICATED ON THE PLAN, IN ACCORDANCE WITH THE SPECIFICATIONS UNDER NON-STRUCTURAL PRACTICES, BELOW.

SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, MATTING, AND RIPRAP ARE CONTAINED ON SHEET No. 3 OF THIS PLAN.

7. UPON COMPLETION OF THE PROPOSED STORM SEWER SYSTEM, DROP INLET AND CURB INLET PROTECTION SHALL BE INSTALLED IN ALL LOCATIONS WHERE SEDIMENT IS BEING CARRIED TO THE INLET AND INTO THE STORM SEWER.

8. DITCHES OR SWALES SHALL BE STABILIZED AS INDICATED ON THE PLAN BEFORE THE CHANNEL BEGINS TO RECEIVE ITS DESIGN FLOW.

9. TEMPORARY CONTROL MEASURES MAY BE REMOVED AND DISPOSED OF AT THE TIME THAT THE ENTIRE CONTRIBUTING AREA HAS BEEN STABILIZED. TRAPPED SEDIMENTS SHALL BE REMOVED AND DISPOSED OF AT A LOCATION AND IN A MANNER WHICH WILL PREVENT THEIR FURTHER EROSION.

10. FINAL SITE STABILIZATION IS ACHIEVED WHEN NO EXPOSED GROUND REMAINS ON THE SITE, ALL SURFACES ARE PROTECTED BY EITHER PAVEMENT, ROOF AREA. OR PERMANENT VEGETATIVE COVER WITH A DENSITY OF AT LEAST 70%, AND ALL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED AND DISPOSED OF AND ALL TRAPPED SEDIMENT HAS BEEN PERMANENTLY STABILIZED.

NON-STRUCTURAL PRACTICES:

WHEREVER FEASIBLE, THE NATURAL CONDITION SHOULD BE PRESERVED. THIS IS ACCOMPLISHED BY PRESERVING RIPARIAN AREAS ADJACENT TO SURFACE WATERS OF THE STATE, PRESERVING EXISTING VEGETATION AND VEGETATED BUFFER STRIPS, PHASING CONSTRUCTION TO MINIMIZE DISTURBANCE. AND DESIGNATION OF TREE PRESERVATION AREAS.

NOTE: UNDISTURBED RIPARIAN AREAS AND BUFFERS SHOULD BE A MINIMUM OF 25 FEET WIDE AS MEASURED FROM THE ORDINARY HIGH WATER MARK OF THE SURFACE WATER. DESIGNATED AND/OR JURISDICTIONAL WETLANDS ARE CONSIDERED TO BE SURFACE WATERS.

PROJECT SITE DESCRIPTION EROSION AND SEDIMENT CONTROL POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION, AND NON-SEDIMENT POLLUTION CONTROL PRACTICES AND PROCEDURES OWNER CERTIFICATION

EROSION CONTROL PRACTICES: THE CONTRACTOR SHALL INITIATE TEMPORARY SEEDING OR PERMANENT SEEDING ON ALL DISTURBED AREAS IN ACCORDANCE WITH THE TIMING REQUIREMENTS

SHOWN ELSEWHERE IN THIS PLAN. WHEN SEASONAL CONDITIONS PROHIBIT THE APPLICATION OF TEMPORARY OR

PERMANENT SEEDING, NON-VEGETATIVE SOIL STABILIZATION PRACTICES SUCH AS

STRUCTURAL PRACTICES:

MATTING AND MULCHING SHALL BE USED.

TIMING SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT EARTH DISTURBING ACTIVITY. SEDIMENT PONDS AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS OF THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RESTABILIZED.

SETTLING PONDS NO SETTLING PONDS HAVE BEEN PROVIDED FOR ON THE SITE IMPROVEMENT ENGINEERING PLANS.

SEDIMENT BARRIERS SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SEDIMENT BARRIERS, SEDIMENT BARRIERS, SUCH AS SILT FENCES OR DIVERSIONS DIRECTING RUNOFF TO SETTLING FACILITIES, SHALL PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED BY SHEET FLOW.

OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL PREVENT SEDIMENT LADEN WATER FROM ENTERING STORM DRAIN SYSTEMS, UNLESS THE STORM DRAIN SYSTEM DRAINS INTO A SETTLING POND. THESE PRACTICES SHALL DIVERT RUNOFF FROM DISTURBED AREAS AND STEEP SLOPES WHERE PRACTICABLE AND STABILIZE CHANNELS AND OUT FALLS FROM PROSIVE FLOWS.

2. POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION: STRUCTURAL AND NON-STRUCTURAL POST-CONSTRUCTION POLLUTION PREVENTION PRACTICES ARE REQUIRED BY FEDERAL, STATE, (AND LOCAL) GUIDELINES AND REGULATIONS FOR ALL PROJECTS WHERE THE DISCHARGE FOLLOWING DEVELOPMENT EXCEEDS THE PRE-DEVELOPMENT DISCHARGE. THE PURPOSE OF THESE STORMWATER MANAGEMENT PRACTICES IS TO ENSURE THAT THERE IS NO SIGNIFICANT CHANGE IN THE HYDROLOGICAL REGIME OF THE RECEIVING WATER.

THE STORMWATER MANAGEMENT PRACTICES THAT MAY BE IMPLEMENTED DURING THE CONSTRUCTION OF LAND DEVELOPMENT PROJECTS INCLUDE BUT ARE NOT

STORAGE PRACTICES - NONE WET PONDS, EXTENDED-DETENTION OUTLET STRUCTURES, SUBSURFACE

FILTRATION PRACTICES - NONE GRASSED SWALES, BIORETENTION CELLS, MEDIA FILTERS, SAND FILTERS,

FILTER STRIPS, CONSTRUCTED WETLANDS INFILTRATION PRACTICES - NONE

INFILTRATION BASINS, INFILTRATION STRIPS, SUBSURFACE INFILTRATION VELOCITY BISSIPATION PRACTICES - NONE

GRADE STABILIZATION STRUCTURES, LEVEL SPREADERS, PIPE AND CHANNEL OUTLET PROTECTION NON-STRUCTURAL PRACTICES - NONE

RIPARIAN SETBACK PRESERVATION, MAINTAIN OR INCREASE OPEN SPACE, MINIMIZE IMPERVIOUS SURFACES, MINIMIZE DISTURBANCE OF SOILS AND VEGETATION, MINIMIZE DIRECTLY INTERCONNECTED IMPERVIOUS SURFACES.

STORMWATER MANAGEMENT IS INTEGRAL TO THE DEVELOPMENT OF THE IMPROVEMENT PLANS FOR THE SITE. STORMWATER MANAGEMENT PRACTICES SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY. CONSTRUCTION MUST BE IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS CONTAINED IN THE SITE

OHIO EPA HAS INDICATED THAT, FOR SITES OF LESS THAN FIVE ACRES. STRUCTURAL POST-CONSTRUCTION PRACTICES ARE RECOMMENDED BUT NOT

NON-SEDIMENT POLLUTION CONTROLS: NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING

MATERIALS, SHALL BE DISCHARGED INTO STORM WATER RUNOFF AND/OR STORMWATER CONVEYANCE FACILITIES. CONSTRUCTION ROAD/PARKING AREA STABILIZATION:

THE CONTRACTOR SHALL DESIGNATE A SINGLE AREA FOR CONSTRUCTION VEHICLE ACCESS AND PARKING AND ENSURE THAT THE DESIGNATED USES WILL BE RESTRICTED TO THAT AREA. THE DESIGNATED ACCESS AND PARKING AREAS SHALL BE STABILIZED WITH A 6-INCH LAYER OF 2- TO 4-INCH CRUSHED ROCK OR GRAVEL BASE PRIOR TO VEHICLES BEING PERMITTED TO USE THE AREAS.

IT IS RECOMMENDED THAT THE SAME AREA BE USED FOR MAINTENANCE AND FUELING OPERATIONS AND MATERIAL STORAGE, WITH THE APPROPRIATE DIKING AND OTHER RAINFALL RUNOFF CONTROLS.

NO WASTE MATERIALS SHALL BE EITHER BURNED OR BURIED, OR ALLOWED TO ENTER SURFACE WATERS OR STORM DRAINAGE SYSTEMS ON THE SITE.

LIDDED CONTAINERS MUST BE PROVIDED FOR COLLECTION OF A WASTE MATERIAL INCLUDING CONSTRUCTION DEBRIS, TRASH, PETROLEUM PRODUCTS AND ANY HAZARDOUS MATERIAL ON SITE. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THAT MATERIAL

HAZARDOUS OR TOXIC MATERIAL HANDLING: CONSTRUCTION VEHICLE MAINTENANCE, FUELING AND LUBRICATING, AND FUEL AND

LUBRICANT STORAGE SHALL BE RESTRICTED TO A SINGLE LOCATION ON THE SITE AT ANY ONE TIME AND THAT SITE SHALL BE ADEQUATELY DIKED TO PREVENT ANY SPILLED CHEMICALS FROM ENTERING THE DRAINAGE SYSTEM.

MIXING, PUMPING, TRANSFERRING, OR OTHERWISE HANDLING CONSTRUCTION CHEMICALS SUCH AS FERTILIZER, LIME, ASPHALT, CONCRETE CURING COMPOUNDS. AND ALL OTHER POTENTIALLY HAZARDOUS MATERIALS SHALL BE PERFORMED IN A DESIGNATED AREA AWAY FROM ANY SURFACE WATER, STREAM, DITCH, OR STORM DRAIN. THE AREA SHALL BE ADEQUATELY DIKED TO PREVENT RAINFALL RUNOFF FROM TRANSPORTING THE MATERIALS ONTO ADJACENT SOILS.

HAZARDOUS SUBSTANCE SPILL HANDLING:

A. IF HAZARDOUS SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC., ARE SPILLED, LEAKED, OR OTHERWISE RELEASED ONTO THE SOIL, THE ENTIRE VOLUME OF CONTAMINATED SOIL SHALL BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL (NOT A CONSTRUCTION/ DEMOLITION DEBRIS LANDFILL). IN NO CASE MAY THE CONTAMINATED SOIL BE

SPILLS ON ADJACENT PAVEMENT SHALL BE ABSORBED WITH SAWDUST. KITTY LITTER, OR A COMMERCIAL CHEMICAL ABSORBENT AND DISPOSED OF AT A LICENSED SANITARY LANDFILL

HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. FOR SUCH MATERIALS, CALL OHIO OEPA (1-800-282-9378).

SPILLS OF 25 GAL. OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE DISCOVERY OF THE RELEASE.

SAWCUTTING AND SURFACING POLLUTION PREVENTION SLURRY AND CUTTINGS SHALL BE VACUUMED DURING CUTTING AND SURFACING OPERATIONS, THEY SHALL NOT REMAIN ON PERMANENT CONCRETE OR ASPHALT PAVEMENT OVERNIGHT. THEY SHALL NOT DRAIN INTO ANY NATURAL OR CONSTRUCTED DRAINAGE CONVEYANCE. COLLECTED SLURRY AND CUTTINGS SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.

CONCRETE HANDLING: UNUSED CONCRETE REMAINING IN THE TRUCK AND PUMP SHALL BE RETURNED TO THE ORIGINATING BATCH PLANT FOR RECYCLING. IT SHALL NOT BE DISPOSED OF

CONCRETE TRUCK CHUTES, PUMPS AND INTERNALS SHALL BE WASHED OUT ONLY INTO PREPARED AREAS AWAITING INSTALLATION OF CONCRETE OR ASPHALT, IF NO PREPARED AREAS ARE AVAILABLE, WASHWATER AND LEFTOVER PRODUCT SHALL BE HELD IN A LINED SUMP. CONTAINED CONCRETE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARD.

SEE SHEET No. 3 OF THIS PLAN FOR DETAILS AND SPECIFICATIONS FOR A CONCRETE WASHOUT SUMP.

TRENCH AND GROUND WATER CONTROL: DEWATERING: WATER IN TRENCHES, SEDIMENT BASINS, AND SEDIMENT TRAPS IS GENERALLY CONTAMINATED WITH SEDIMENT AND CANNOT BE ALLOWED TO MIX WITH SURFACE WATER WITHOUT APPROPRIATE TREATMENT,

IF DEWATERING OF TRENCHES, SEDIMENT BASINS, AND/OR SEDIMENT TRAPS IS REQUIRED, THE CONTRACTOR SHALL ENSURE THAT THE DISCHARGE PASSES THROUGH A CONSTRUCTED TEMPORARY SEDIMENT TRAP OR A SEDIMENT FILTERING DEVICE SUCH AS AN AFC ENVIRONMENTAL, INC., "DIRT BAG".

GROUND WATER DISCHARGE: GROUND WATER IS NOT USUALLY CONTAMINATED WITH SEDIMENT AND MAY BE PUMPED AND DISCHARGED WITHOUT TREATMENT IF THE PROPER PRECAUTIONS ARE TAKEN.

GROUND WATER MAY ONLY BE DISCHARGED DIRECTLY INTO SURFACE WATERS. STORM DRAINS, OR PERMANENTLY STABILIZED SURFACES. GROUND WATER THAT IS DISCHARGED ONTO UNSTABILIZED SURFACES OR THAT IS ALLOWED TO FLOW ACROSS UNSTABILIZED SURFACES MUST BE TREATED TO REMOVE SEDIMENT BEFORE BEING ALLOWED TO ENTER ANY SURFACE WATER OR STORM WATER CONVEYANCE SYSTEM.

OTHER CONSIDERATIONS:

SURFACE WATER PROTECTION:

MAINTENANCE:

CERTIFICATION:

NO CONSTRUCTION ACTIVITY OF ANY KIND SHALL BE PERFORMED IN ANY SURFACE WATERS (STREAMS, RIVERS, LAKES, WETLANDS, OR OTHER) ON THE SITE UNLESS THE CONSTRUCTION PLANS FOR THE PROJECT ARE IN COMPLIANCE WITH SECTIONS 404 AND 401 OF THE CLEAN WATER ACT AND THE APPROPRIATE PERMITS HAVE BEEN ACQUIRED FROM THE U.S. ARMY CORPS OF ENGINEERS (SECTION 404 REGULATION) AND/OR THE OHIO ENVIRONMENTAL PROTECTION AGENCY (SECTION 401 REGULATION).

INSPECTIONS ARE TO BE PERFORMED BY QUALIFIED PERSONS PROVIDED BY THE

PERMITTEE AND THE INSPECTION LOGS ARE TO BECOME A PART OF THIS PLAN. INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE IN EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH OF RAIN PER 24 HOUR PERIOD. FROM THE BEGINNING OF CONSTRUCTION THROUGH THE FINAL INSPECTION PRIOR TO THE NOTICE OF TERMINATION.

ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE REPAIRED AND MAINTAINED IN ACCORDANCE WITH THE TIME REQUIREMENTS SHOWN ON THIS TO ACCOMPLISH THIS, THERE SHALL BE SUFFICIENT EQUIPMENT, MATERIALS, AND PERSONNEL AVAILABLE AT ALL TIMES TO MAKE ANY REPAIRS OR REPLACEMENTS SEWER AGE

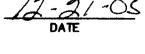
SUB-LOTS WITHIN THE DEVELOPMENT: RESPONSIBILITY FOR COMPLIANCE WITH THE PERMIT AND THE PLAN ON X INDIVIDUAL LOTS REMAINS WITH THE PERMITTEE UNTIL AN INDIVIDUAL LOT NOTICE ENVIRONMENTAL PROTECTION OF INTENT IS FILED WITH OFFIA DEPARTMENT OFFIA DEPARTMENT OF INTENT IS FILED WITH OFFIA DEPARTMENT OF OF INTENT IS FILED WITH DEPA BY THE BUILDER. TRANSFERRING RESPONSIBILITY AS EVIDENCED BY COPY DEO TO THE BUILDER ON AN INDIVIDUAL LOT IS NOT ACCOMPLISHED UNLESS THE LOT LETTER OF APPROVAL IS TEMPORARILY STABILIZED BY THE PERMITTEE AT LEAST 7 DAYS PRIOR TO

HERETO ATTACHED PERMITTEE FROM RESPONSIBILITY FOR MAINTAINING CENTRAL PRACTICES EVEN IF

THE PRACTICE IS LOCATED ON A SINGLE LOT.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR THE GATHERING OF THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE. ACCURATE. AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.





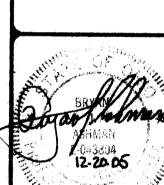


TRAWN BY: C.H.B. HECKED BY:__ FIELD BOOK No._ DATE December 5, 200

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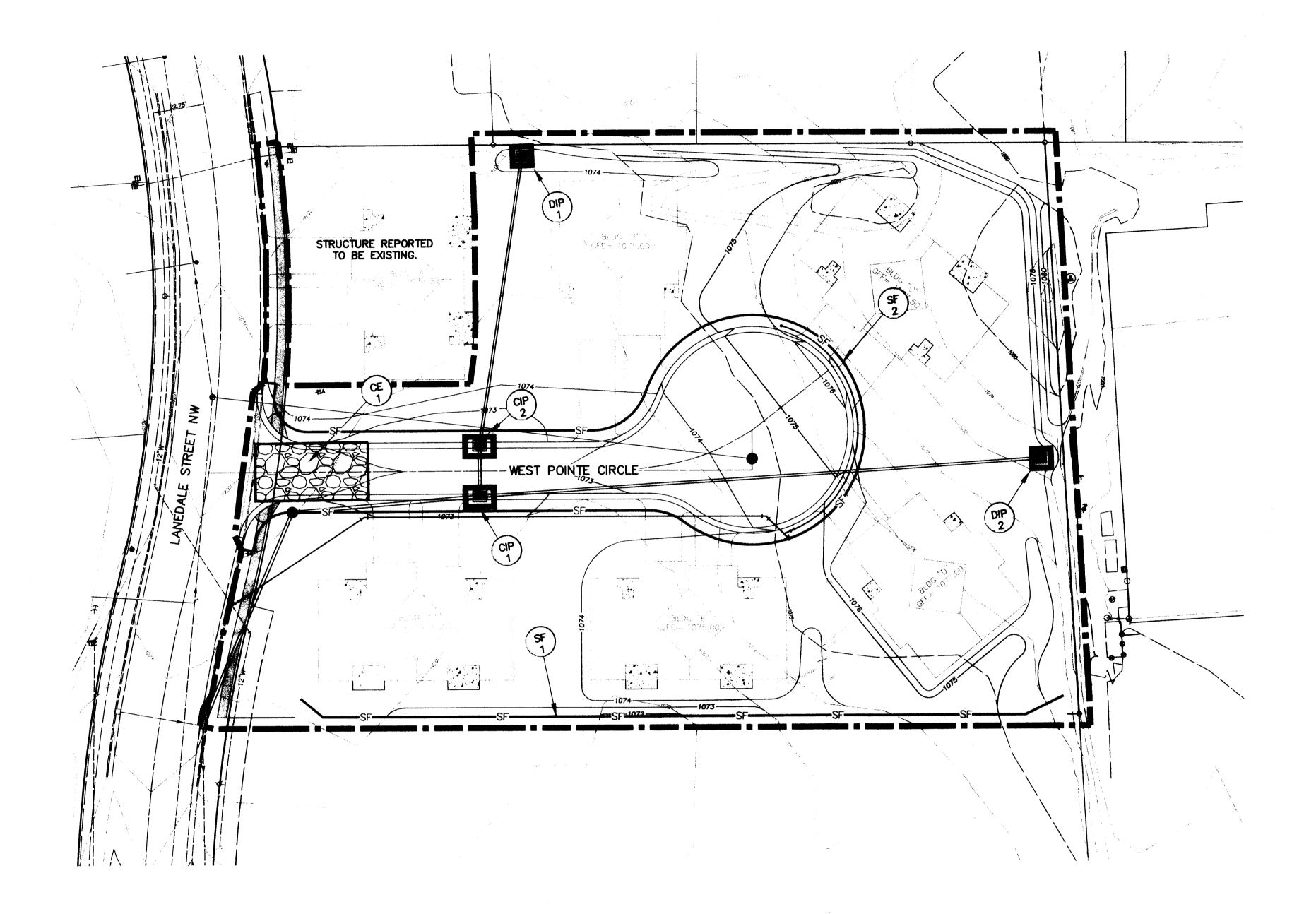
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STORMWATER POLLUTION PREVENTION PLAN WEST POINTE CONDOMINIUMS



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CONSTRUCTION ENTRANCE



CURB INLET PROTECTION





LIMIT OF DISTURBANCE

PERMAMENT STABILIZATION			
AREA REQUIRING PERMAMENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS		
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE.	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.		
ANY AREAS WITHIN 50 FEET OF A STREAM AND AT FINAL GRADE.	WITHIN 2 DAYS OF REACHING FINAL GRADE.		
ANY OTHER AREAS AT FINAL GRADE.	WITHIN 7 DAYS OF REACHING FINAL GRADE WITHIN THAT AREA.		
TEMPORARY STABILIZATION			
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS		
ANY DISTURBED AREAS WITHIN 50 FEET OF A STREAM AND NOT AT FINAL GRADE.	WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR 7 DAYS OR MORE.		
FOR RESIDENTIAL SUBDIVISIONS, NON-RESIDENTIAL SUBDIVISIONS (E.G., NDUSTRIAL PARKS) AND COMMERCIAL DEVELOPMENTS (E.G., SHOPPING	WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.		
CENTERS), ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 21 DAYS BUT LESS THAN ONE YEAR AND NOT WITHIN 50 FEET OF A STREAM.	FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST 7 DAYS PRIOR TO THE TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOTS.		
DISTURBED AREAS THAT WILL BE IDLE	PRIOR TO THE ONSET OF WINTER WEATHER.		

REPAIR AND MAINTENANCE TIME REQUIREMENTS

WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE. IF INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH THE EXCEPTION OF A SEDIMENT BASIN, IT MUST BE REPAIRED OR MAINTAINED WITHIN 48 HOURS OF THE INSPECTION. SEDIMENT BASINS MUST BE REPAIRED OR MAINTAINED WITHIN 7 DAYS OF THE INSPECTION.

WHEN PRACTICES FAIL TO PERFORM THEIR INTENDED FUNCTION. IF INSPECTION REVEALS THAT A CONTROL PRACTICE FAILS TO PERFORM ITS INTENDED FUNCTION AND THAT ANOTHER, MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWP3 MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION.

WHEN PRACTICES DEPICTED ON THE SWP3 ARE NOT INSTALLED. IF INSPECTION REVEALS THAT A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE SCHEDULE CONTAINED IN THIS PLAN, THE CONTROL PRACTICE MUST BE IMPLEMENTED PRIOR TO THE NEXT STORM EVENT WHICH PRODUCES RUNOFF FROM THE SITE, BUT IN NO CASE LATER THAN 7 DAYS FROM THE DATE OF INSPECTION.

IF THE INSPECTION REVEALS THAT THE PRACTICE IS NOT NEEDED, THE INSPECTION RECORD MUST CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.

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PERMANENT SEEDING & MULCH	LUMP	LUMP
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EROSION AND SEDIMENT CONTROL ESTIMATED QUANTI

THE ESTIMATE OF QUANTITIES LISTED ABOVE IS APPROXIMATE ONLY AND IS BASED ON THE PRACTICES INDICATED ON THE PLAN.

THE ESTIMATED QUANTITIES DO NOT INCLUDE ANY ADDITIONAL MATERIALS THAT MAY BE REQUIRED FOR: 1) MAINTENANCE, REPLACEMENT AND/OR ADJUSTMENT OF PRACTICES

AS DETÉRMINED BY INSPECTIONS. 2) MATERIALS REQUIRED FOR ADDITIONAL PRACTICES, NOT INDICATED ON THE PLAN, WHICH MAY BE REQUIRED BY ACTUAL FIELD CONDITIONS DURING CONSTRUCTION.

FOR THESE QUANTITIES, THE CONTRACTOR MUST RELY UPON HIS EXPERIENCE IN SIMILAR CONSTRUCTION PROJECTS INVOLVING SIMILAR SLOPES, SOIL TYPES, AND SEASONAL RAINFALL.

> SEWERAGE OHIO ENVIROMENTAL PROTECTION AGENCY AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

SOIL STOCKPILE PROTECTION
LOCATIONS FOR TOPSOIL STOCKPILES SHOULD BE CAREFULLY SELECTED TO

INSURE THAT THEY DO NOT OBSTRUCT THE NORMAL FLOW OF SURFACE WATER RUNOFF AND THAT ANY MATERIAL ERODED FROM THE STOCKPILES

THE STOCKPILES SHOULD BE PROTECTED BY EITHER BEING COVERED WITH PLASTIC SHEETING OR BY THE APPLICATION OF TEMPORARY SEEDING.

THE BASE OF THE STOCKPILES SHOULD BE PROTECTED BY A LINE OF SILT

FENCE ALONG THE LOWER SIDE(S) OF THE STOCKPILE AND NO CLOSER

THE STOCKPILE PROTECTION SHALL REMAIN IN PLACE AND FUNCTIONING

THAN 6' FROM THE BASE.

UNTIL THE STOCKPILE HAS BEEN REMOVED.

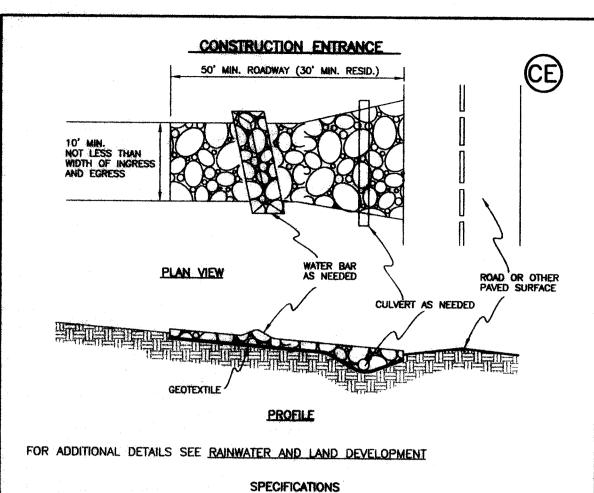
DOES NOT HAVE DIRECT ACCESS TO A STORM DRAIN OR DRAINAGEWAY.

DRAWN BY: C.H.B. CHECKED BY:____ FIELD BOOK No.____ DATE December 5, 2005 E2 of E3

44444

EROSION AND SEDIMENT CONTROL PLAN PROJ.#03337CP

STORMWATER POLLUTION PREVENTION PLAN WEST POINTE CONDOMINIUMS



- A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. IT E A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LB.

- CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING, VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

SILT FENCE

FLAT SLOPE IN FRONT

-SILT FENCE

POSTS

STAPLED TO

SPECIFICATIONS

ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.

TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL

WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5' (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.

THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16" ABOVE THE ORIGINAL GROUND SURFACE.

THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6" DEEP, THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL INSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.

THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8" OF CLOTH ARE BELOW THE GROUND SURFACE, EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6" DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.

SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.

MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF TOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS

SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.

BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.

WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.

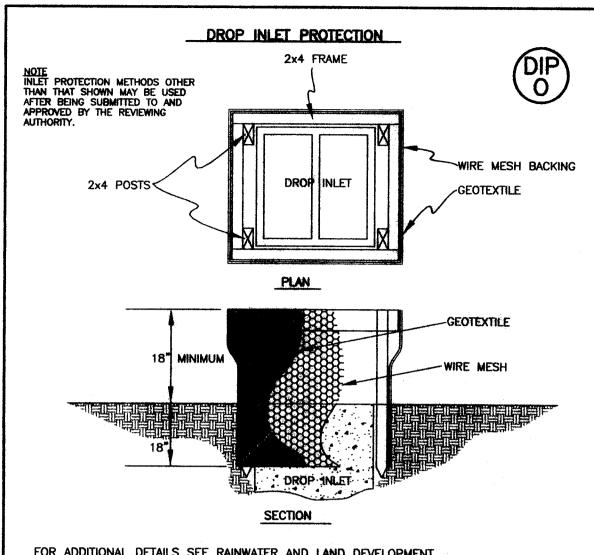
OF BARRIER

TRENCH TO BE

COMPACTED

FOR ADDITIONAL DETAILS SEE RAINWATER AND LAND DEVELOPMENT

BACKFILLED AND



- THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2"x 4" CONSTRUCTION GRADE LUMBER. THE 2x4 POST SHALL BE DRIVEN 1' INTO THE GROUND AT THE FOUR CORNERS OF THE INLET AND THE TOP PORTIONS OF 2x4 FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6" BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.

- A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF THE EARTH DIKE SHALL BE AT LEAST 6' HIGHER THAN THE TOP OF THE FRAME.

CURB INLET PROTECTION

GEOTEXTILE

CLOTH

INLET PROTECTION MUST BE INSTALLED AT EACH CURB INLET PROVIDING ACCESS TO A STORM DRAIN THAT DOES NOT OUTLET INTO A SEDIMENT TRAP OR SEDIMENT BASIN.

INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.

THE WOODEN FRAME IS TO BE CONSTRUCTED OF 2" X 4" CONSTRUCTION—GRADE LUMBER. THE END SPACERS SHALL BE A MINIMUM OF 1" BEYOND BOTH ENDS OF THE THROAT OPENING, THE ANCHORS SHALL BE NAILED TO 2x4 STAKES DRIVEN ON THE OPPOSITE SIDE OF THE CURB.

THE WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIN AND STONE. IT SHALL BE A CONTINUOUS PIECE WITH A MINIMUM WIDTH OF 30" AND 4' LONGER THAN THE THROAT LENGTH OF THE INLET, 2' ON EACH SIDE.

GEOTEXTILE CLOTH SHALL HAVE AN EQUIVALENT OPENING SIZE (EOS) OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE AT LEAST THE SAME SIZE AS THE WIRE MESH.

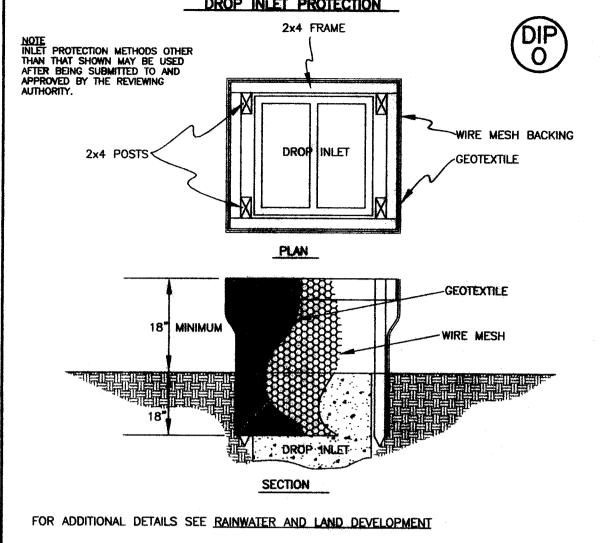
INLET PROTECTION MUST BE INSTALLED AT THE FIRST INLET DOWNSTREAM OF SEDIMENT OBSERVED IN THE GUTTER SECTION.

CURB

GUTTER

NOTE:
OTHER INLET PROTECTION METHODS,
COMMERCIALLY AVAILABLE OR CUSTOM
DESIGNS MAY BE USED. CUSTOM DESIGNS
MUST BE REVIEWED AND APPROVED BY
THE DESIGNER AND THE REVIEWING

SECTION



AUGUST 16 TO NOVEMBER 2 BUSHEL 40 JBS 40 JBS

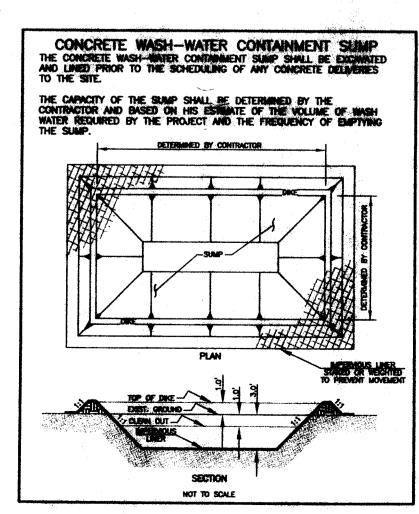
STOCKPILING
TOPSOIL SHALL BE STOCKPILED IN A MANNER AND LOCATION THAT NATURAL DRAINAGE IS NOT
OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE SHALL RESULT AND ANY ERODED MATERIAL DOES
NOT HAVE DIRECT ACCESS TO ANY STORM DRAINS OR DRAINAGEWAYS. STOCKPILE SIDE SLOPES SHALL
NOT EXCEED 2:1.

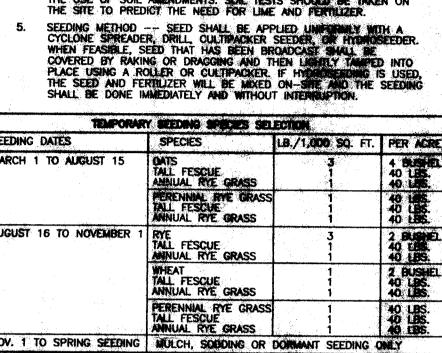
STOCKPILE PROTECTION

PERMITTER CONTROLS (SLET FENCE OR EARTH BARRIER) MUST BE PLACED AROUND THE STOCKPILE IMMEDIATELY. TEMPORARY SEEDING OF THE STOCKPILE MUST BE PERFORMED WITHIN 7 DAYS IF THE STOCKPILE IS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS.

TOPSOIL MUST BE COMPACTED ENOUGH TO ENSURE GOOD COMPACT WITH THE LANDERLYING SOIL AND TO OBTAIN A LEVEL SEEDBED FOR THE ESTABLISHMENT OF HIGH MAINTENANCE TURF, UNDUE COMPACTION SHALL BE AVOIDED BECAUSE IT INCREASES RUNOFF VELOCITY AND VOLUME, AND DETERS

IN ACCORDANCE WITH "SURFACE ROUGHENING".





TOPSOIL OPERATIONS SHOULD NOT BE PERFORMED WHEN THE SOIL IS WET OR FROZEN. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. ALL PERIMETER DIKES, BASINS, AND OTHER SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO STRIPPING.

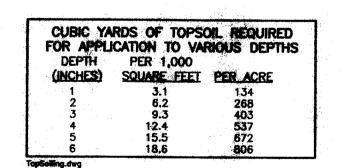
WHERE THE PH OF THE SUBSOIL IS & OR LESS, OR THE SOIL IS COMPOSED OF HEAVY CLAYS, AGRICULTURAL LIMESTONE SHALL SE SPREAD IN ACCORDANCE WITH SOIL TESTS OR THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED.

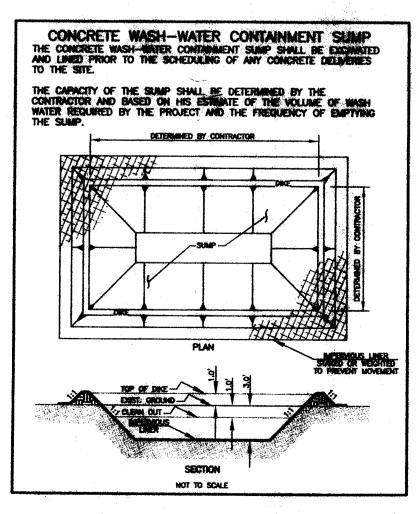
IMMEDIATELY PRIOR TO STEPING AND SPREADING THE TOPSOIL, THE SUBGRADE SMALL BE LOOSENED BY DISCING OR SOUTH TING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND

APPLICATION
TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN TOPSOIL OR SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING, TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 2" ON 3:1 OR STEEPER SLOPES AND 4" ON FLATTER SLOPES. ANY IRREGULARITIES IN THE SURFACE SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION

SPECIAL CONSIDERATION SHOULD BE GIVEN TO THE TYPES OF EQUIPMENT USED TO PLACE TOPSOIL IN AREAS TO RECEIVE FINE TURF. AVOID UNNECESSARY COMPACTION BY HEAVY MACHINERY WHENEVER POSSIBLE. IN AREAS WHICH ARE NOT GOING TO BE MOWED, THE SURFACE SHOULD BE LEFT ROUGH

SOIL STERILANTS
NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS UNTIL SUFFICIENT TIME HAS ELAPSED TO PERMIT DISSIPATION OF TOXIC MATERIALS.





BERMANENT SEEDING

FLAT PEA TALL FESCUE

DWARF FESCUE

TALL FESCUE 40

SEE MULCH

MAINTENANCE OF PERMANENT SEEDING

MIXTURE

CREEPING RED FESCUE RYE GRASS KENTUCKY BLUEGRASS

TALL FESCUE

DWARF FESCUE

CROWN VETCH FESCUE

FLAT PEA

FESCUE

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

PERMANENT SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF PLANTING, SEEDED AREAS SHALL BE INSPECTED FOR FAILURE AND VEGETATION REESTABLISHED AS NEEDED, DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVERSEED, OR REESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION

MAINTENANCE FERTILIZATION RATES SHALL BE ESTABLISHED BY SOIL TEST RECOMMENDATIONS OR BY USING THE RATES SHOWN IN THE FOLLOWING TABLE.

LB./AC.

LIME

FALL, YEARLY OR AS NEEDED

SPRING, YEARLY FOLLOWING ESTABLISH— MENT AND EVERY 4-7 YEARS THEREAFTER

MOWING

NOT CLOSER THAN 4" NOT CLOSER THAN 2"

DO NOT WOW

DO NOT

EKILIZABAN AND MONNIG

10-10-10 500

10-10-10 500

0-20-20

0-20-20

NOTE: SOIL TEST RECOMMENDATIONS PREFERRED OVER ABOVE

FORMULA

EXCESSIVE IRRIGATION RATES SHALL BE AVOIDED AND IRRIGATION MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF.

FERRILIZER - FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST, IN LIEU OF A SOIL TEST, PERTILIZER SHALL BE APPLIED AT A RATE OF 12 LB./1,000 SQ. FT. OR 500 LB./AC. OF 10-10-10 OR 12-12-12 ANALYSIS.

NOT LATER THAN AUGUS

FOR SHADED AREA

Per 1,000 sq.ft. Free from weeds and coarse matter, must be anchored. Spread with mulch blower or by hand. 1-1/2 - 2 tons (Minimum 2 tons for winter cover) Corn Stalks Cuit or stredded in 4-6" lengths. Air-dried Do not use in fine turf greas. Apply with multiplication by hand. - 6 tons Fiber Mulch Do not used this musta-for winter cover or during hot, dry months.* Apply finimum 1,500 lbs. Free of course matter. Air-dried. Treat with 12 lbs. ditrogen per ton. Do not use in fine burt arreas. Apply with mulch blower, chip handler, or by hand. Free of coarse matter.
Air-dried: Do not use in fine turf arrens. Apply with mulch blower, chip handler, or by hand.

LIME AND FERTILIZER SHOULD BE INCORPORATED AND SURFACE ROUGHENING ACCOMPLISHED AS NEEDED. SEED SHOULD BE APPLIED PRIOR TO MULCHING EXCEPT IN THE FOLLOWING CASES:

1. WHERE SEED IS TO BE APPLIED AS PART OF A HYDROSEFDER SLURRY CONTAINING FIBER MULCH.

2. WHERE SEED IS TO BE APPLIED FOLLOWING A STRAW MULCH SPREAD DURING WINTER MONTHS.

G. SYNDEREC, BUDDERS: FORMULATED BINDERS OR ORGANICALLY FORMULATED PRODUCTS MAY BE USED AS RECOMMENDED BY THE MANUFACTURES.

b. ASSISTANT RECOMMENDED FOR USE ARE RAPID CURING (RC-70 RC-200, MC-200), MEDIUM CURING (MC-250, MC-800), AND SIMILSTREE ASSISTANT (SS-1,CSS-1,CMS-,MS-2,RS-1, RS-2, CRS-1 & CRS-2), APPLY ASSISTANT AT 0.10 GALLON PER SQUARE YARD (10 ggs,/1,000 gg/ls), C. ASPHALT DESIGNATIONS ARE FROM THE ASPHALT INSTITUTE SPECIFICATIONS.

4. MILLUM NETTINGS: LIGHTWEIGHT PLASTIC, COTTON, OR PAPER NETS MAY BE STAPLED OVER THE MULCH IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE:
INSPECT PER THE SCHEDULE CONTAINED IN THE PLAN TO CHECK FOSE WERAGE
EROSION. WHERE EROSION IS OBSERVED IN MULCHED AREAS, ADDITIONAL

MULCH SHOULD BE APPLIED. NETS AND MATS SHOULD BE INSPECTED FOR
DISLOCATION OR FAILURE, IF WASHOUTS OR BREAKAGE OCCUR, REASTILE DROVED
NETTING OR MATTING AS NECESSARY AFTER REPAIRING DAMAGE TO THE

OHIO FAILURE. AS EVIDENCED BY COPY OF

MULCH - NOT RECOMMENDED WITHIN HEAVY TRAFFIC PATHWAYS. BINDERS OR TACKIFIERS SHOULD BE USED TO TACK ORGANIC MULCHES. TILLAGE - CHISEL-TYPE PLOWS SPACES ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SWILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT. THE PRACTICE SHOULD BE USED BEFORE WIND BROSION STARTS. BEGIN PLOWING ON THE WINDWARD SIDE OF THE STEE

DUST CONTROL MEASURES DURING CONSTRUCTION

IRRIGATION - SPRINKLE HAUL ROADS AND HEAVY TRAFFIC ROUTES WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED. SPRAY-ON ADMESTVES - THE FOLLOWING TABLE LISTS VARIOUS ADMESTVES AND CORRESPONDING MIXING AND APPLICATION INFORMATION:

ADHESIVE	WATER DELITICA (ADMESSIVE MAJER)	TYPE OF	APPLICA KATE GALLONS
ANIONIC ASPHALT EMULSION	7:1	OARSE SPRAY	1,200
LATEX EMULSION	12.5.1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
ACRYLIC EMULSION (NON-TRAFFIC)	7:1	COARSE SPRAY	450
ACRYLIC EMULSION (TRAFFIC)	3.5 : 1	COARSE SPRAY	350
STONE - USE CRUS	SHED STONE OR COAL C AREAS.	RSE GRAVEL TO	STABILIZE
BARRIERS - A BOA BARRIER PLACED P	ARD FENCE, WIND FEN ERPENDICULAR TO PR	CE, SILT FENCE. EVAILING WIND C	OR SIMILA

INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT WILL HELP TO CONTROL WIND CURRENTS AND BLOWING SOIL CALCIUM CHLORIDE - APPLICATION RATES SHOULD BE STRICTLY IN COMPLIANCE WITH THE SUPPLIERS SPECIFICATIONS. THE CHEMICAL MAY BE APPLIED BY MECHANICAL SPREADER AS LOOSE, DRY GRANULES OF FLAKES AT A RATE THAT KEEPS THE SURFACE MOIST BUT NOT SOCIATION AS TO CAUSE WATER POLLUTION OR PLANT DAMAGE.

DRAWN BY: C.H.B. CHECKED BY:____ FIELD BOOK No

DATE December 5, 200

44444

& ASSC ERS AND

CONTROL

LETTER OF APPROVAL

HERETO ATTACHED

E3

DETAILS AND SPECIFICATIONS PROJUG33370P

SILT FENCE FABRIC - SEE CHART BELOW FABRIC PROPERTIES MULLEN BURST STRENGTH

CRITERIA FOR SILT FENCE MATERIALS

US STD. SIEVE CW-0221

OVERFLOW

PLAN

FOR ADDITIONAL DETAILS SEE RAINWATER AND LAND DEVELOPMENT

MESH

CURB

THE WIRE MESH AND GEOTEXTILE CLOTH SHALL BE FORMED TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET AND SECURELY FASTENED TO THE 2x4 FRAME. TWO-INCH STONE SHALL BE PLACED OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE CLOTH.

ASTM D 1682

FOR PROJECTS REQUIRING EXTENSIVE SILT FENCE INSTALLATION, THE CONTRACTOR MAY UTILIZE COMMERCIALLY AVAILABLE SILT FENCE INSTALLATION

EQUIPMENT SUCH AS THE TOMMY SILT FENCE MACHINE TO REDUCE THE TIME, LABOR AND EXPENSE OF SILT FENCE INSTALLATION.

TEST METHOD 190 PSI MINIMUM 0.3 GAL./MIN./SQ. FT. MAXIMU

FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32" LONG. WOOD POSTS WILL BE 2-BY-2" HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.

SLURRY FLOW RATE TRAVIOLET RADIATION STABILITY 90% MINIMUM

THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED.
ACCUMULATED SEDIMENT SHALL BE REMOVED, OR
OTHER PRACTICES SHALL BE INSTALLED.

of E3