

OWNER/APPLICANT
AMHERST VILLAGE DEVELOPMENT, LLC
SUITE 201
26949 CHAGRIN BOULEVARD
BEACHWOOD, OHIO 44122

ENGINEER/PLANNER/
LANDSCAPE ARCHITECT
ATWELL-HICKS, LLC
30575 BAINBRIDGE ROAD, SUITE 180
SOLON, OHIO 44139
(440) 349-2000 PHONE
(440) 349-2028 FAX

STORMWATER MANAGEMENT SYSTEM:
THE PROPOSED STORMWATER MANAGEMENT SYSTEM WILL CONSIST OF WATER-QUALITY DEVICES THAT WILL EFFECTIVELY TREAT STORMWATER RUNOFF PRIOR TO ENTERING THE ADJACENT CITY STORM SEWER SYSTEM.

SANITARY SEWER & WATER SYSTEMS:
THE PROPOSED WATER SYSTEM WILL CONSIST OF THE EXTENSION OF EXISTING WATERLINES OWNED BY AQUA OHIO TO SERVICE ALL OF THE PROPOSED UNITS.
THE SANITARY SEWER SYSTEM FOR THE UNITS WILL BE SERVICED BY AN EXISTING 8" SANITARY SEWER LOCATED AT THE INTERSECTION OF 1ST STREET NE OPERATED BY THE CITY OF MASSILLON.
SEWAGE TO BE TREATED AT MASSILLON WATER POLLUTION CONTROL STATION

SITE DATA

EXISTING ZONING RM-1

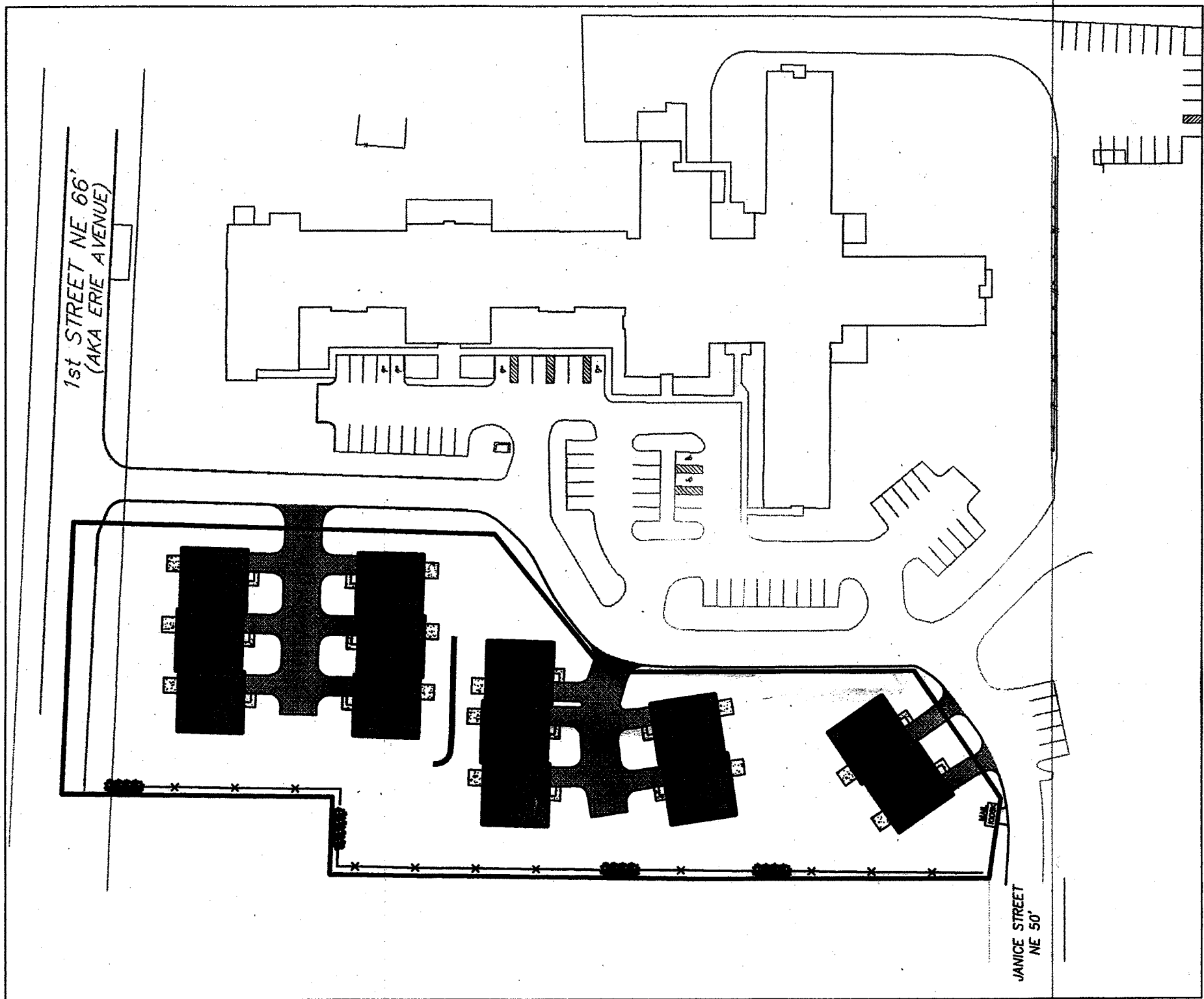
TOTAL AREA = 2.24

ATTACHED SINGLE FAMILY = 13 UNITS

AMHERST VILLAGE CONDOMINIUMS

A 55 AND OLDER COMMUNITY
CITY OF MASSILLON, STARK COUNTY, OHIO

IMPROVEMENT PLANS



OVERALL DEVELOPMENT MAP
NOT TO SCALE



SUBMITTED BY: Matthew W. Bryant PE
MATTHEW W. BRYANT REG. ENGINEER NO. 65519

DATE: 11-16-05

ENGINEERING APPROVALS

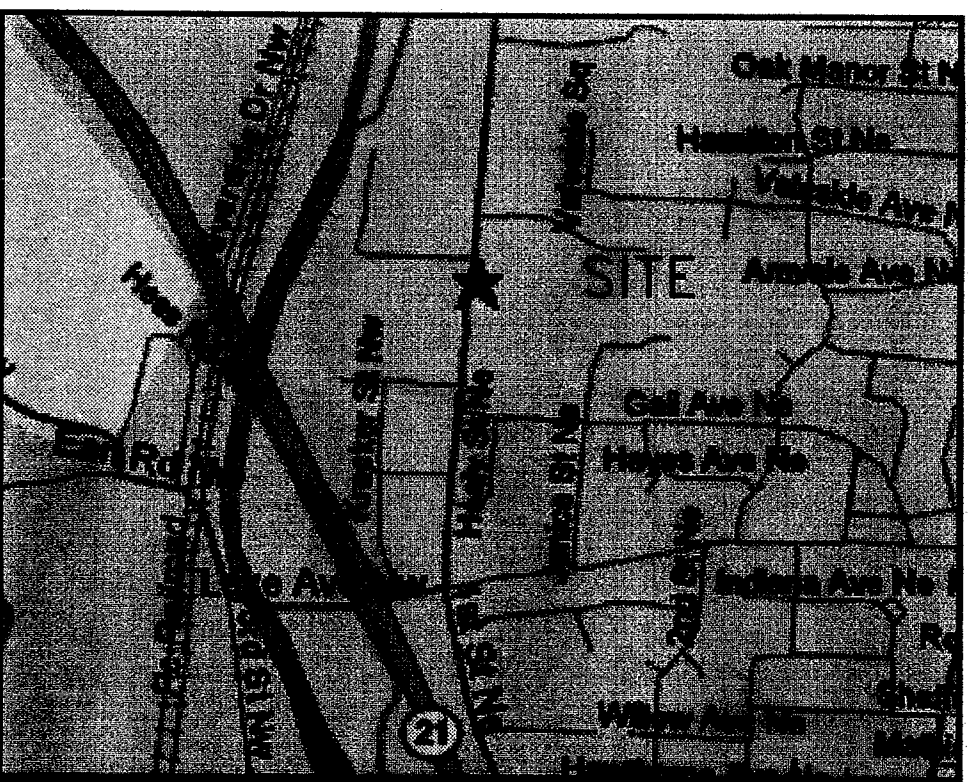
APPROVED BY: [Signature]
MASSILLON CITY ENGINEER

DATE: 12/08/05

OHIO ENVIRONMENTAL PROTECTION AGENCY (O.E.P.A.)

APPROVAL FOR: SANITARY SEWER
WATER

DATE: 10/12/05



LOCATION MAP
NOT TO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	TOPOGRAPHIC SURVEY
3	LAYOUT PLAN
4	OVERALL GRADING PLAN
4A	POND DETAILS
5	STORM WATER POLLUTION PREVENTION PLAN
6	OVERALL UTILITY PLAN
7	PROFILES
8	DETAILS
9	DETAILS
10	DETAILS

- GENERAL NOTES**
- ALL CONSTRUCTION SHALL CONFORM TO THE REGULATIONS AND SPECIFICATIONS OF THE CITY OF MASSILLON
 - LANDSCAPING PROVIDED BY OTHERS.
 - FOR SITE LIGHTING DETAILS, PLEASE SEE ARCHITECTURAL PLANS.

48 BUSINESS HOURS
**BEFORE YOU DIG
CALL O.U.P.S.**
1-800-362-2764
FOR THE LOCATION OF
UNDERGROUND FACILITIES

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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AMHERST VILLAGE
CONDOMINIUMS
CONSTRUCTION PLANS

CAD FILE
05000680CP-01-CV

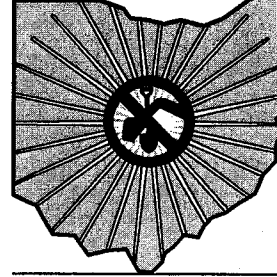
CITY OF MASSILLON
REVISIONS
DATE
11-15-05

AH

DR. SG. CH. MB.
P.M. M. BRYANT
BOOK
JOB 05000680
FILE NO.
1550-000-01

RECEIVED
02/22/06

Final Set



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- NOTES:
- (A) SAWCUT EXISTING PAVEMENT/CURB TO MAKE CLEAN BUTT JOINT FOR NEW PAVEMENT.

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AMHERST VILLAGE DEVELOPMENT, LLC

AMHERST VILLAGE CONDOMINIUMS

LAYOUT PLAN

CAD FILE

05000680CP-03-L

REVISIONS

11-15-05

SCALE

0 15 30

1" = 30 FEET

DR.

SG

CH.

MB

P.M.

M. BRYANT

BOOK

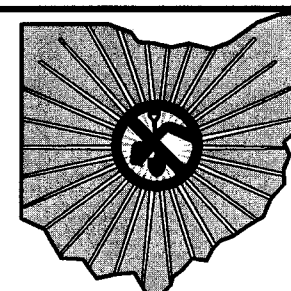
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FILE NO.

1550-000-03

3



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GRADING LEGEND

835	EXIST. CONTOUR
836	PROP. CONTOUR
854.6	EXIST. SPOT ELEVATION
854.6	PROP. SPOT ELEVATION
1/2"	TOP OF CURB
1/2"	TOP OF PAVEMENT
0	GUTTER
0	EDGE OF PAVEMENT
0	EDGE OF WETLAND
T.F.	TOP OF FOUNDATION
F.G.	FINISH GRADE
R.V.O.	REAR VIEWOUT BASEMENT
R.W.O.	REAR WALKOUT BASEMENT
B.F.	BASEMENT FLOOR
G.F.	GARAGE FLOOR
---	DRAINAGE DIRECTION
---	DRIVEWAY
---	PROPOSED SWALE (SEE DETAIL THIS SHEET)
---	TREE PROTECTION FENCE
---	CLEARING AND GRADING LIMITS
---	SILT FENCE
---	INLET PROTECTION
---	RIP-RAP

1st STREET NE 66'
(AKA ERIE AVENUE)

HANDICAP RAMP

175'-LF 4' WIDE PROP.
CONCRETE SIDEWALK

MATCH WIDTH OF EXISTING
SIDEWALK

2 STORY
FRAME
DWG.

FRAME
GARAGE

FRAME SHED
(NO FOUNDATION)

2 STORY
GARAGE

FRAME
SHED

2 STORY
FRAME
DWG.

JANICE STREET
NE 50'

EXISTING
1 STORY
FRAME & BRICK
BUILDING

ROOFED
AREA

RETAINING WALL

F.G.=81.90

F.G.=80.90

F.G.=79.90

F.G.=83.00

F.G.=82.00

F.G.=81.00

F.G.=90.00

F.G.=89.00

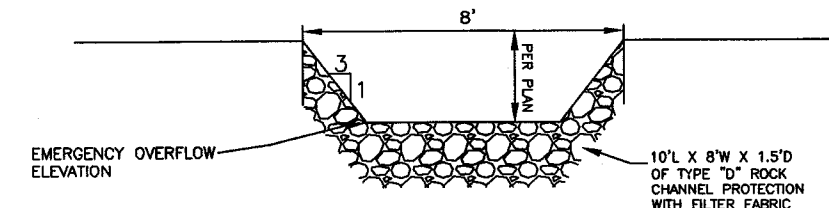
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F.G.=89.90

F.G.=87.90

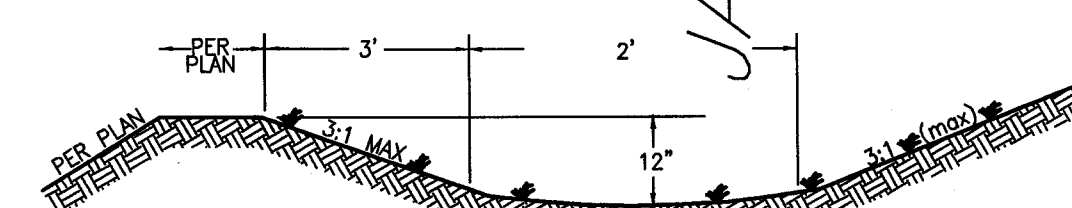
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F.G.=98.50



EMERGENCY OVERFLOW DETAIL

NOT TO SCALE



SWALE

NOT TO SCALE

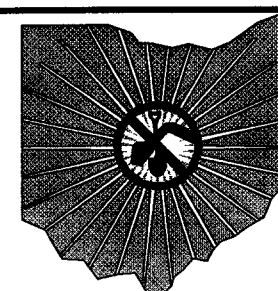


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CLIENT AMHERST VILLAGE DEVELOPMENT, LLC AMHERST VILLAGE CONDOMINIUMS OVERALL GRADING PLAN	CAD FILE 05000680CP-04-G
REVISIONS DATE 11-15-05	
SCALE 0 15 30 1" = 30 FEET DR. SG CH. MB P.M. M. BRYANT BOOK JOB 05000680 FILE NO. 1550-000-04	
4	

	SILT FENCE
	INLET PROTECTION
	ROCK CHANNEL PROTECTION
	TREE PROTECTION FENCE
	GRADING LIMITS
	CONSTRUCTION ENTRANCE

- 1) CONSTRUCTION OPERATION SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STORM DRAIN MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.
- 2) CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
- 3) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER DISCHARGE FROM THE CONSTRUCTION ACTIVITIES IS REQUIRED PRIOR TO ANY EARTH CHANGE.
- 4) CONTRACTOR IS RESPONSIBLE FOR GRADING OF SIDE AND REAR YARDS AS SHOWN ON THE PLANS AND FOR ANY DRAINAGE AS INTENDED.
- 5) CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND DUST CONTROL.
- 6) VEGETATION WILL BE ESTABLISHED WITHIN 5 DAYS OF REACHING FINAL GRADE OR WHENEVER DISTURBED AREAS WILL REMAIN UNCHANGED FOR GREATER THAN 21 DAYS.
- 7) TERRACING SHALL BE USED ALONG ALL SLOPES OF SIGNIFICANT LENGTH OR STEEPNESS.
- 8) IF EROSION WITHIN 25' FEET OF ANY WETLAND IS DISTURBED, IT WILL BE RE-ESTABLISHED BY AN EROSION CONTROL BLANKET.

- 1) SEDIMENT POND/TRAPS AND PERIMETER CONTROLS SHALL BE IMPLEMENTED AS A FIRST STEP GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE STABILIZED.
- 2) DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPLIED MEASURES TO PREVENT EROSION.
- 3) DITCHES WITH GRADES GREATER THAN 1.5% AND ALL OTHER SLOPES GREATER THAN 6% WILL HAVE EROSION CONTROL, BLANKETS/MATTING INSTALLED TO STABILIZATION.
- 4) A) SOLID OR LIQUID WASTE SHALL BE SHALL BE DISCHARGED INTO STORM WATER RUNOFF
- 5) ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST CONFORM TO THE SPECIFICATIONS OF THE EROSION AND LAND DEVELOPMENT CODE STANDARDS FOR STORM WATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STEAM PROTECTION.
- 6) OTHER EROSION AND SEDIMENTS CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONTROLS
- 7) REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES. MAINTENANCE RECORDS OF MAINTENANCE SHALL BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY SEVEN DAYS AND IMMEDIATELY AFTER ANY RAINFALL PERIOD. PROVIDED WILL BE NAME OF INSPECTOR, AOR OBSERVATIONS, DATE OF INSPECTION AND CORRECTIVE MEASURES TAKEN.
- 8) WINTERIZATION - ANY DISTURBED AREA THAT IS NOT GOING TO BE WORKED FOR 21 DAYS OR MORE MUST BE SEEDDED AND MULCHED BY NOVEMBER 1 OR MUST HAVE A DORMANT SEEDING OR MULCH COVER APPLIED BEFORE NOVEMBER 1.
- 9) DISPOSAL OF SOLID, SANITARY AND TOXIC WASTE:
SOLID, SANITARY AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPERLY LICENSED OR PERMITTED FACILITY. STATE AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR OUT INTO GROUND OR INTO STORM SEWER ANY SOLVENTS, PAINT, STAINS, GLUES, OILS, GREASE, LUBRICANTS, MOTOR OIL, ANTIFREEZE, FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS AND OTHER SUCH TOXIC OR HAZARDOUS WASTE.
- 10) WASTE STORAGE - ALL WASTE SHOULD OCCUR IN THE DESIGNATED AREA WHERE THE WASHING CAN COLLECT AND BE DISPOSED OF PROPERLY WHEN THEY HARBOR.
- 11) DIKED STORAGE TANKS SHALL BE LOCATED IN DIKED AREAS AWAY FROM DRAINAGE CHANNELS. THE DIKED AREAS SHOULD HOLD A VOLUME AT LEAST 110% OF THE LARGEST TANK. THE DIKED AREAS SHOULD BE NECESSARY IF CONDUCTS USES SELF -CONTAINED SUMP, PUMP TANKS.
- 12) TRENCH AND GROUND WATER DEWATERING- ALL SEDIMENT LAUND PUMP MUST PASS THROUGH A SEDIMENT BASIN, FILTER BAG, OR SUMP PUMP TO DISCHARGE TO A STABLE OUTLET. THE PUMP SHALL BE PUMPED TO A STABLE OUTLET AND SHALL NOT CO-MINGEL WITH SEDIMENT.

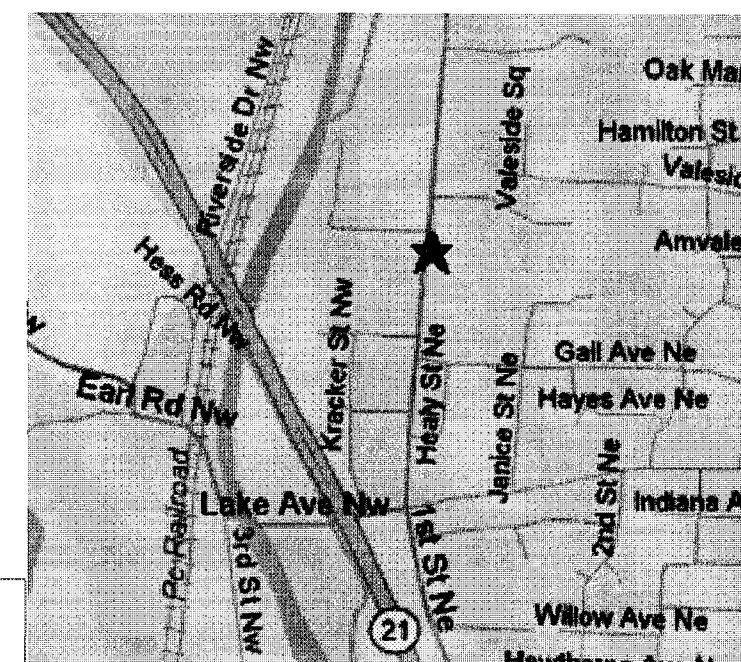
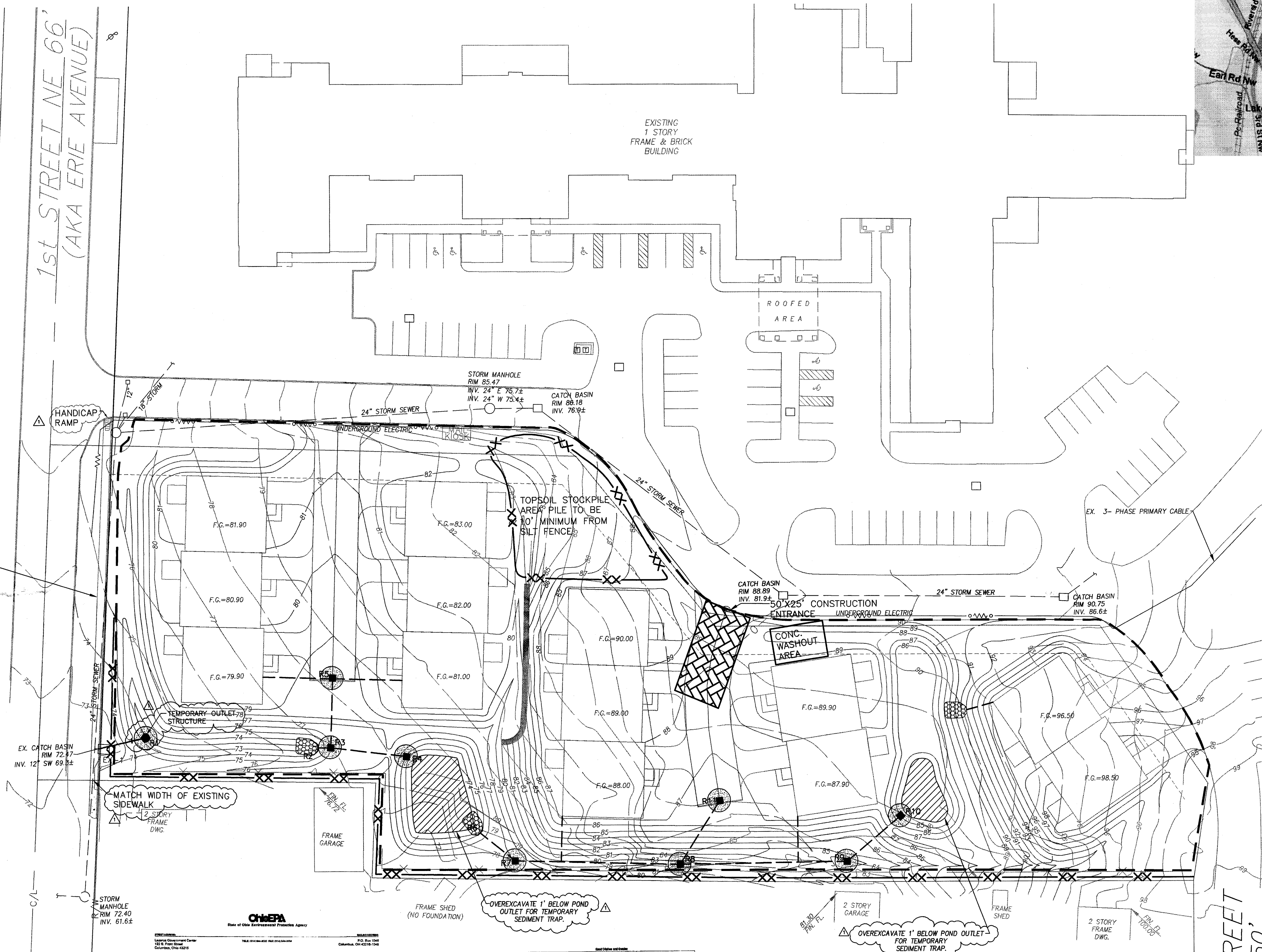


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Lazarus Government Center
 122 S. Front Street
 Columbus, Ohio 43215

TEL: (614) 464-3030 FAX: (614) 464-3018

AMHERST VILLAGE DEVELOPMENT LLC

02/22/2004

AMHERST VILLAGE DEVELOPMENT LLC
MARK HOLTZ
28949 CHAGRIN BLVD - #201
BEACHWOOD OH 44122

RE: Approval for coverage under Ohio EPA General Permit: OHG000002
STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY.

Dear Discharger:

The Ohio Environmental Protection Agency has received the Notice of Intent (NOI) for coverage under the Storm Water General Permit for Construction Activity you submitted for:

Facility Name: AMHERST FIVE-FLYING CONDORS
Facility Street / Location: JAMNICE ST
County: STARKE
City(town) and Township(s): MABILLION ;
Ohio EPA Facility Permit Number: CIP069487

This application is approved for coverage under the above referenced Ohio EPA general permit. Please use your Ohio EPA facility permit number in all future correspondence. Enclosed is a copy of the general permit requiring your discharge. Please read and review the permit carefully. The permit contains requirements and conditions which will apply to your construction project. If you have questions regarding the permit or need assistance with compliance, please contact the Regional Office at 1-800-368-5888.

This NOI and Ohio EPA has concluded your written notice requesting continuing permit coverage.

Please note that OHC has ceased granting coverages under the expired construction permit permit (H0100000) on April 4, 2003. Coverages are now only granted under OHC000000. There are differences between the two permits, therefore, please send the enclosed copy of OHC000000 carefully. Also, be aware that if more than one operator, as defined in Part VII of OHC000000, will be engaged at a site, each operator will be required to obtain a separate permit. One operator shall submit an NOI and the additional operator(s) shall submit a Co-permittees NOI. Co-permittee will all be covered under the same facility permit number. There is no fee associated with the Co-permittee NOI form.

You may obtain current forms and instructions from our web site at:
<http://www.oche.state.nh.us/development/permits.html>
Forms can be typed or printed from the web site or by contacting Mike Joseph (construction program specialist) at (614) 782-0782, or email Mike at:

or by calling (614) 644-2001 and asking to speak with a member of the Storm Water Section.

Sincerely,

Joseph P. Kozelak
Director

Bob Tipt, Governor
Jerrold Stradley, Lieutenant Governor
Christopher Jones, Director

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NPDES COVER LETTER

East Number and Gender			
Ball Number	45-50	1-154	
Year-Open			
Current Number	80	2 1/4	
Factory Program	5	3.1	

Specifications

for
Permanent Seeding

- Site Preparation**

 1. Subsoiling, plow, or other implement shall be used to reduce soil compaction and allow maximum infiltration. Excessives infiltration will help control both runoff and erosion. If necessary, Subsoiling should be done when the ground is dry enough to allow the soil to crack and fracture. Subsoiling shall not be done on any slope where lands or preparation should be limited to what is necessary for establishing vegetation.
 2. The site shall be graded as needed to permit the use of conventional equipment for seeded preparation and the use of any specialized equipment.
 3. Topsoil shall be applied where needed to establish vegetation.
- Seeding**

 1. The following methods may be used for "Conventional Seeding":
 - From October 1 through November 28, prepare the bed, add the required amount of seed, and fertilize the seedbed immediately after seeding. Seed, and before 11, broadcast the indicated seed rates. Increase seeding rates by 50% for the type of seeding.
 - From November 29 through March 15, when soil is too hard to turn, prepare the seedbed, then and after fertilize the seedbed using broadcast, mulch, and smother. Increase the seeding rates by 50% for the type of seeding.
 - Apply seed evenly with a seed box, seed drill, or seed, and packer, aerial, or hydro-seeded (slurry) type seeders and tumbler(s) on a flat, moist seedbed.

Standard Practices:

1. **Fertilizer:**
 - a. **Pre-plant:** 2 to 3 pounds ground limestone shall be applied to each seed bed (recommended) at a rate less. In lieu of a soil test, fertilizer shall be applied at the rate of 100 lbs. per acre, 1,000 lbs. per acre, or 2 tons per acre.
 - b. **Post-plant:** Fertilizer shall be recommended by a soil test. In place of a soil test, fertilizer shall be applied at a rate of 25 pounds per 1,000 lbs. or 1,000 pounds per acre of 10-10-10 or 15-15-15 fertilizer.
 - c. **The lime and fertilizer shall be worked into the seed bed with a harrow, spring-tine harrow, or other suitable seed bed implement in a depth of 3 inches.** On sloping land, the fertilizer shall be applied on the contour.
2. **Watering:**
 - a. **Heavy watering**, except when a crop is young.
 - b. **In seed, the water should be turned** following seedling operations with a catpaw, rake, or light disc striking hard, creating a surface film on the soil and water beneath.

Marketing:

1. **Materials tested** shall be applied immediately after seeding. Demand security of the seed shall be maintained. The seed shall be covered with an approved method.
2. **Measurements:**
 - a. **Discs or arrow** in seed bed can be verified on the ground.
 - b. **Arrow** in seed bed at the rate of 2 tons per acre or 100,000 lbs. per acre.

Seeding should be done March 1 to May 31 or August 1 to September 30, if seeding occurs outside of the above-specified periods.

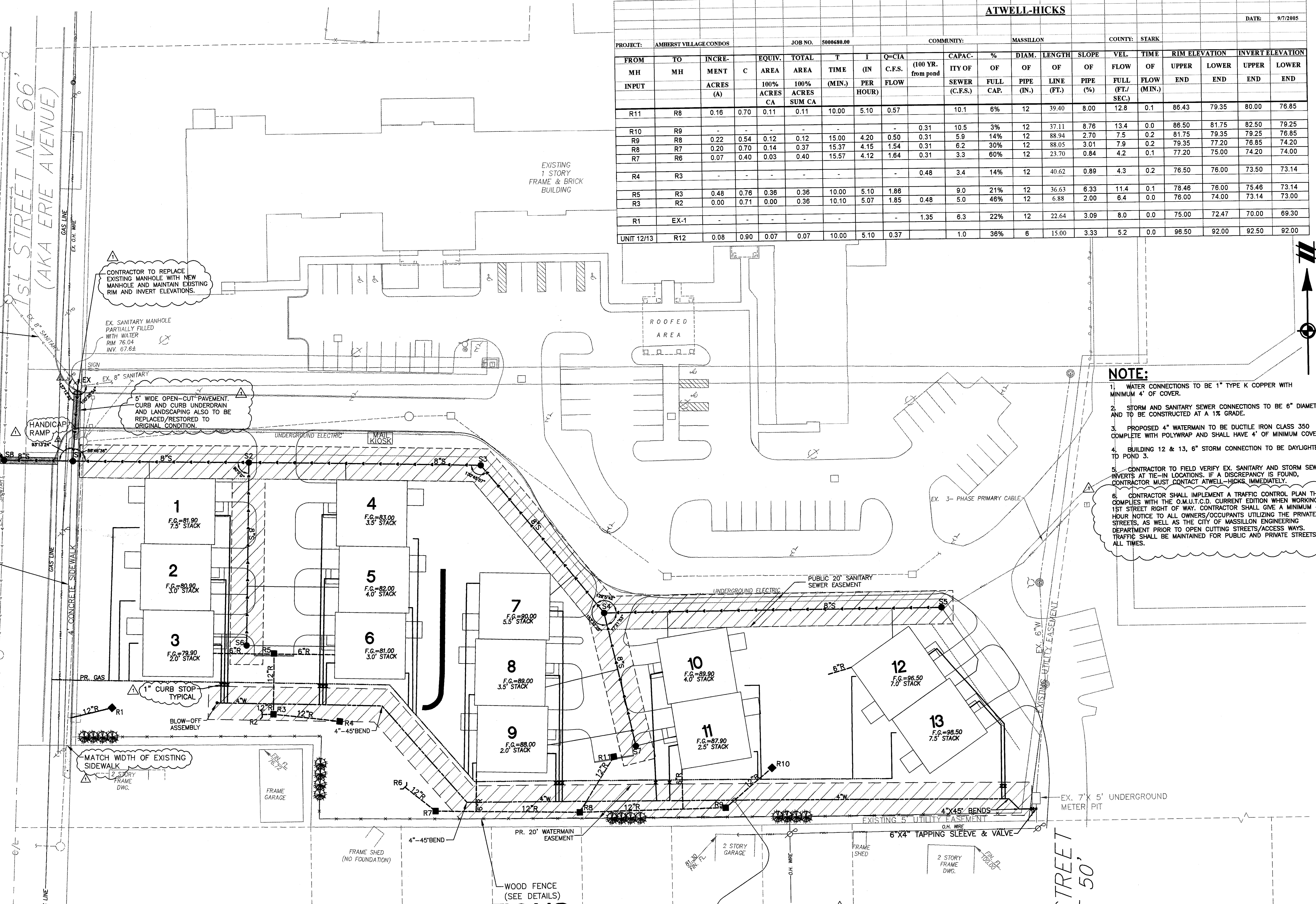
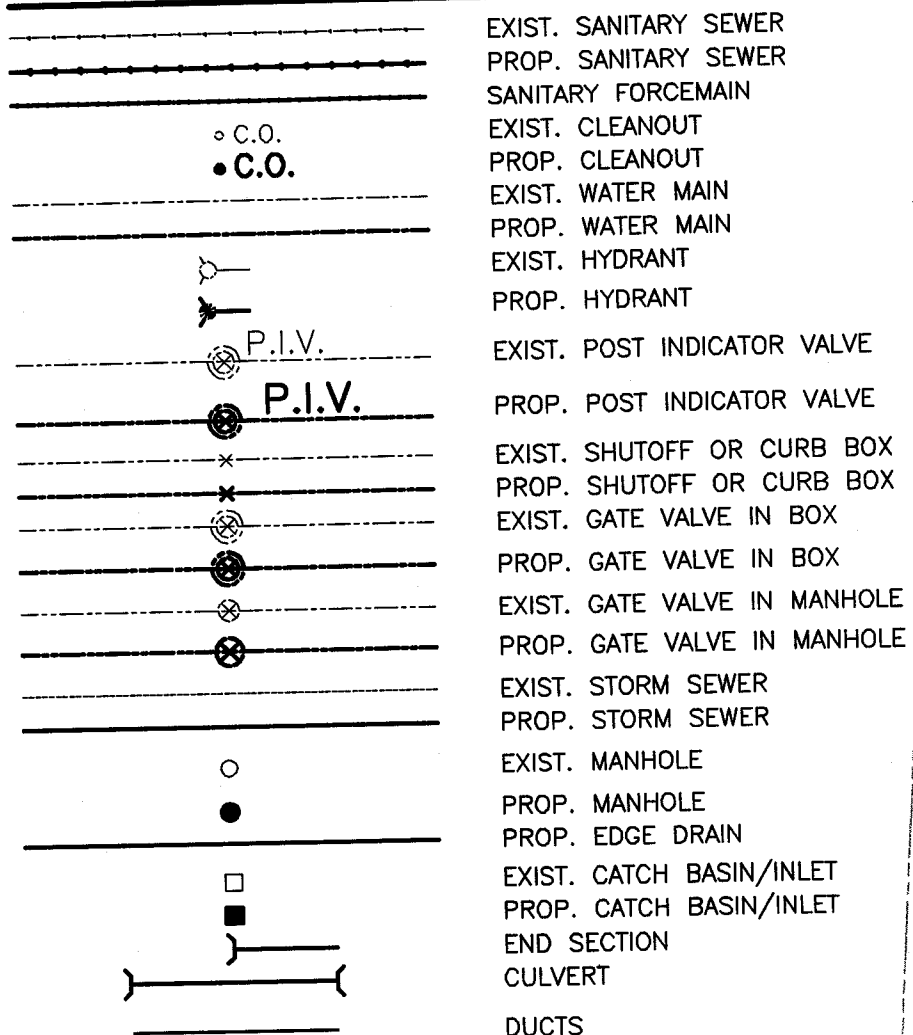
After dunes, additional mounds and irrigation may be required to ensure a minimum of 60% germination. Things for seedbed preparation should be done when the soil is dry enough to be available and not kept ribbon away compressed by hand. For winter seeding, see the following section on dormant seeding.

1. Seedlings should not be made from October 1 through November 20. During this period, the seeds are busy to germinate but probably will not be able to survive the winter.

PERMANENT SEEDING NOTES

STORM SEWER CALCULATIONS

UTILITY LEGEND



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- NOTE:
1. WATER CONNECTIONS TO BE 1" TYPE K COPPER WITH MINIMUM 4' OF COVER.
 2. STORM AND SANITARY SEWER CONNECTIONS TO BE 6" DIAMETER AND TO BE CONSTRUCTED AT A 1% GRADE.
 3. PROPOSED 4" WATERMAIN TO BE DUCTILE IRON CLASS 350 COMPLETE WITH POLYWRAP AND SHALL HAVE 4' OF MINIMUM COVER.
 4. BUILDING 12 & 13, 6" STORM CONNECTION TO BE DAYLIGHTED TO POND 3.
 5. CONTRACTOR TO FIELD VERIFY EX. SANITARY AND STORM SEWER INVERTS AT TIE-IN LOCATIONS. IF A DISCREPANCY IS FOUND, CONTRACTOR MUST CONTACT ATWELL-HICKS IMMEDIATELY.
 6. CONTRACTOR SHALL IMPLEMENT A TRAFFIC CONTROL PLAN THAT COMPLIES WITH THE O.M.U.T.C.D. CURRENT EDITION WHEN WORKING IN 1ST STREET RIGHT OF WAY. CONTRACTOR SHALL GIVE A MINIMUM 48 HOUR NOTICE TO ALL OWNERS/OCCUPANTS UTILIZING THE PRIVATE STREETS, AS WELL AS THE CITY OF MASSILLON ENGINEERING DEPARTMENT PRIOR TO OPEN CUTTING STREETS/ACCESS WAYS. TRAFFIC SHALL BE MAINTAINED FOR PUBLIC AND PRIVATE STREETS AT ALL TIMES.

SANITARY SEWER CALCULATIONS

SEWER RUN		PIPE INPUT			MANHOLE		
From	To	Pipe Length (LF)	Pipe Dia. (IN)	Pipe Slope %	Rim Elev	U/S Invert Elev	D/S Invert Elev
5	4	205.59	8"	2.69%	92.50	84.97	79.44
4	3	116.92	8"	1.36%	88.41	79.44	77.86
3	2	141.43	8"	4.53%	85.25	77.86	71.45
2	1	107.37	8"	3.79%	81.25	71.45	67.37
1	8	45.39	8"	0.50%	77.50	67.37	66.54
Main Run to Existing Sewer							
6	2	110.75	8"	0.50%	79.00	72.00	71.45
7	4	82.52	8"	0.50%	87.00	79.85	79.44
EX	1	45.39	8"	0.50%	76.04	67.60	67.37

48 BUSINESS HOURS
BEFORE YOU DIG
CALL O.U.P.S.
1-800-362-2764
FOR THE LOCATION OF UNDERGROUND FACILITIES

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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888 850 4200
www.atwell-hicks.com
MICHIGAN ILLINOIS OHIO FLORIDA

PREPENTER LAND GROUP
AMHERST VILLAGE
CONDOMINIUMS
OVERALL UTILITY PLAN

CAD FILE
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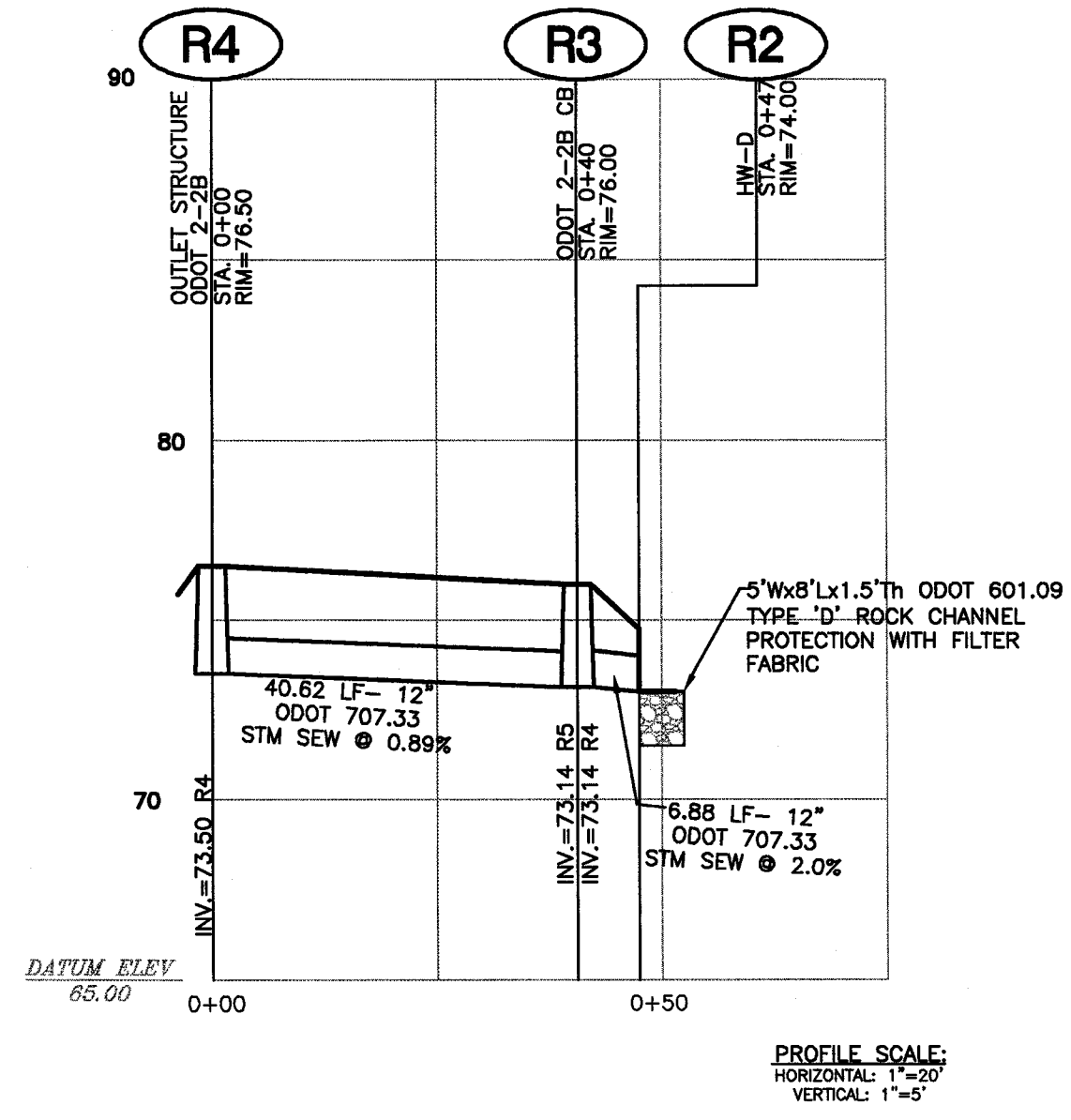
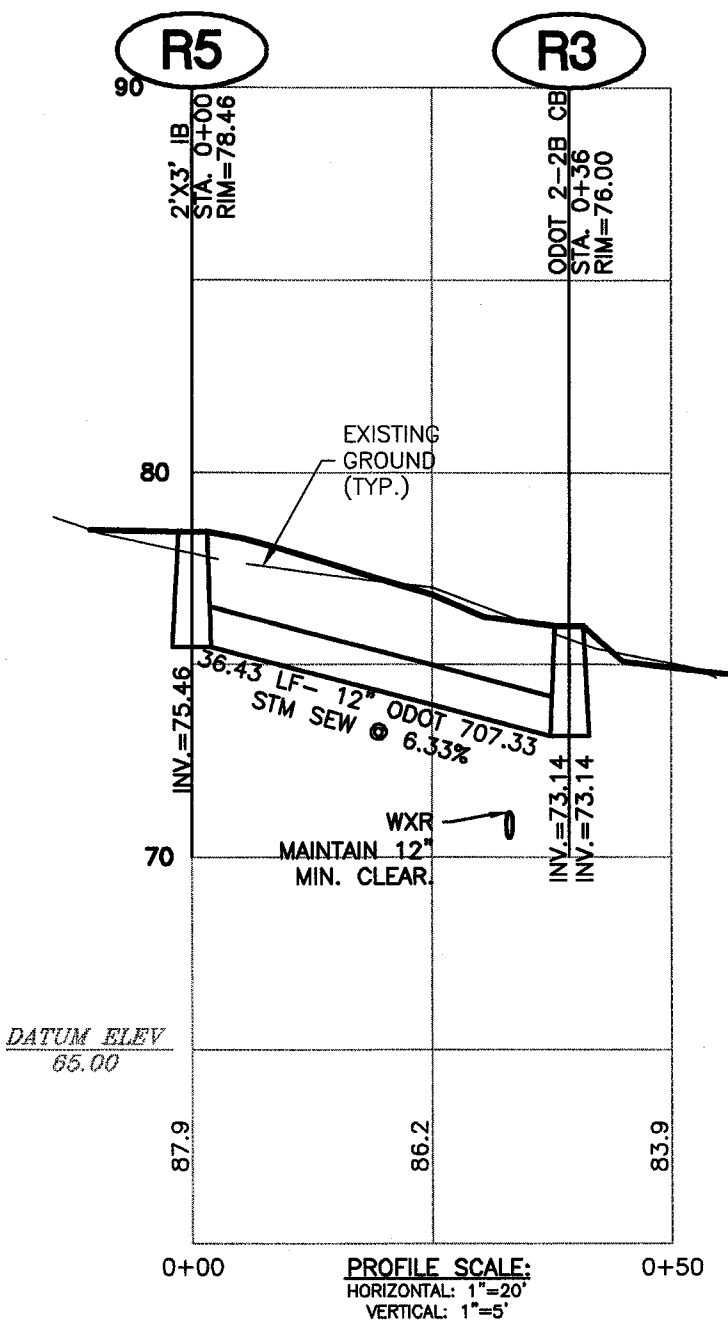
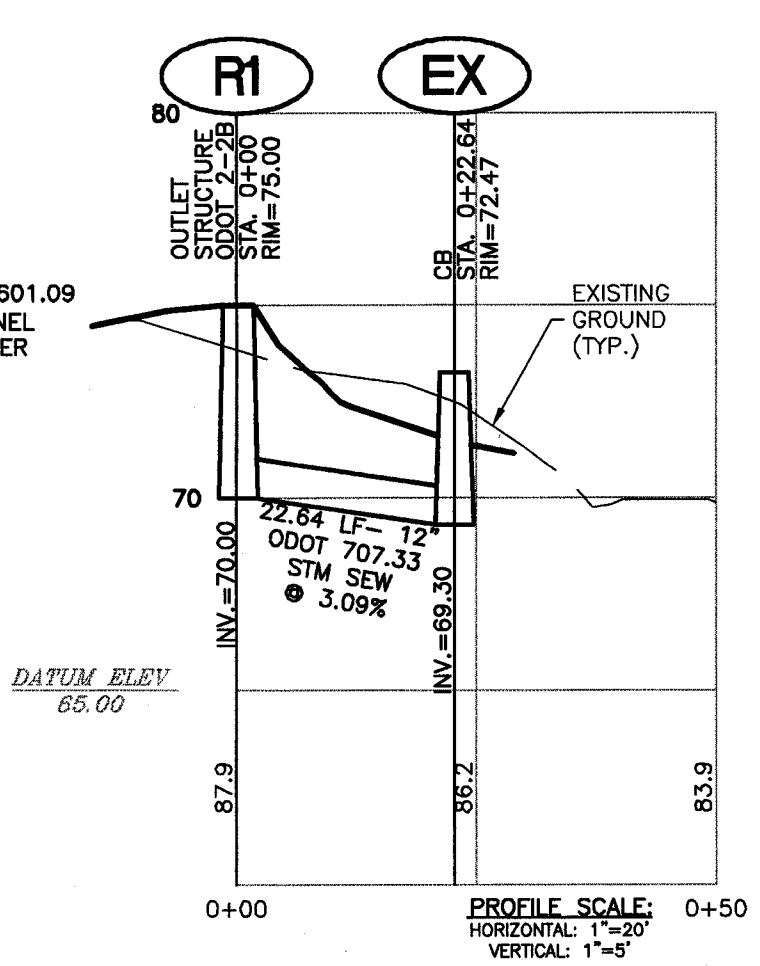
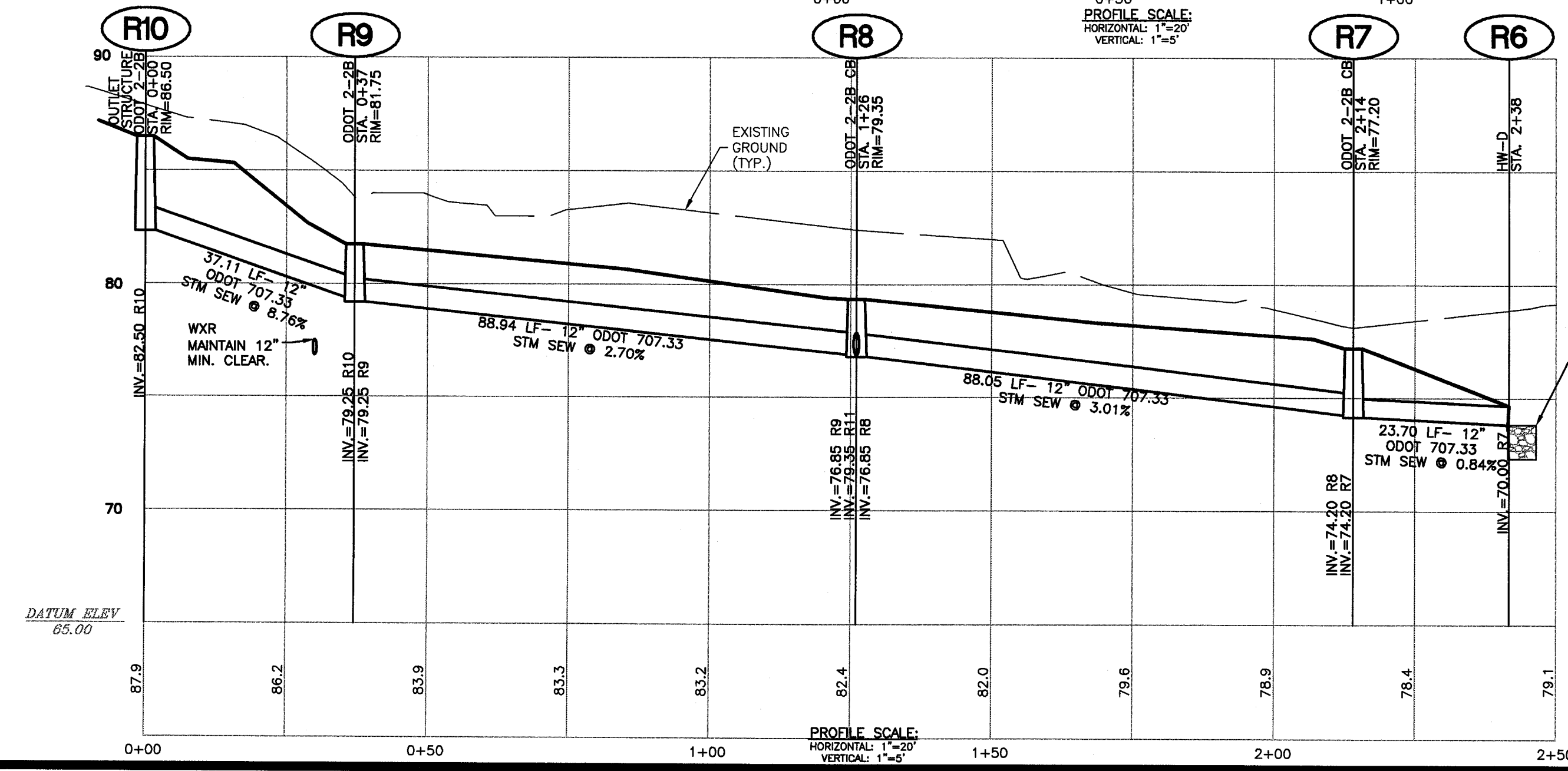
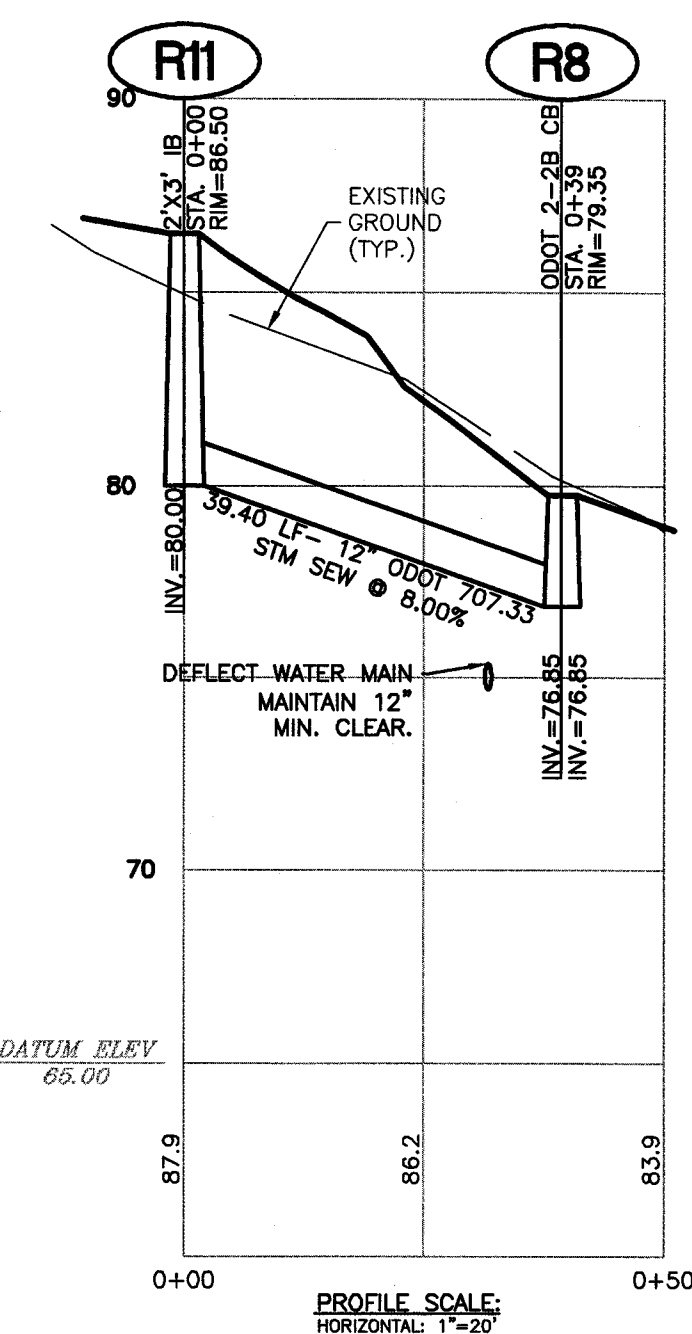
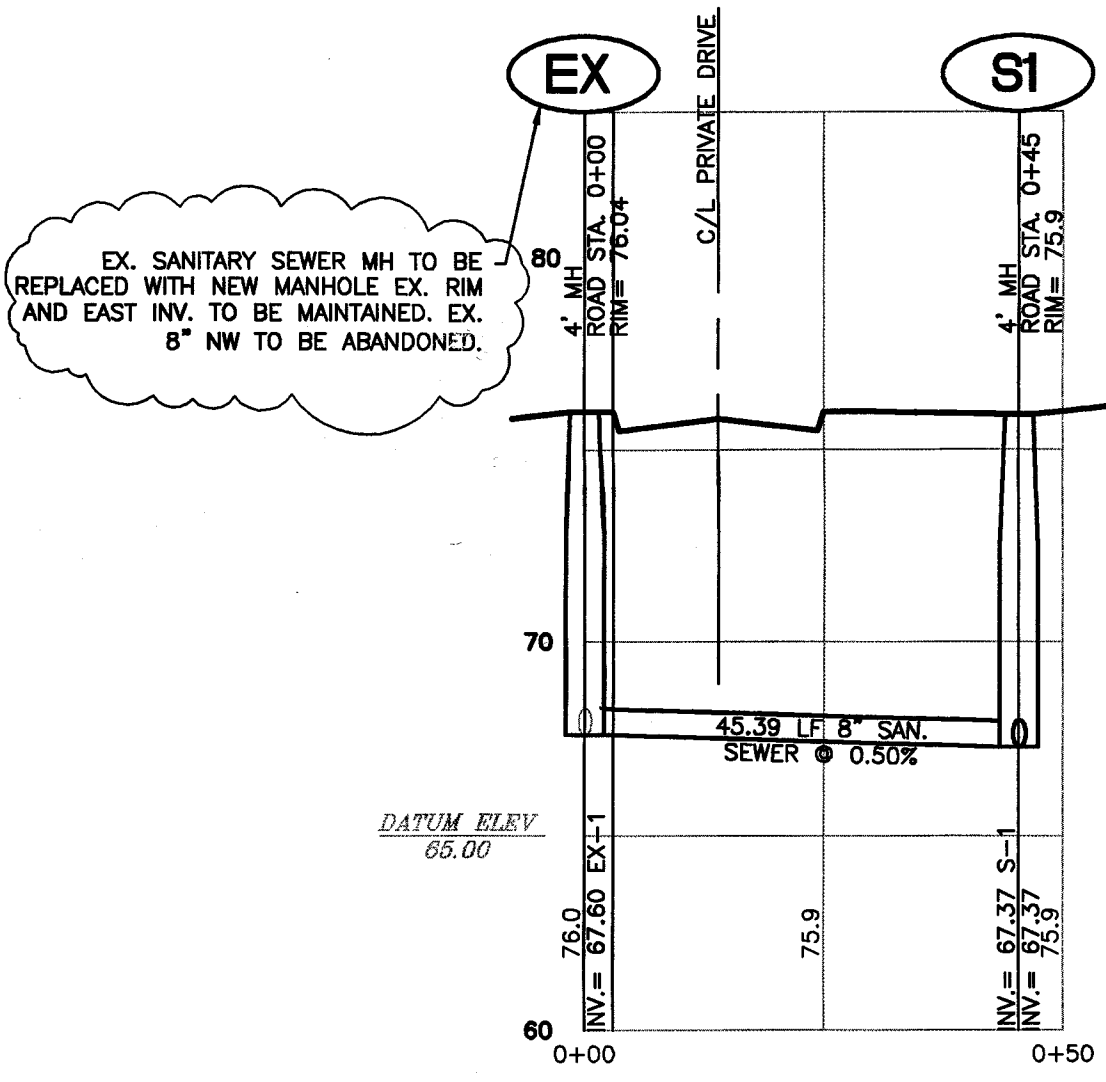
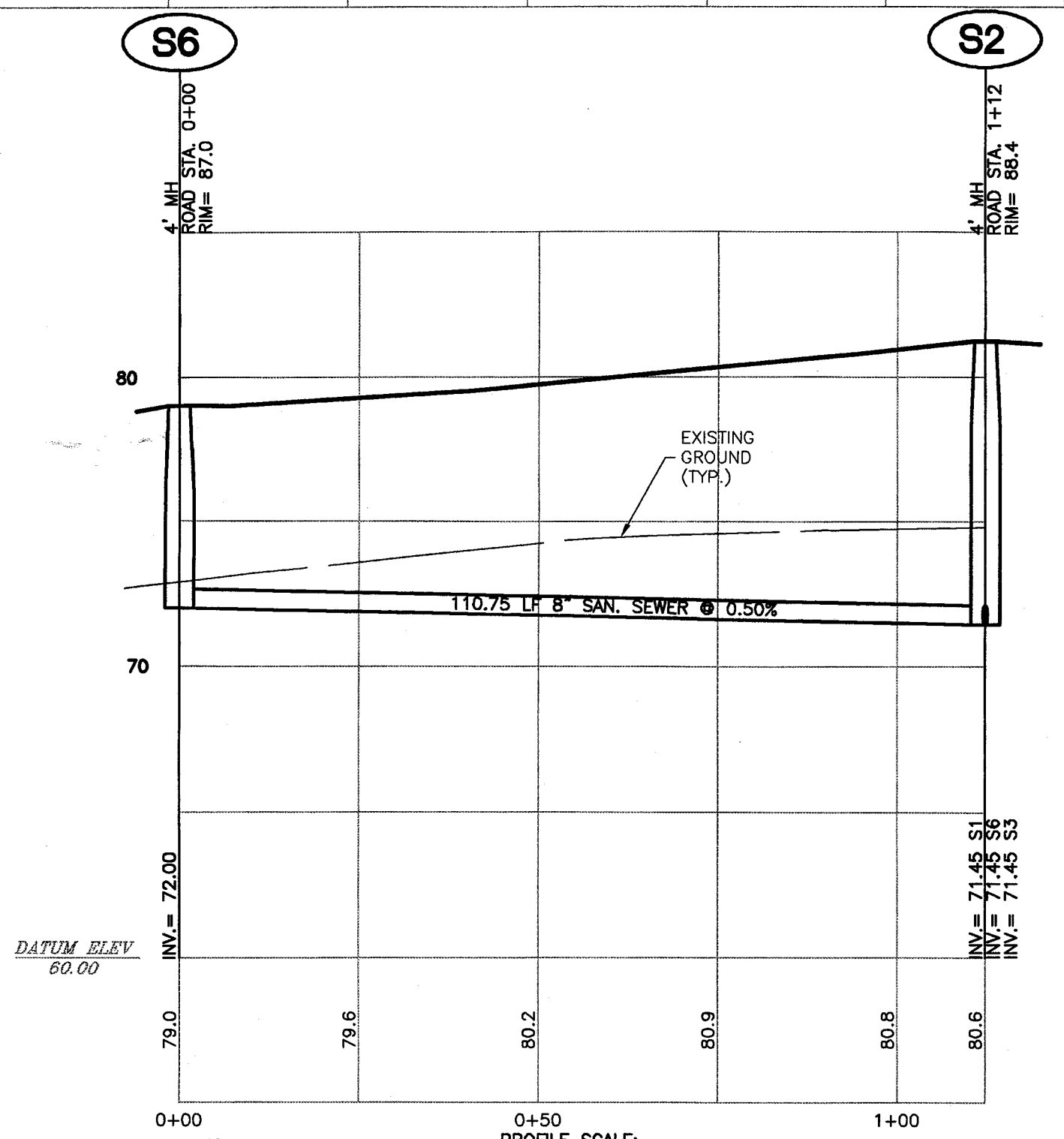
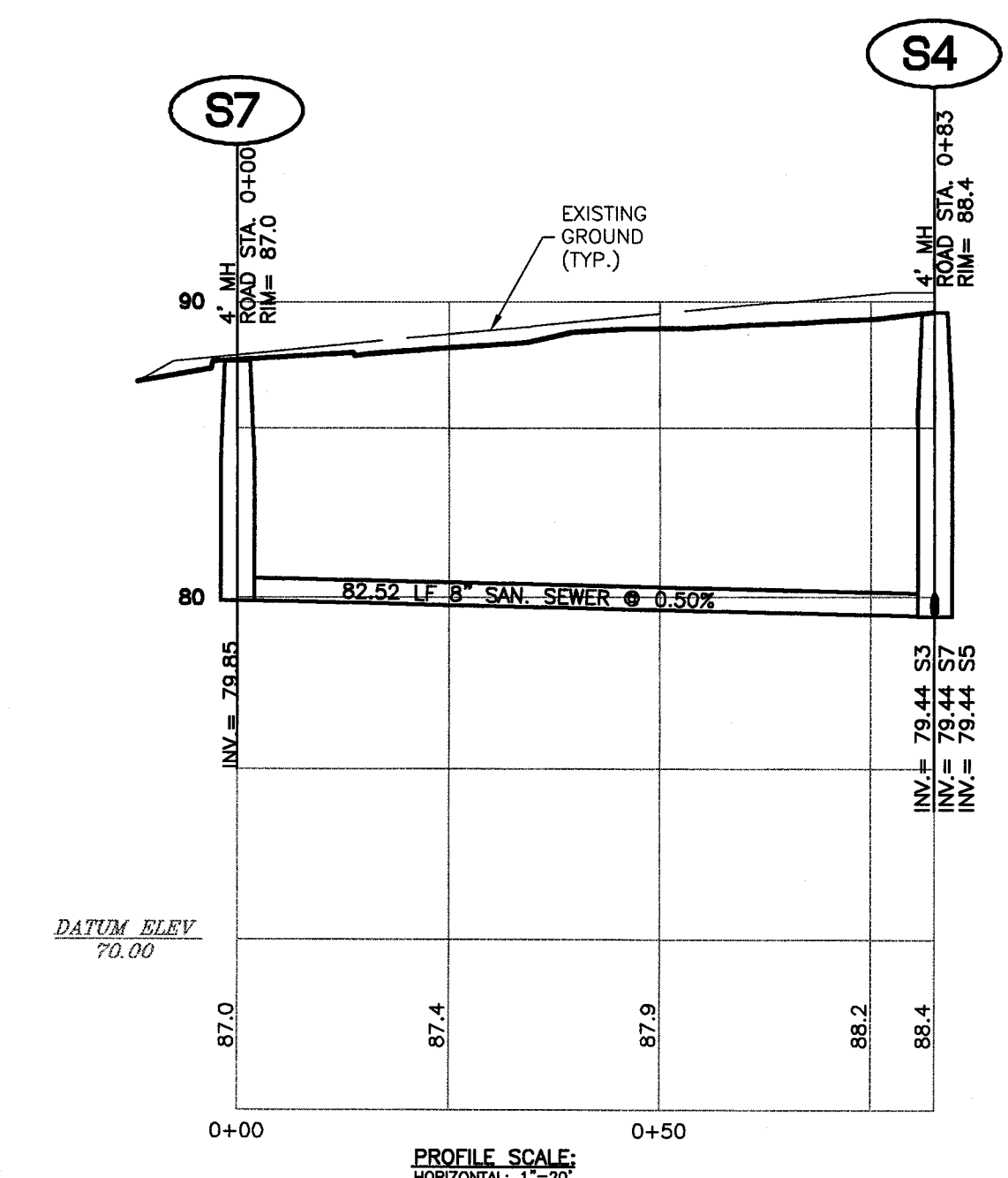
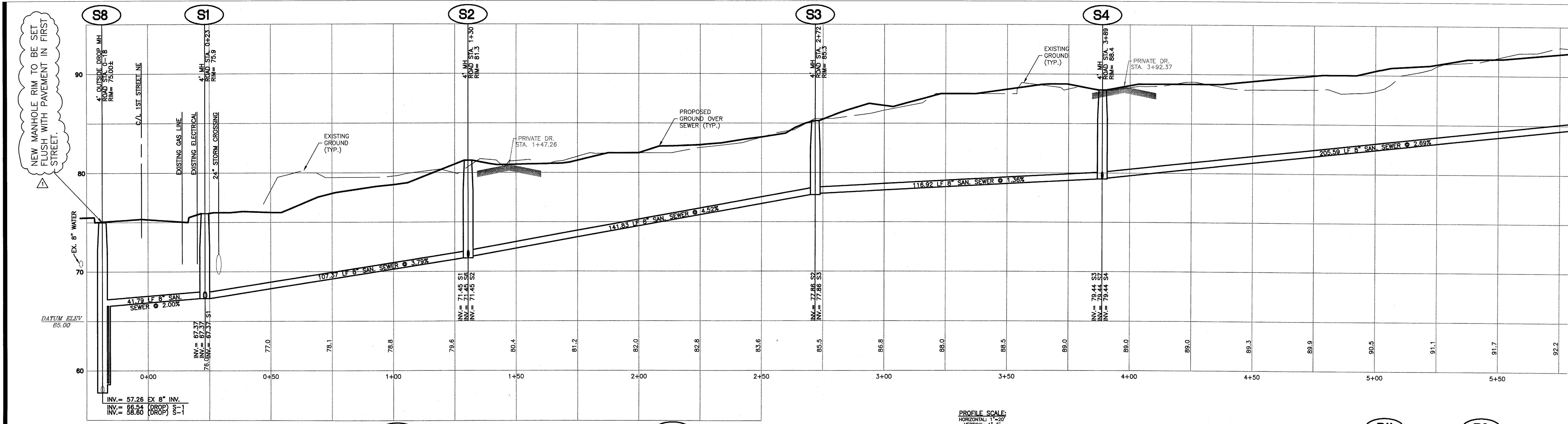
REVISED SANITARY PER CITY OF MASSILLON 2/15/06

DATE
11-15-05

SCALE
1" = 30 FEET

DR. SG. CH. MB
P.M. M. BRYANT
BOOK
JOB 05000680
FILE NO.
1550-000-06

6



Specifications
for
Permanent Seeding

SITE PREPARATION

1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.
2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.
3. Resoil shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

1. Lime-Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.
2. Fertilizer-Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer 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.
3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or Aug 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillage/seedbed preparation should be done when the soil is

dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

DORMANT SEEDINGS.

1. Seedings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate but probably will not be able to survive the winter.
2. The following methods may be used for "Dormant Seeding":
 - From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.
 - From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.
 - Apply seed uniformly with a cyclone seeder, drill, cutipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.
 - Where feasible, except when a cutipacker type seeder is used, the seedbed should be firmed following seeding operations with a cutipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.

Specifications for Silt Fence

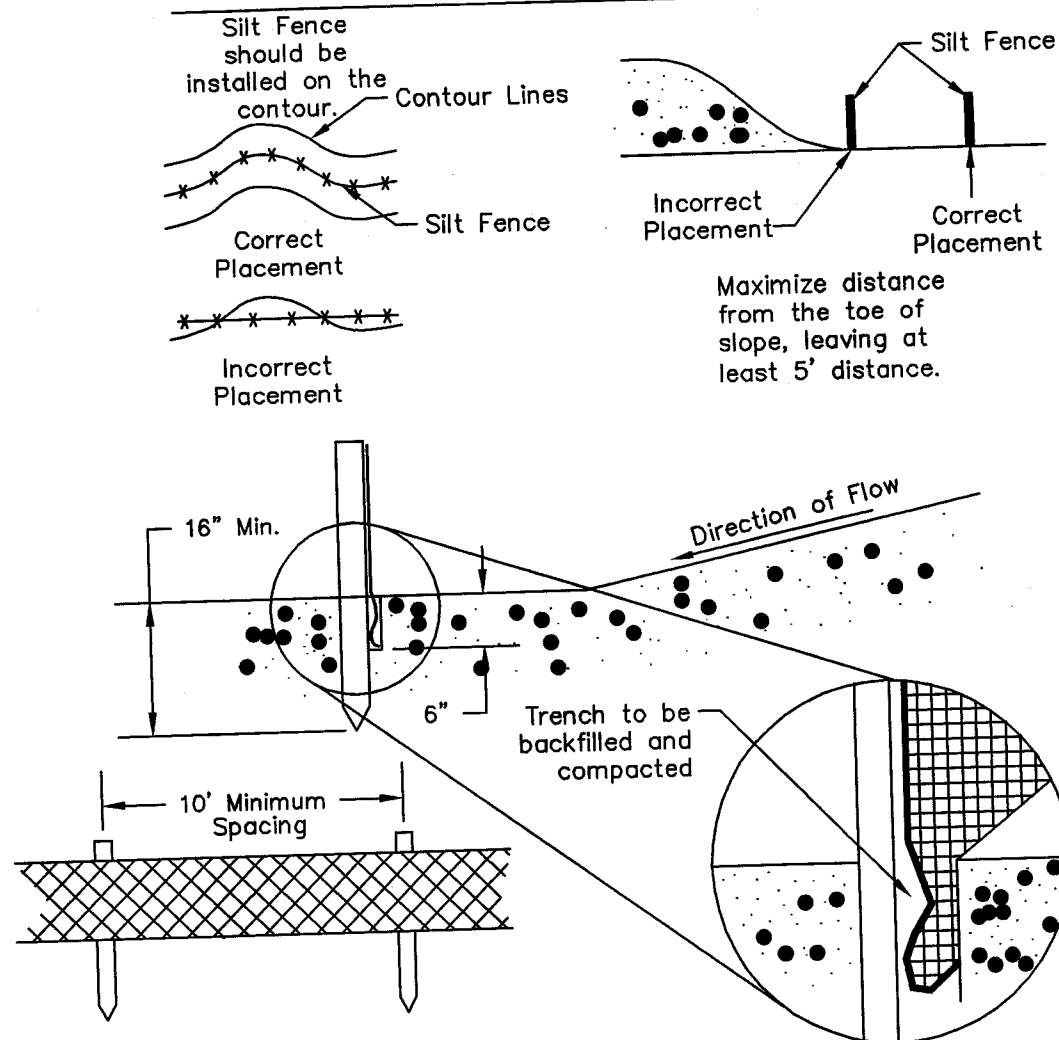
1. Silt fence shall be constructed before upslope land disturbance begins.
2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions which may carry small concentrated flows to the silt fence are dissipated along its length.
3. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.
4. Where possible, silt fence shall be placed on the flattest area available.
5. Where possible, vegetation shall be preserved for 5 ft. (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.
6. The height of the silt fence shall be a minimum of 16 in. above the original ground surface.
7. The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench shall be cut with a trencher, cable laying machine, or other suitable device which will ensure adequate uniform trench depth.
8. The silt fence shall be placed with the stakes on the downslope side of the geotextile and so that the 8 in. of cloth are below the ground surface. Excess material shall lay on the bottom of the 6-in. deep trench. The trench shall be backfilled and compacted.
9. Seams between sections of silt fence shall be overlapped with the end stakes of each section wrapped together before driving into the ground.
10. Maintenance - Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under or around the ends, or in any other way becomes a concentrated flow, one of the following shall be performed, as appropriate: 1) The layout of the silt fence shall be changed, 2) Accumulated sediment shall be removed, or 3) Other practices shall be installed.

Criteria for Silt Fence Materials

1. Fence Posts - The length shall be a minimum of 32 in. long. Wood posts will be 2 by 2 in. hardwood of sound quality. The maximum spacing between posts shall be 10 ft.
2. Silt Fence Fabric (See chart below)

Fabric Properties	Values	Test Method
Grab Tensile Strength	90 lb. minimum	ASTM D 1682
Mullen Burst Strength	190 psi minimum	ASTM D 3786
Slurry Flow Rate	0.3 gal/min/ft maximum	
Equivalent Opening Size	40-80	US Std. Sieve CW-02215
Ultraviolet Radiation Stability	90% minimum	ASTM-G-26

Specifications for Silt Fence



Specifications
for
Temporary Seeding

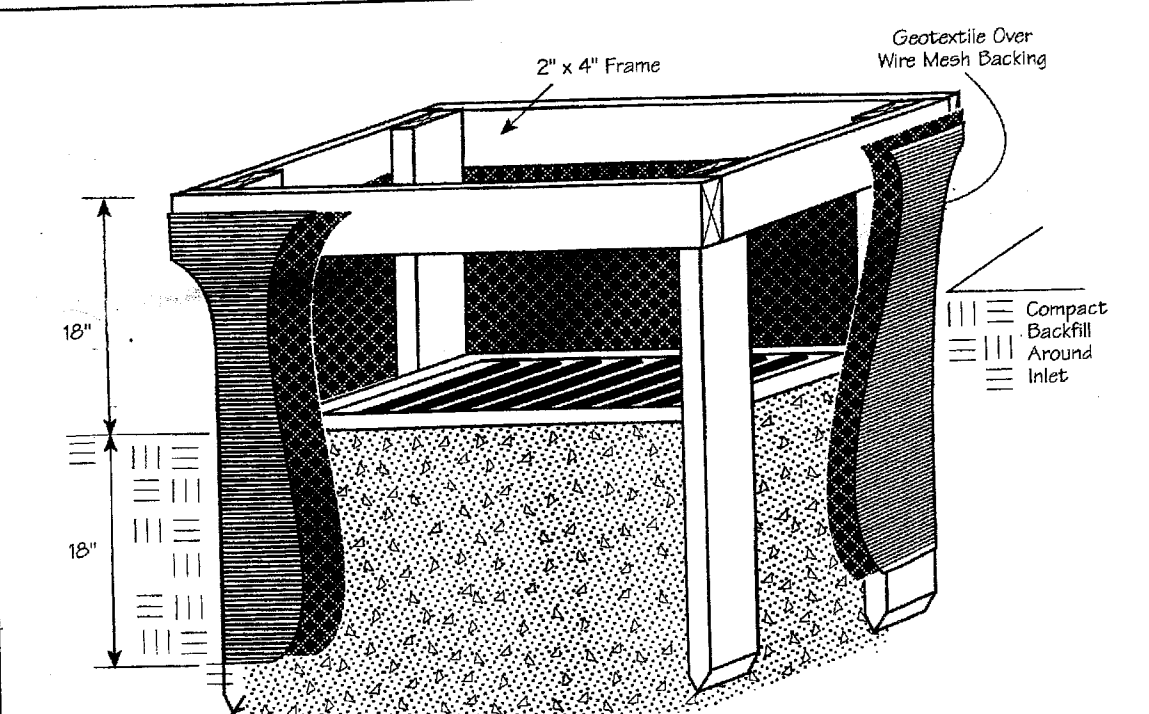
Temporary Seeding Species Selection

Seeding Dates	Species	Lb./1,000 ft. ²	Per Ac.
March 1 to August 15	Oats	3	4 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
August 16 to November 1	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Wheat	3	2 bushel
	Tall Fescue	1	40 lb.
November 1 to Spring Seeding	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.

Note: Other approved seed species may be substituted.

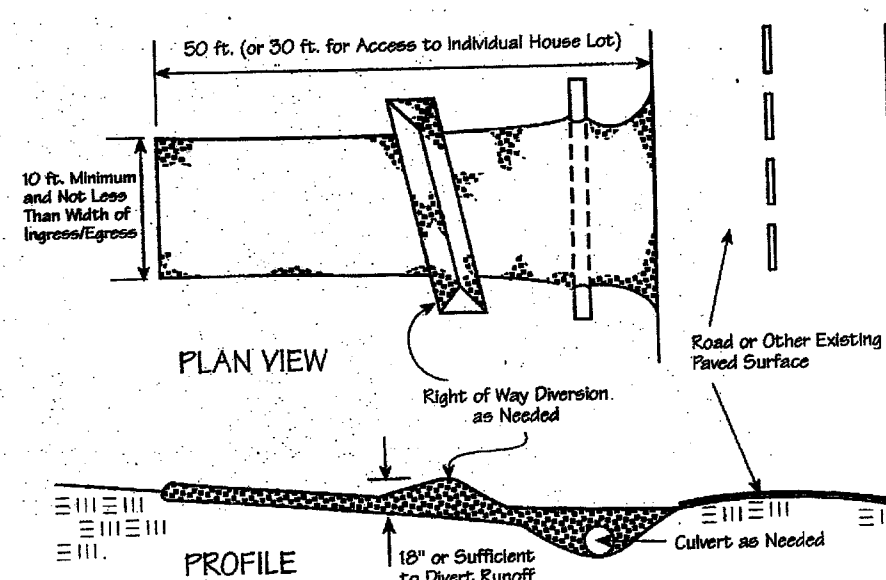
1. Structural erosion- and sediment-control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction-site.
2. Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 30 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days. Several applications of temporary seeding are necessary on typical construction projects.
3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.
4. Soil Amendments-Applications of temporary vegetation shall establish adequate stands of vegetation which may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.
5. Seeding Method-Seed shall be applied uniformly with a cyclone seeder, drill, cutipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cutipacker. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately and without interruption.

Specifications
for
Inlet Protection in Swales, Ditch Lines or Yard Inlets



1. Inlet protection shall be constructed either before upslope land disturbance begins or before the storm drain becomes operational.
2. The earth around the inlet shall be excavated completely to a depth of at least 18 in.
3. The wooden frame shall be constructed of 2-by-4-in. construction-grade lumber. The 2-by-4-in. posts shall be driven 1 ft. into the ground at four corners of the inlet and the top portion of 2-by-4-in. frame assembled using the overlap joint shown. The top of the frame shall be at least 6 in. below adjacent roads if ponded water would pose a safety hazard to traffic.
4. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the frame.
5. Geotextile shall have an equivalent opening size of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 in. below the inlet notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
6. Backfill shall be placed around the inlet in compacted 6-in. layers until the earth is even with notch elevation on ends and top elevation on sides.
7. 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 earth dikes shall be at least 6 in. higher than the top of the frame.

Specifications
for
Construction Entrance



1. Stone Size-Two-inch stone shall be used, or recycled concrete equivalent.
2. Length-The construction entrance shall be as long as required to stabilize high traffic areas but not less than 50 ft. (except on single residence lot where a 30-ft. minimum length applies).
3. Thickness-The stone layer shall be at least 6 in. thick.
4. Width-The entrance shall be at least 10 ft. wide, but not less than the full width at points where ingress or egress occurs.
5. Bedding-A geotextile shall be placed over the entire area prior to placing stone. It shall have a Grab Tensile Strength of at least 200 lb. and a Mullen Burst Strength of at least 190 lb.
6. Culvert-A pipe or culvert shall be constructed under the entrance if needed to prevent surface water flowing across the entrance from being directed out onto paved surfaces.
7. Water Bar-A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.
8. Maintenance-Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.
9. 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.

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" INTO THE LOTS OR BEYOND FURTHEST UTILITY, WHICHEVER IS GREATER, 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. SEWER SERVICE 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:

MATERIAL DESCRIPTION	PIPE	JOINT	INSTALLATION
PVC SMOOTH EXTERIOR	ASTM D-3034	ASTM D-3212	ASTM D-2321
PVC CLOSED PROFILE (DUAL WALL)	ASTM F-794	ASTM D-3212	ASTM D-2321
PVC CORRUGATED (DUAL WALL)	ASTM F-949	ASTM D-3212	ASTM D-2321
PVC CORRUGATED EXTERIOR	ASTM F-949	ASTM D-3212	ASTM D-2321
WOP EXTRA STRENGTH	ASTM C-700	ASTM C-425	ASTM C-112
DDIP (CLASS 22)	AWWA C-151	AWWA C-110/C-111	AWWA C-151
ABS COMPOSITE	ASTM D-2680	ASTM D-2235	ASTM D-2680
PVC COMPOSITE	ASTM D-2680	ASTM D-2680	ASTM D-2680

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 VIDEOTAPE 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. MAHOLE 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. PRE-CONSTRUCTION MEETING IS REQUIRED, CONTACT CITY OF MASSILLON ENGINEERING DEPARTMENT AT 330-830-1722 AND STARK SOIL AND WATER DISTRICT AT 330-830-7700.
22. SANITARY PERMITS ARE REQUIRED, CONTACT THE CITY OF MASSILLON ENGINEERING DEPARTMENT FOR LICENSE AND PERMIT REQUIREMENTS.

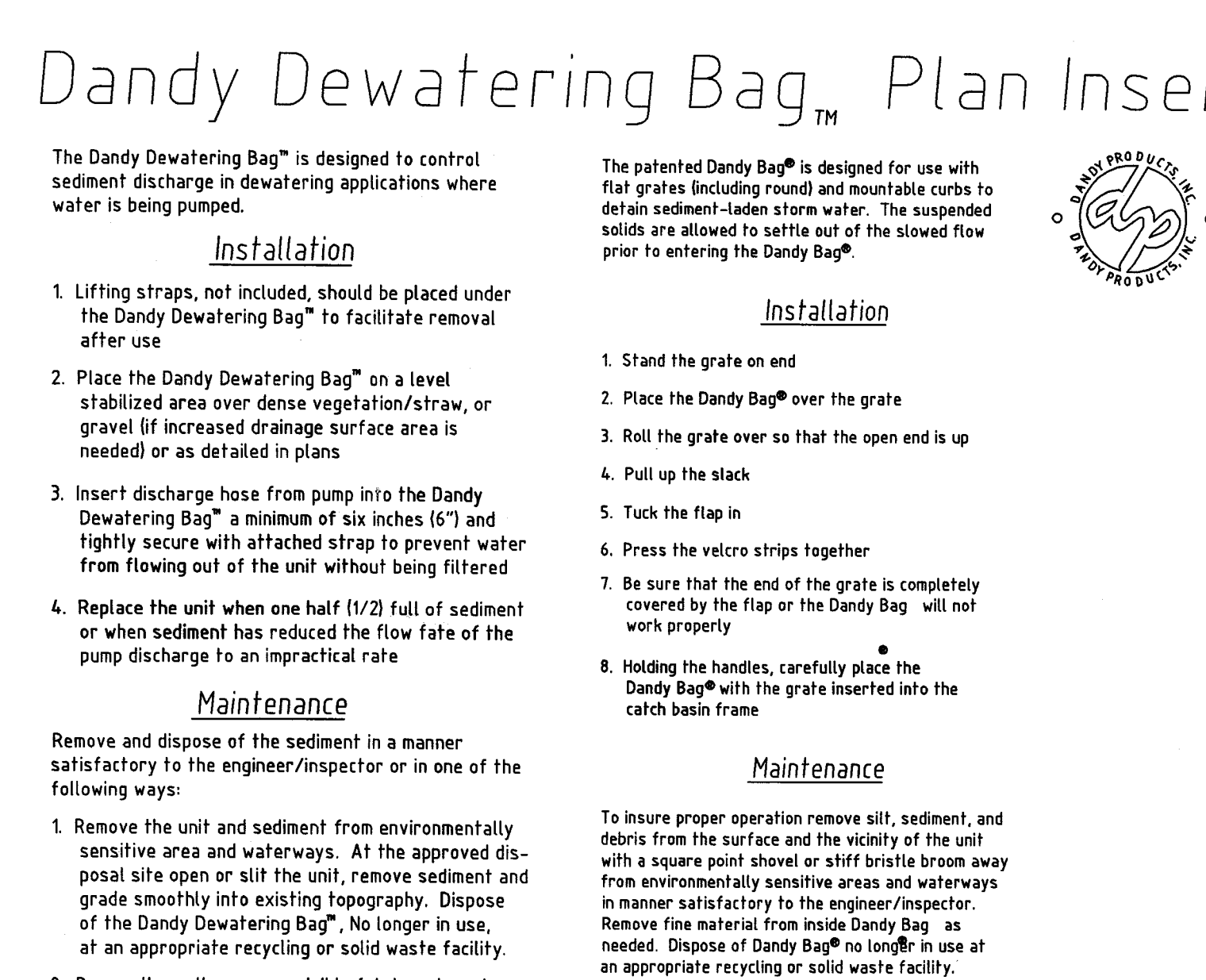
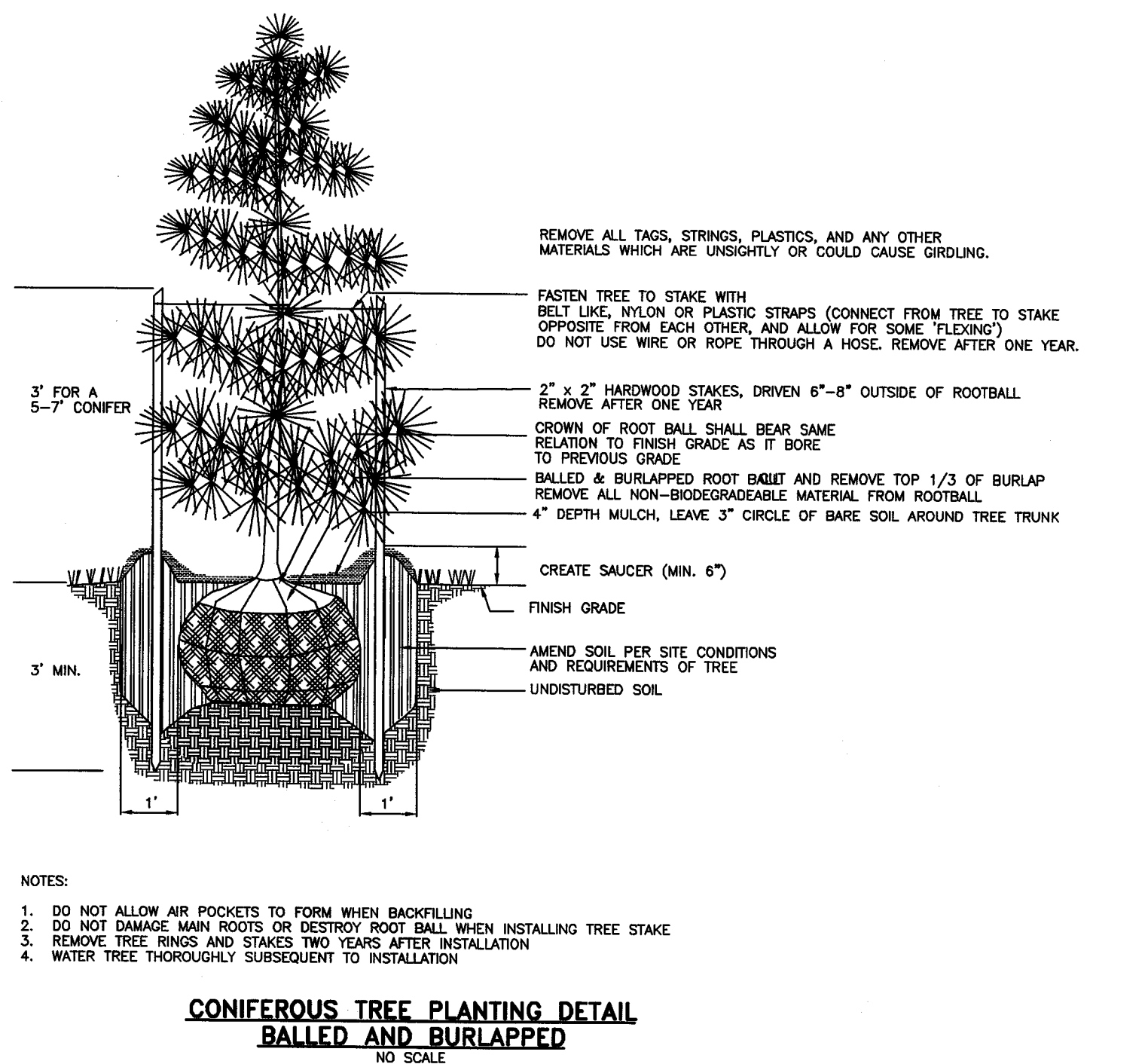
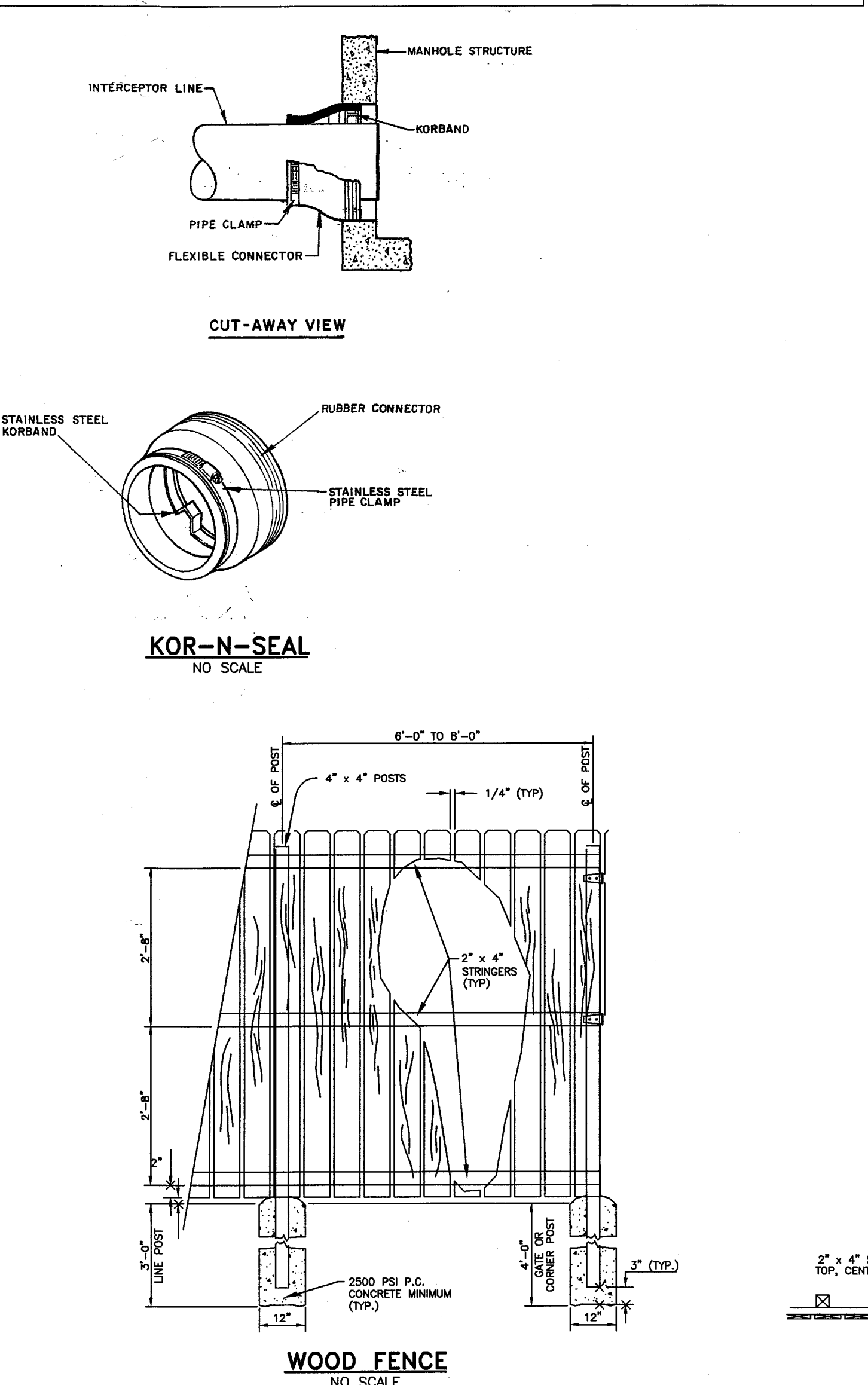
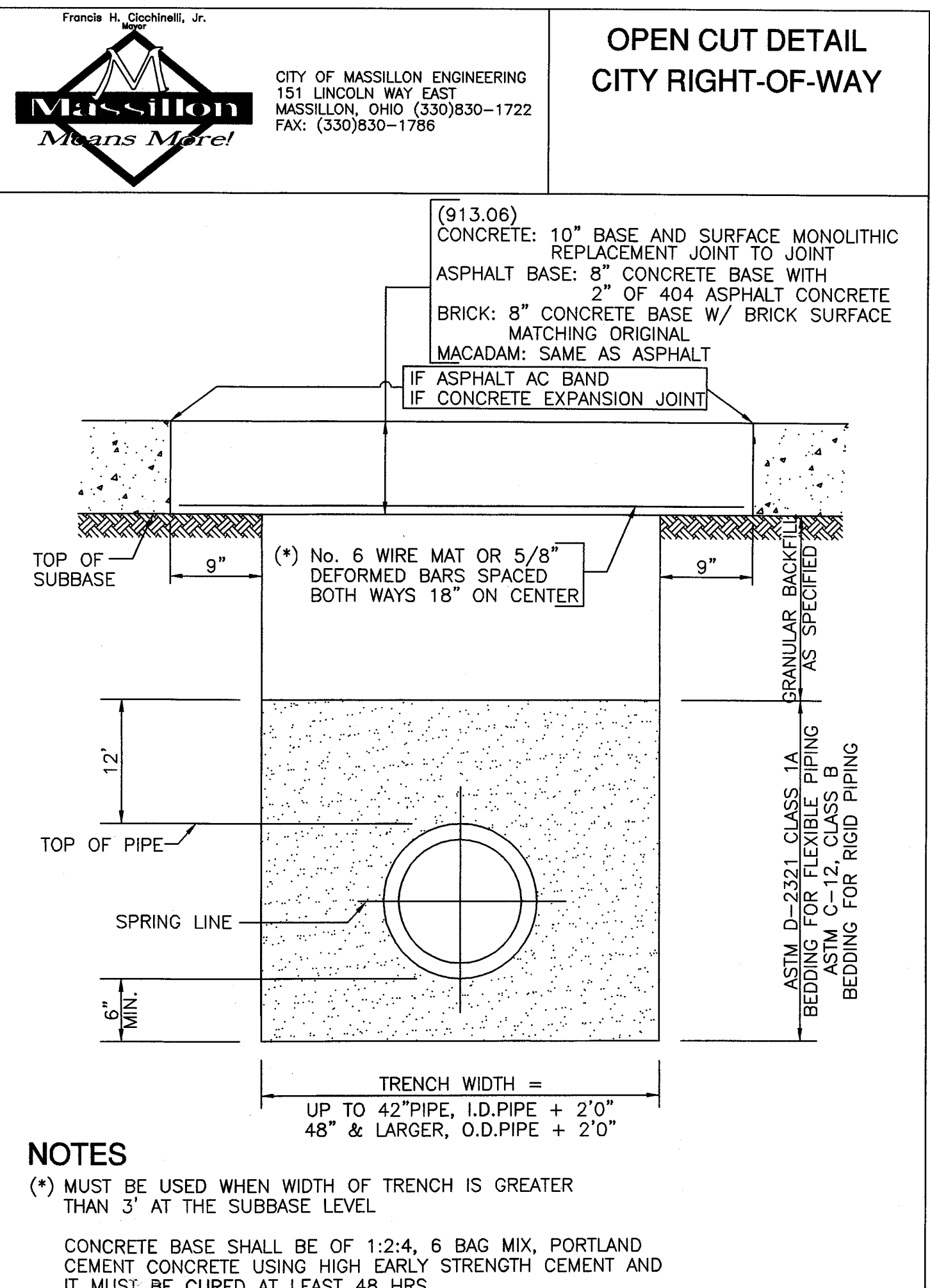
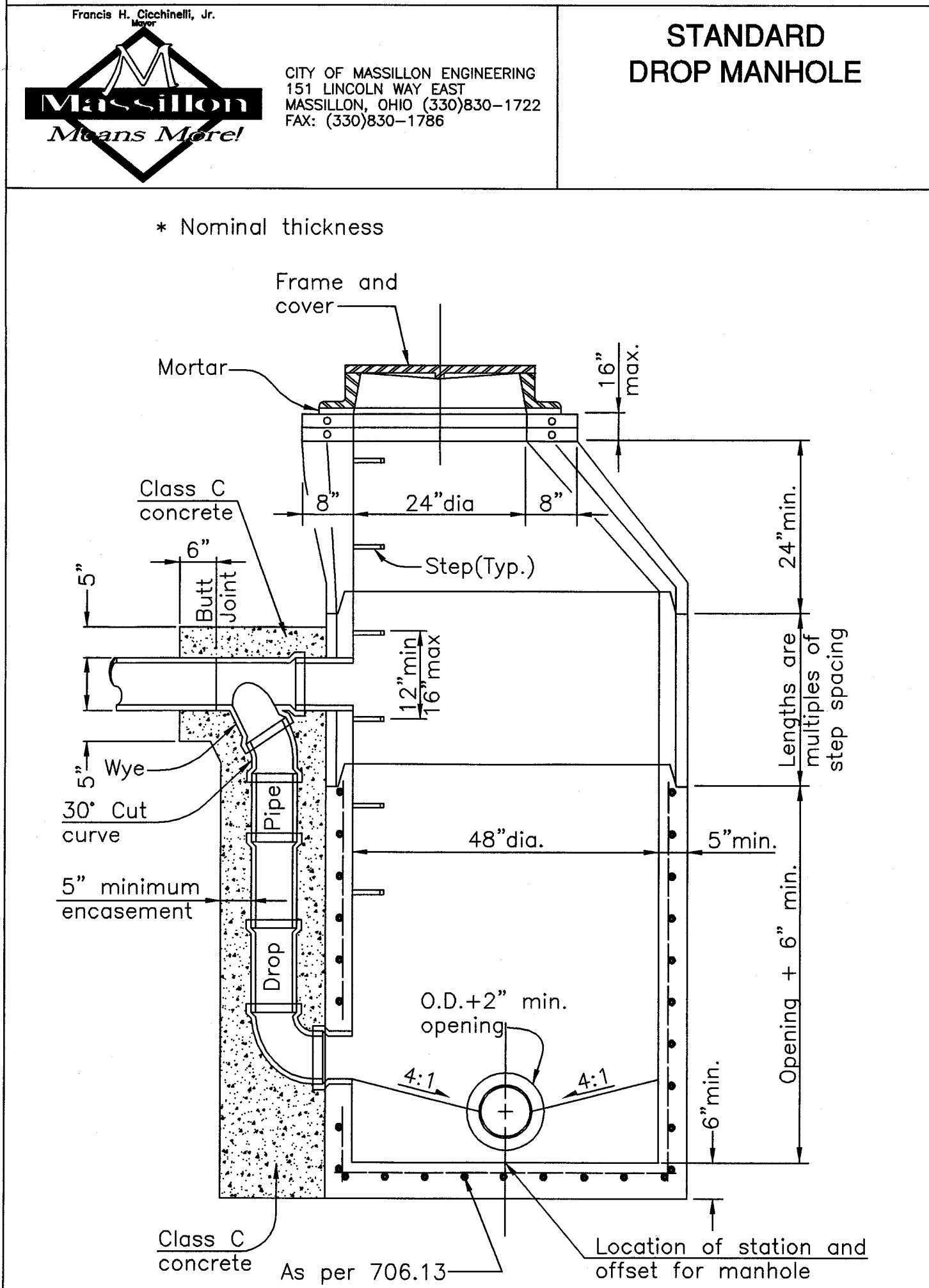
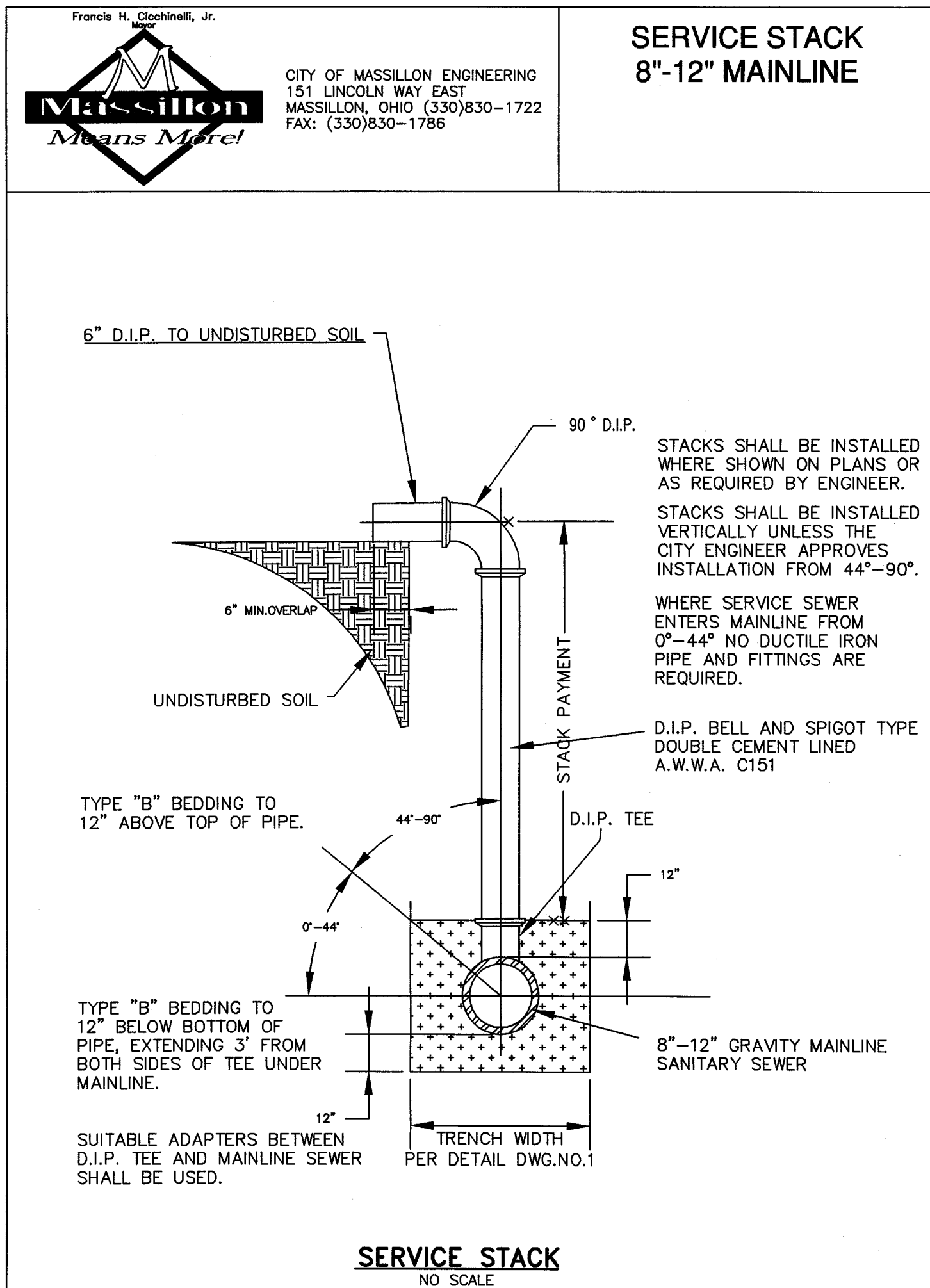


THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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1ST STREET NORTHEAST

CITY OF MASSILLON

STARK COUNTY, OHIO

DETAILS

CLIENT

PREPENTER LAND GROUP

AMHERST VILLAGE CONDOMINIUMS

CAD FILE 05000680CP-08-DT

REVISED SANITARY PER CITY OF MASSILLON 2/15/06

REVISIONS

DATE 11-15-05

DR. SG. CH. MB.

P.M. M. BRYANT

BOOK ---

JOB 05000680

FILE NO. 1554-001-10