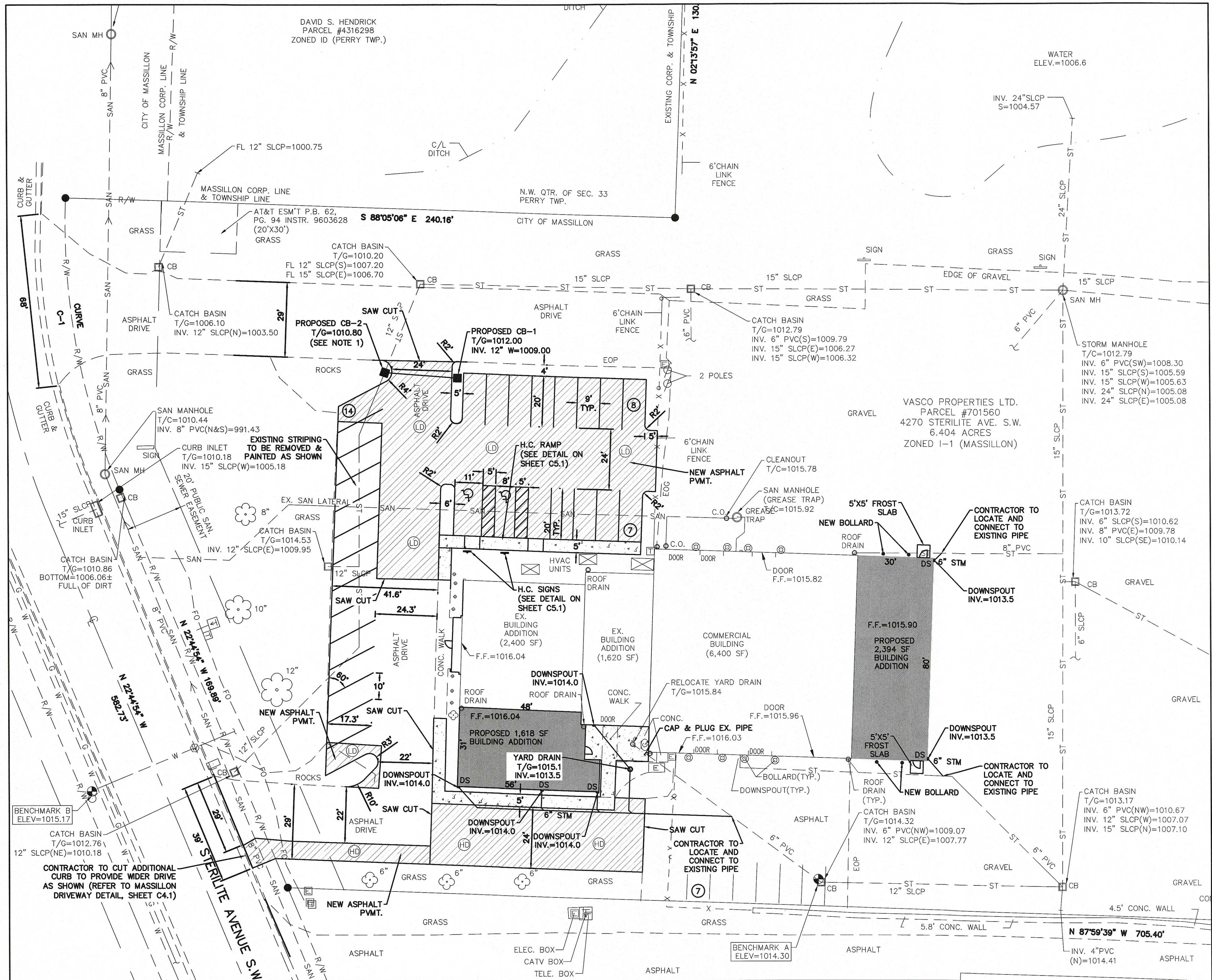


R:\Stark\City Massillon\135\Sol H-D - Vasco Expansion\2018\DWG\2018-09-27 SOL Harris Day - Vasco Expansion Site Plans.dwg; 12/18/18 - 3:20pm; jrenicker



BENCHMARK 'A'
CHISELED 'X' ON N.W. CORNER OF CATCH BASIN, 12' N. OF CONCRETE WALL ALONG S. SIDE OF PROPERTY.

ELEV. 1014.30

BENCHMARK 'B'
CHISELED 'X' ON N. FLANGE BOLT OF FIRE HYDRANT, WEST SIDE OF STERILITE ST. S.W., 57' S.W. OF CATCH BASIN.

ELEV. 1015.17

SCALE: 1 INCH = 20'
0 10' 20' 40'

HAMMONTREE & ASSOCIATES, LIMITED
ENGINEERS, PLANNERS, SURVEYORS
5233 STONEHAM RD. NORTH CANTON, OH 44720
PHN: (330) 499-8817 FAX: (330) 499-0149
TOLL FREE: 1-800-394-8817
www.hammontree-engineers.com

SITE DATA

ADDRESS:
4270 STERILITE AVE. S.W.
MASSILLON, OHIO 44646

TOTAL SITE AREA: 6.40 AC.
AREA OF SITE TO UNDERGO EXCAVATION: 0.56 AC.
EXISTING & PROPOSED USE:
OFFICE/COMMERCIAL
BUILDING WITH PARKING
TOTAL STRUCTURE AREA: 0.33 AC.
TOTAL PARKING AREA: 0.29 AC.
TOTAL LANDSCAPING/LAWN AREA: 2.32 AC.

ZONING

ZONED: I-1 LIGHT INDUSTRIAL DISTRICT

MINIMUM BUILDING SETBACKS
FRONT: 60'
SIDE: 0'
REAR: 0'

MINIMUM PARKING SETBACKS
FRONT: 6'
SIDE: 0'
REAR: 0'

PARKING

PARKING REQUIRED:
FIVE PLUS ONE FOR EVERY
EMPLOYEE IN THE LARGEST
WORKING STAFF (19 EMPLOYEES)

PARKING PROVIDED:
36 SPACES
2 H.C. SPACES

TYPICAL SPACE SIZE: 9' x 20'
TYPICAL AISLE WIDTH: 24'

LEGEND:

- NEW ASPHALT (BY OWNER)
- LD LIGHT DUTY ASPHALT PAVEMENT AREA
- HD HEAVY DUTY ASPHALT PAVEMENT AREA

NOTES:

- CONTRACTOR TO LOCATE EXISTING PIPE AND VERIFY INVERT AT PROPOSED CATCH BASIN LOCATION. CONNECT EXISTING PIPE TO PROPOSED CB ON THE NORTH AND SOUTH SIDES. CONNECT PROPOSED 12" PIPE ON THE EAST SIDE TO MATCH THE EXISTING INVERT. ADJUST INVERT AT CB-1 IF NEEDED FOR POSITIVE DRAINAGE.

ADDITONS & RENOVATIONS FOR:

The Vasco Group

4270 Sterilite St. SE
Massillon, OH, 44646

PROJECT NO: 18.026
DATE: 9/27/2018

SITE DIMENSION PLAN

C3.1

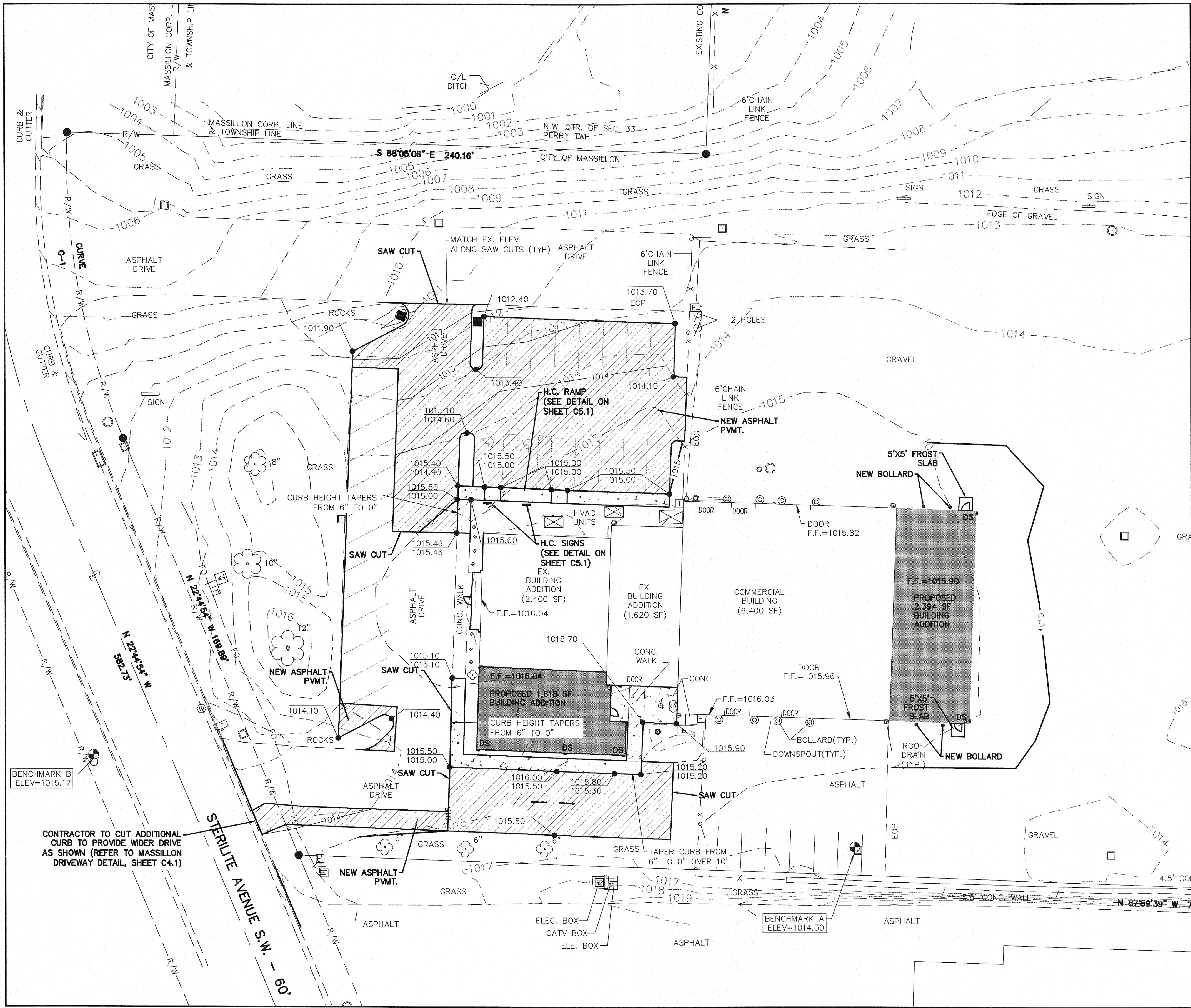
10/04/18

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SOL

HARRIS/DAY
ARCHITECTS
6577 Fern Ave NW
North Canton, OH 44720
ph: 330.493.3722
www.solarharrisday.com

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BENCHMARK 'A'
CHISELED 'X' ON N.W. CORNER OF CATCH BASIN, 12' N. OF CONCRETE WALL ALONG S. SIDE OF PROPERTY.

ELEV. 1014.30

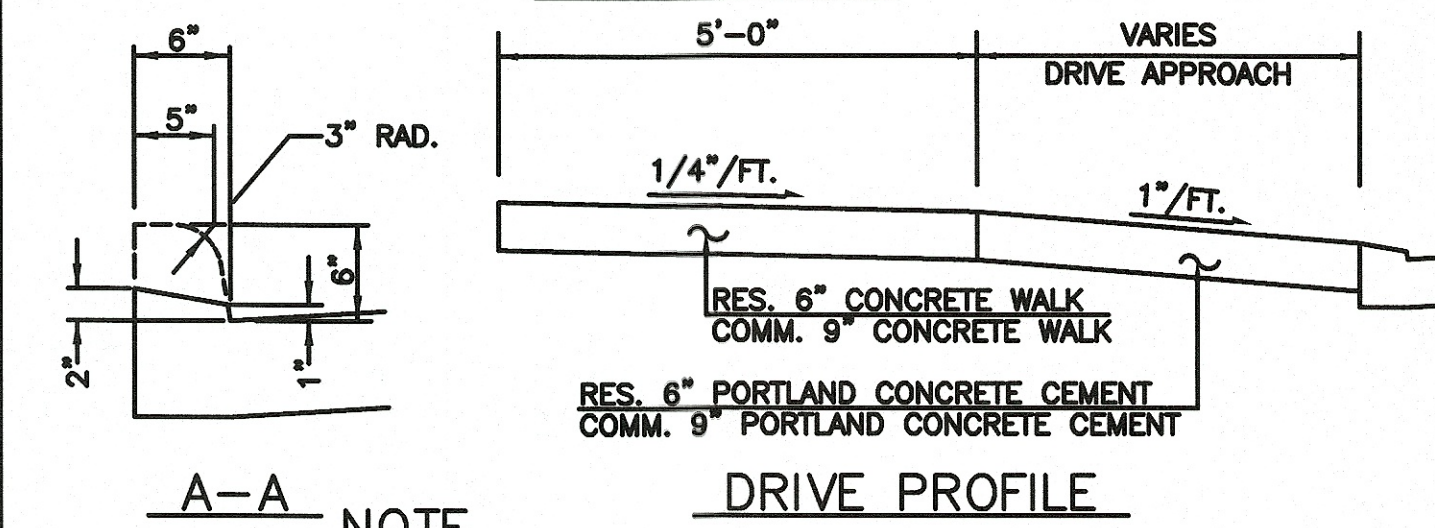
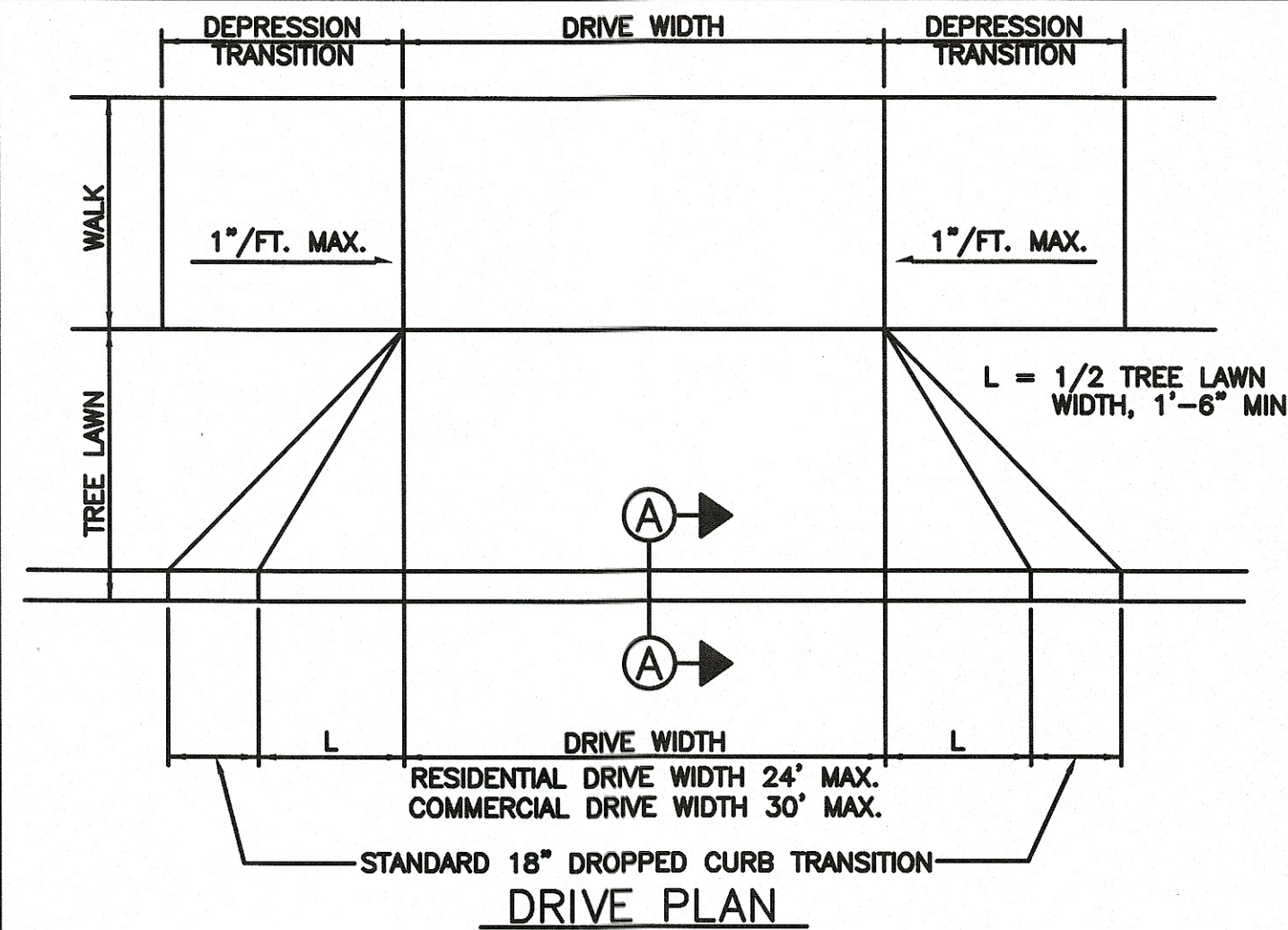
BENCHMARK 'B'
CHISELED 'X' ON N. FLANGE BOLT OF FIRE HYDRANT, WEST SIDE OF STERILITE ST. S.W., 57' S.W. OF CATCH BASIN.

ELEV. 1015.17



CITY OF MASSILLON ENGINEERING
151 LINCOLN WAY EAST
MASSILLON, OHIO (330)830-1722
FAX: (330)830-1786

DRIVEWAY APPROACH DETAIL



A-A NOTE
ANY DEVIATION FROM THIS MUST BE APPROVED BY THE CITY ENGINEER.
CONCRETE SHALL BE 4000 PSI CLASS C.

FLOOD DATA:

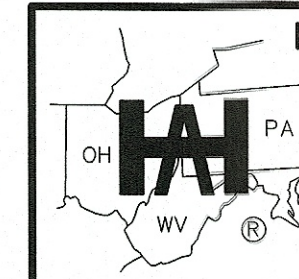
FLOOD ZONE: ZONE X - AREA OF MINIMAL FLOOD HAZARD
FLOOD MAP: 39151C0351E - EFF. 9/29/2011 (NOT PRINTED)

LEGEND:

NEW ASPHALT (BY OWNER)

PARKING LOT AREA TO BE LIGHT DUTY & SOUTH DRIVE TO BE HEAVY DUTY. SEE PAVEMENT SECTION DETAIL ON SHEET C5.1.

SCALE: 1 INCH = 20'
0 10' 20' 40'
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PHN: (330) 499-8817 FAX: (330) 499-0149
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www.hammontree-engineers.com

Additions & Renovations for:

The Vasco Group

4270 Sterlite St. SE
Massillon, OH, 44646

MARK	DATE	DESCRIPTION

PROJECT NO: 18.026
DATE: 9/27/2018

SITE GRADING PLAN

C4.1



10/04/18

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SOL
HARRIS/DAY
8/18/2018
667 First Ave NW
North Canton, OH 44720
PH: 330.499.8817
www.sollarharrisday.com

BID SET: 2018.10.03

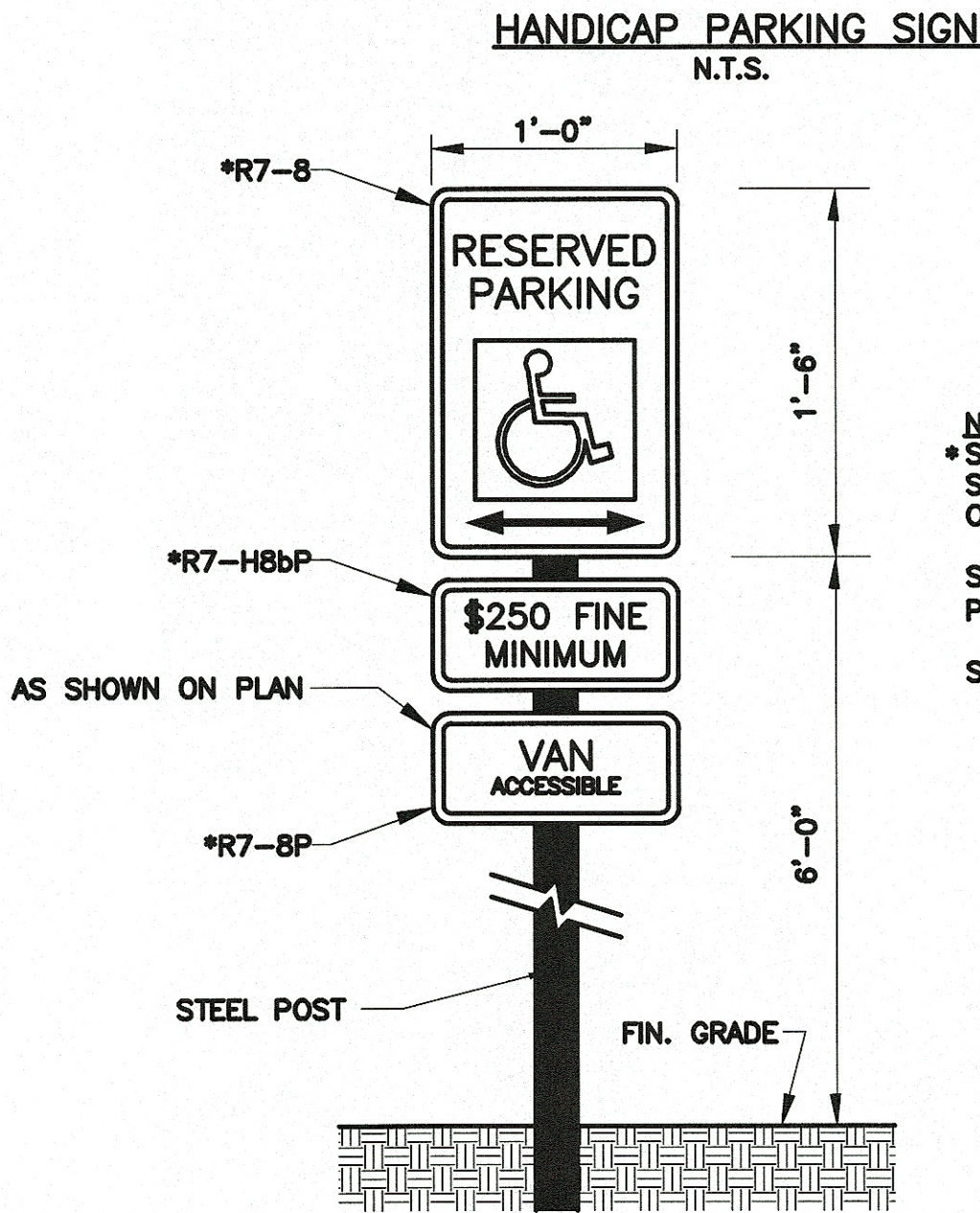
R:\Stark\City\Massillon\135\Sol H-D - Vasco Expansion\2018-09-27 SOL Harris Day - Vasco Expansion Site Plans.dwg; 12/18/18 - 3:20pm; jrenicker

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY THE GOVERNING AUTHORITIES) OF ALL STRUCTURES; SO THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS OUTLINED IN THESE PLANS OR GEOTECHNICAL REPORT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS NEEDED FOR DEMOLITION AND DISPOSAL.
2. THE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. ALL EXISTING UTILITY CONNECTIONS ARE TO BE ABANDONED AS DIRECTED BY THE RESPECTIVE UTILITY OWNER.
3. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
4. IF ANY PAVEMENT IS DAMAGED OUTSIDE THE SAW-CUT LIMITS, THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPAIR OF THAT PAVEMENT.
5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ALL UTILITIES.
6. WITHIN THE SUBJECT PROPERTY, THE INTENT IS TO HAVE A CLEAN, CLEAR SITE, FREE OF ALL EXISTING ITEMS NOTED TO BE REMOVED IN ORDER TO PERMIT THE CONSTRUCTION OF THE NEW PROJECT.
7. WHERE EXISTING ITEMS ARE SHOWN TO REMAIN, CARE SHOULD BE TAKEN TO INSURE PROTECTION OF THAT ITEM FROM DAMAGE. ANY ITEMS DISTURBED BY CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE TO A CONDITION EQUAL TO OR BETTER THAN EXISTING AND TO THE SATISFACTION OF THE OWNER OF THE ITEM.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, AND MATERIALS OF CONSTRUCTION TO COMPLETE PROPOSED CONSTRUCTION.
9. ANY APPARENT DISCREPANCIES OR QUESTIONS IN CONTRACT DOCUMENTS ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVES IMMEDIATELY.
10. TRAFFIC SHALL BE MAINTAINED ON ALL ADJOINING STREETS AT ALL TIMES. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
11. THE DESIGN ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION NOT SPECIFIED HEREIN, NOR FOR THE SAFETY ON THE JOB SITE, NOR SHALL THE DESIGN ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
12. ANY MODIFICATIONS TO THE WORK SHOWN ON THE PLANS MUST HAVE PRIOR WRITTEN APPROVAL FROM THE OWNER AND REVIEW AGENCIES.

GENERAL NOTES - EARTHWORK

1. THE CONTRACTOR SHALL INSTALL ALL SEDIMENTATION CONTROLS TO MINIMIZE SOIL EROSION AND OFF-SITE SILTATION BEFORE ANY CLEARING, GRUBBING OR EARTHWORK HAS BEGUN. REFERENCE THE STORMWATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL STRUCTURES AND SPECIFICATIONS.
2. ALL TIMBER, LOGS, BRUSH, RUBBISH, AND VEGETATIVE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OF FILL AREAS SHALL BE REMOVED FROM THE PROJECT CONSTRUCTION AREA.
3. ANY UNSUITABLE SOILS ENCOUNTERED IN PROPOSED PAVEMENT AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED MATERIAL APPROVED BY THE ENGINEER.
4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BACKFILL AND GRADE EXCAVATED AREAS SO AS TO ELIMINATE PONDING ON THE SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPORTATION OF ANY BORROW MATERIAL NECESSARY TO COMPLETE THE JOB.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF ANY AND ALL EXCESS OR UNSUITABLE MATERIAL NOT USED ON THE JOB SITE.
7. PROPOSED PAVEMENT AREAS ARE TO BE PROOF-ROLLED PER SPECIFICATIONS IMMEDIATELY PRIOR TO CONSTRUCTION. IF ANY AREAS ARE FOUND TO BE "SOFT" OF "SPONGY", THE CONTRACTOR IS TO COORDINATE THE REMOVAL OR PROCEDURE WITH THE GEOTECHNICAL ENGINEER.
8. PROPOSED ELEVATIONS SHOWN SHALL NOT BE CHANGED WITHOUT APPROVAL OF THE ENGINEER.
9. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING AND IN AREAS SELECTED BY OWNER.
10. UNLESS OTHERWISE INDICATED AT A SPECIFIC LOCATION, ALL FINISHED GRADES AT THE LIMITS OF NEW WORK ARE TO CONFORM TO AND MATCH EXISTING GRADES.
11. SITE GRADING SHALL PROVIDE POSITIVE DRAINAGE TO CATCH BASINS OR SHEET FLOW OFF OF AREAS, THUS PREVENTING THE PONDING OF WATER ON SITE.
12. PRIOR TO PLACEMENT OF ANY COMPACTED FILLS, PROCTOR CURVES SHALL BE ESTABLISHED FROM PROPOSED BORROW MATERIAL SAMPLES.
13. PRIOR TO PAVING, THE SUBGRADE SHALL BE TESTED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK FURNISHED BY THE CONTRACTOR. ANY YIELDING AREAS IN THE SUBGRADE SHALL BE REMOVED AND/OR REPLACED PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
14. ALL COMPACTED FILLS RELATED TO THE CONSTRUCTION OF THE PROPOSED PROJECT SHALL BE PLACED IN ACCORDANCE WITH ODOT ITEM 203. DURING CONSTRUCTION, THESE COMPACTED FILLS SHALL BE TESTED USING THE NUCLEAR DENSOMETER METHOD. COMPACTION REQUIREMENT SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

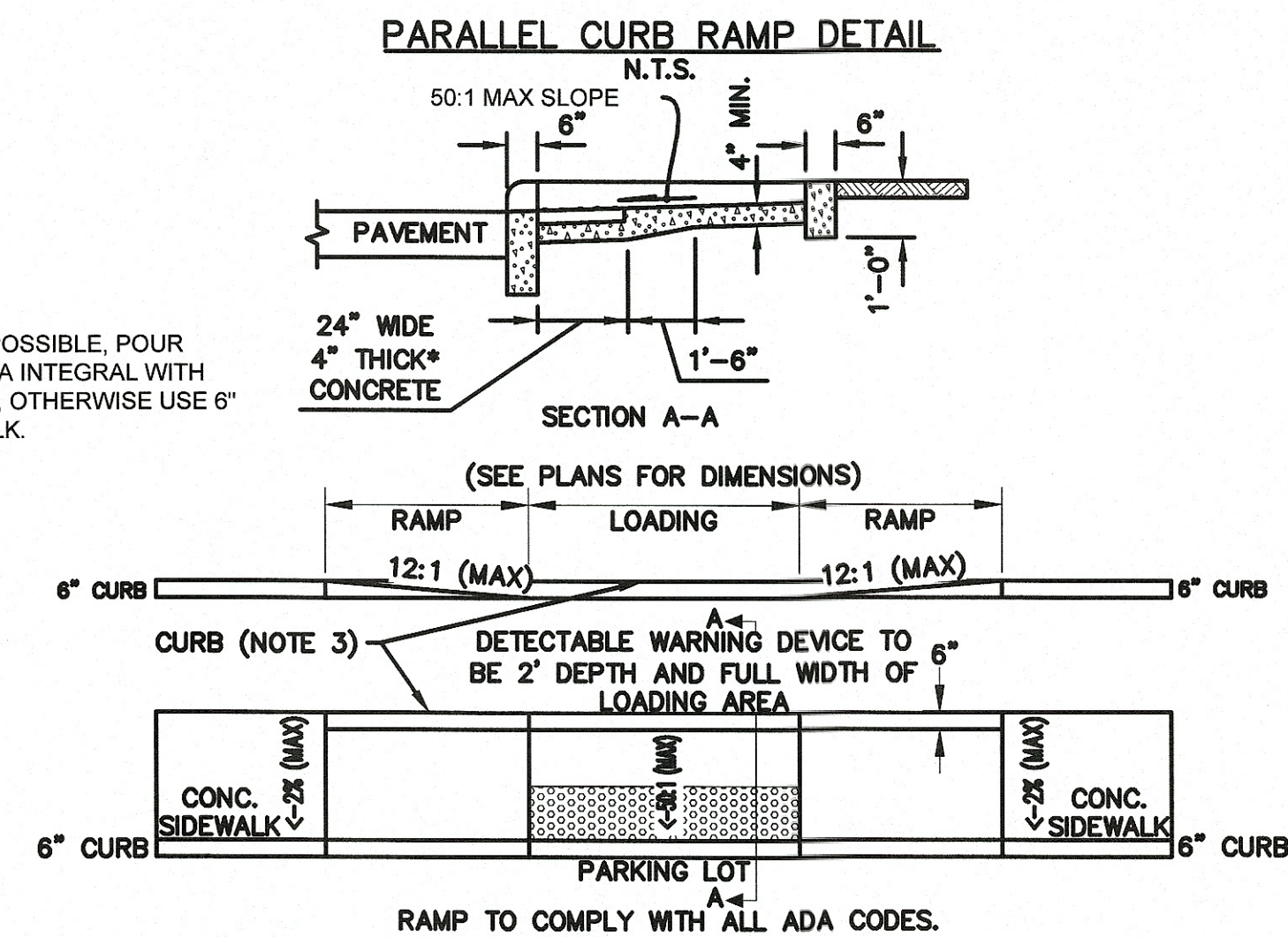
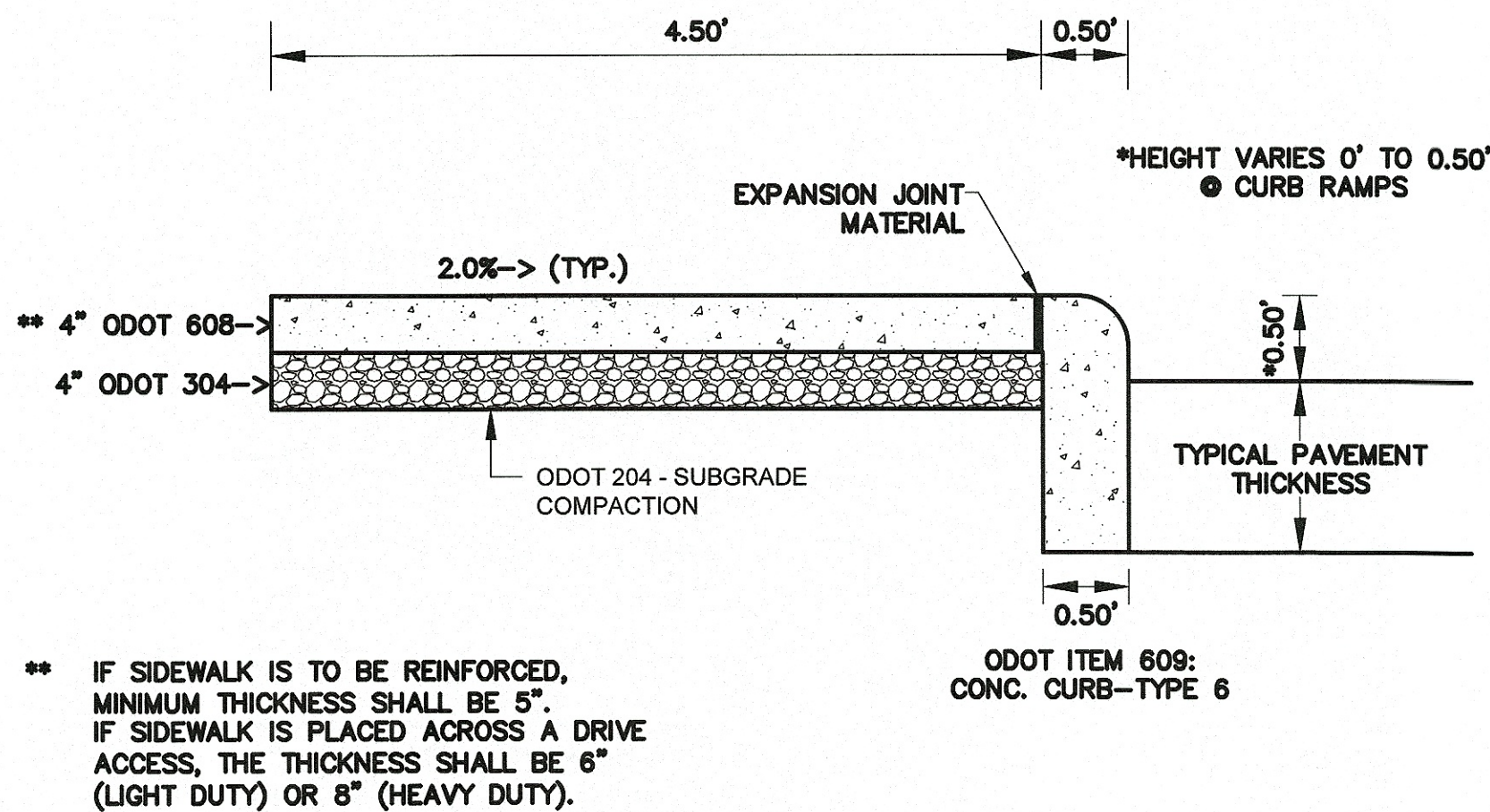


NOTES:
* SIGNS ARE TO CONFORM WITH THE LATEST SPECIFICATIONS FROM THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

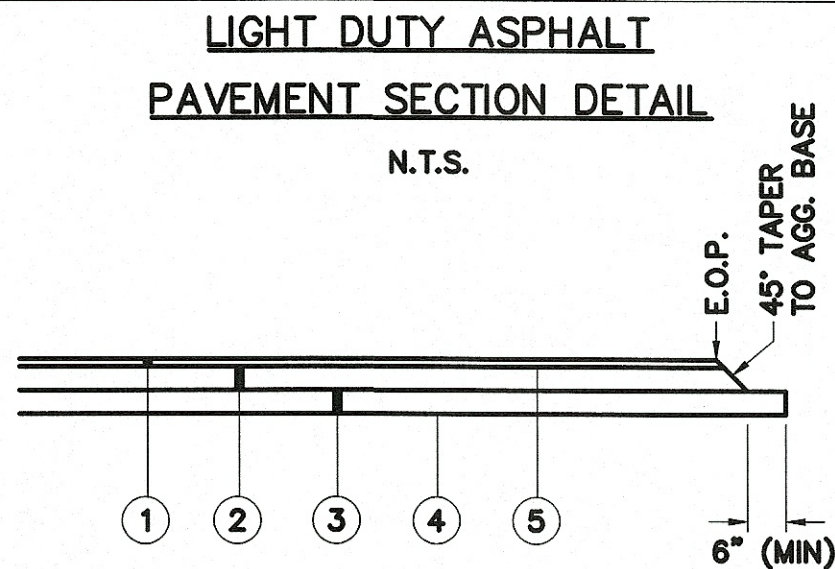
SIGNS WILL BE MOUNTED ON GALVANIZED POLES OR ON WALL (WHERE APPLICABLE).

SIGNS SHALL COMPLY TO ALL ADA CODES.

ON-SITE SIDEWALK & CURB DETAIL
N.T.S.



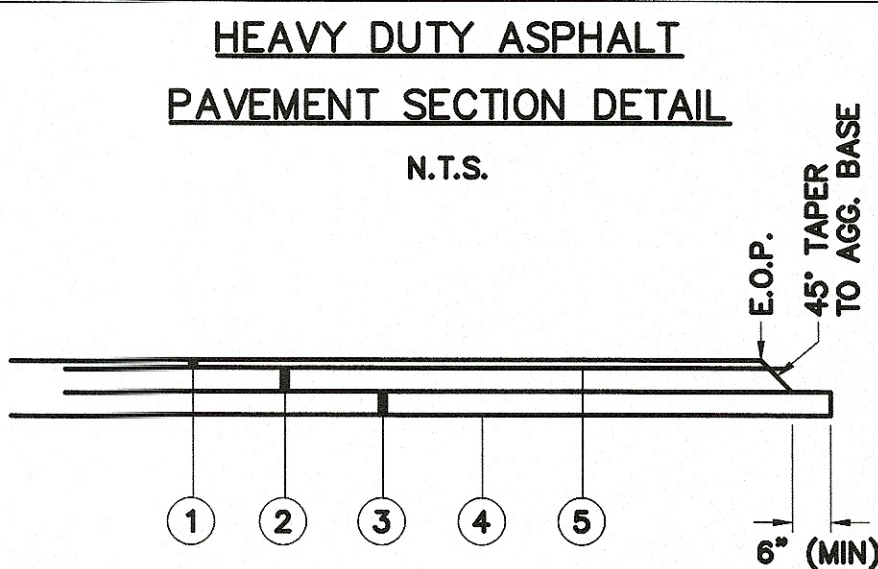
- NOTES:**
1. ADAAG STANDARDIZES DETECTABLE WARNINGS AS RAISED TRUNCATED DOMES WITH A NOMINAL 0.9" DIA., 0.2" HEIGHT AND NOMINAL 2.35" ON CENTER.
 2. COLOR OF TRUNCATED DOMES TO CONTRAST WITH SURROUNDING CONCRETE WALK AND RAMP. VERIFY WITH OWNER AS TO MATERIAL TYPE AND COLOR FOR TRUNCATED DOMES.
 3. CURB TO BE USED WHEN EMBANKMENT IS PLACED BEHIND WALK. CURB WILL NOT BE USED WHEN WALK IS AGAINST BUILDING/STRUCTURE.



- 1) ITEM 441 1-1/2" ASPHALT CONCRETE SURFACE, TYPE 1, (448), PG64-22
- 2) ITEM 441 1-3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
- 3) ITEM 304 6" AGGREGATE BASE
- 4) ITEM 204 SUBGRADE COMPACTION & PROOF ROLL
- 5) ITEM 407 TACK COAT (PER ODOT CMS 407.06)

ALL ITEMS FROM STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, LATEST VERSION.

IF GEOTECHNICAL REPORT RECOMMENDS A DIFF. SECTION THEN THE GEOTECHNICAL CONSULTANTS RECOMMENDATIONS SHALL OVERRIDE THIS DETAIL.



- 1) ITEM 441 1-1/2" ASPHALT CONCRETE SURFACE, TYPE 1, (448), PG64-22
- 2) ITEM 441 2-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
- 3) ITEM 304 8" AGGREGATE BASE
- 4) ITEM 204 SUBGRADE COMPACTION & PROOF ROLL
- 5) ITEM 407 TACK COAT (PER ODOT CMS 407.06)

ALL ITEMS FROM STATE OF OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION & MATERIAL SPECIFICATIONS, LATEST VERSION.

IF GEOTECHNICAL REPORT RECOMMENDS A DIFF. SECTION THEN THE GEOTECHNICAL CONSULTANTS RECOMMENDATIONS SHALL OVERRIDE THIS DETAIL.

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www.solharrisday.com

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The Vasco Group
4270 Sterlite St. SE
Massillon, OH, 44646

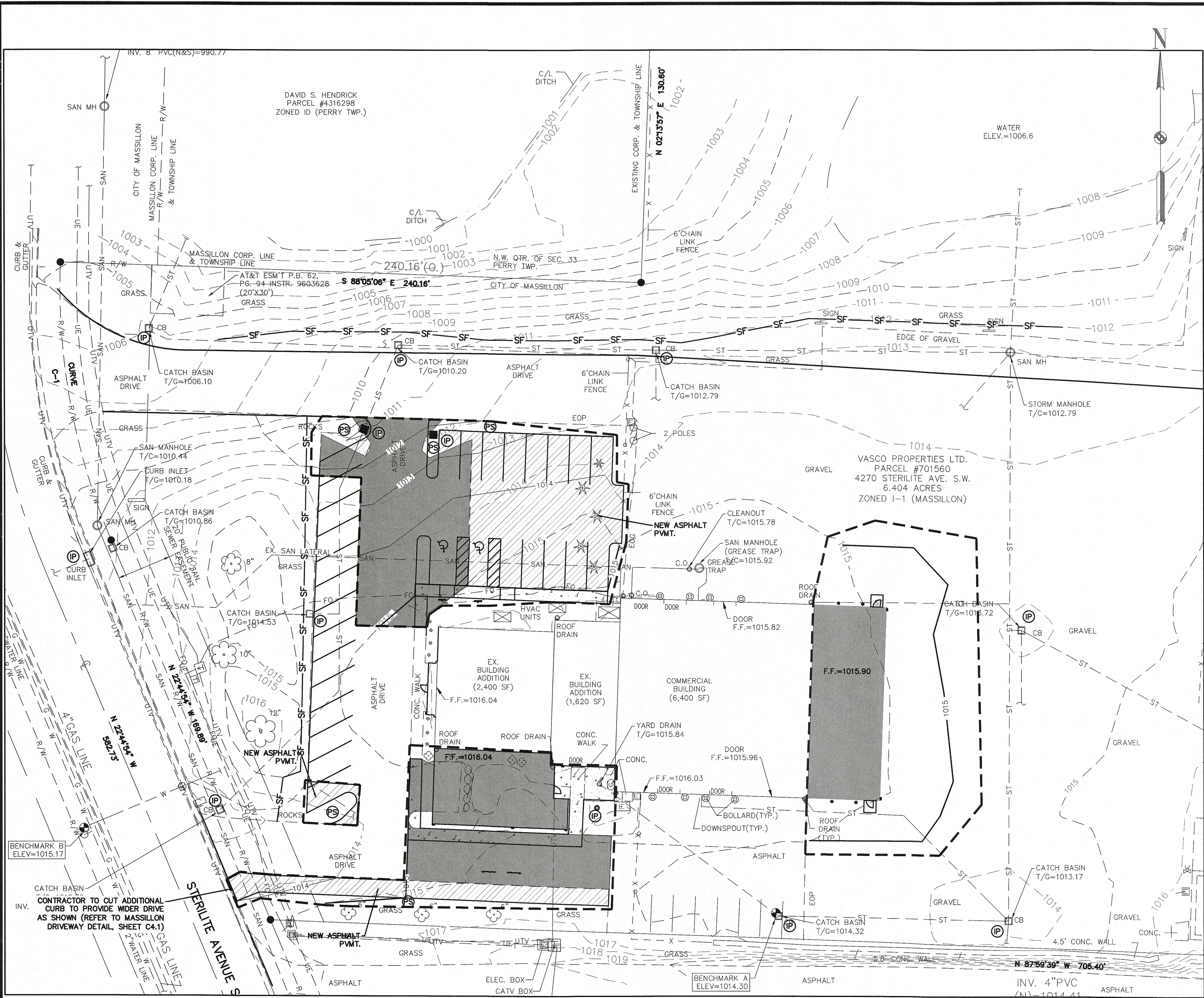
MARK	DATE	DESCRIPTION

PROJECT NO: 18.026
DATE: 9/27/2018

SITE NOTES & DETAILS

C5.1

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LEGEND

- CE CONSTRUCTION ENTRANCE
- TD TEMPORARY DIVERSION CHANNEL
- SB SEDIMENT BASIN
- PS PERMANENT SEEDING
- TS TEMPORARY SEEDING
- SS TOPSOIL STOCKPILE
- P INLET PROTECTION
- VF VEHICLE FUELING AREA
- SA STORAGE AREA (SOLID, SAN. WASTE.....)
- CW CONCRETE WASHOUT PITS
- SF SILT FENCE
- LIMITS OF CONSTRUCTION

SITE INFO:

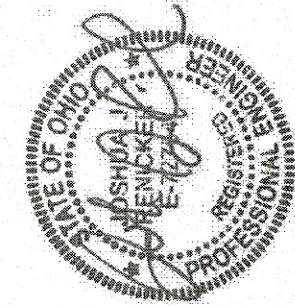
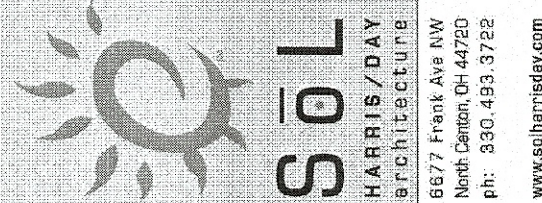
SITE DESCRIPTION: EXISTING INDUSTRIAL FACILITY WITH PARKING LOT. PROPOSED BUILDING AND PARKING LOT ADDITION FOR INDUSTRIAL FACILITY.

BMPs: EXISTING WATER QUALITY / DETENTION POND. ADDITIONAL BMPs REQUIRED FOR THIS PROJECT INCLUDE SILT FENCE AND INLET PROTECTION FOR EXISTING CATCH BASINS.

TOTAL AREA OF SITE - 6.40 AC.
AREA OF SITE TO UNDER GO EXCAVATION - 0.56 AC.

PRE-CONSTRUCTION CURVE NUMBER - 87
PRE-CONSTRUCTION IMPERVIOUS AREA - .87 AC.

POST-CONSTRUCTION CURVE NUMBER - 87
POST-CONSTRUCTION IMPERVIOUS AREA - 1.02 AC.



Additions & Renovations for:

The Vasco Group

4270 Sterilite St. SE
Massillon, OH, 448646

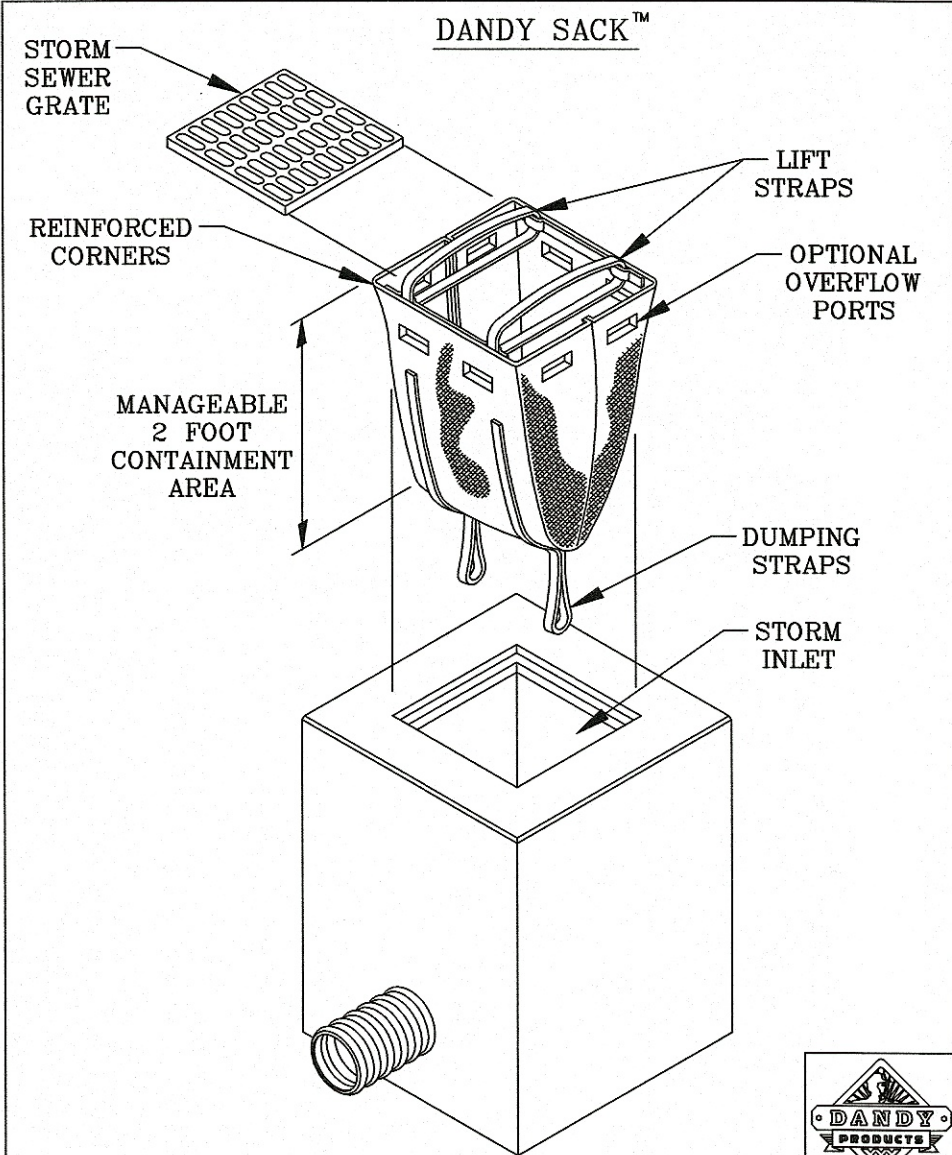
MARK	DATE	DESCRIPTION

PROJECT NO: 18.026
DATE: 10/03/2018

EROSION &
SEDIMENT
CONTROL PLAN

C6.1

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DANDY SACK™ SPECIFICATIONS				
NOTE: THE DANDY SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:				
REGULAR FLOW DANDY SACK™ (BLACK)				
Mechanical Properties	Test Method	Units	MARV	
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.78 (400)	x 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15	x 15
Puncture Strength	ASTM D 4833	kN (lbs)	0.67 (150)	
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5506 (800)	
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150)	x 0.73 (165)
UV Resistance	ASTM D 4355	%	90	
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)	
Flow Rate	ASTM D 4491	l/min/m ² (gal/min/ft ²)	2852 (70)	
Permittivity	ASTM D 4491	Sec	0.90	
HI-FLOW DANDY SACK™ (SAFETY ORANGE)				
Mechanical Properties	Test Method	Units	MARV	
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365)	x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24	x 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)	
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)	
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115)	x 0.33 (75)
UV Resistance	ASTM D 4355	%	90	
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)	
Flow Rate	ASTM D 4491	l/min/m ² (gal/min/ft ²)	5907 (145)	
Permittivity	ASTM D 4491	Sec	2.1	
*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows				

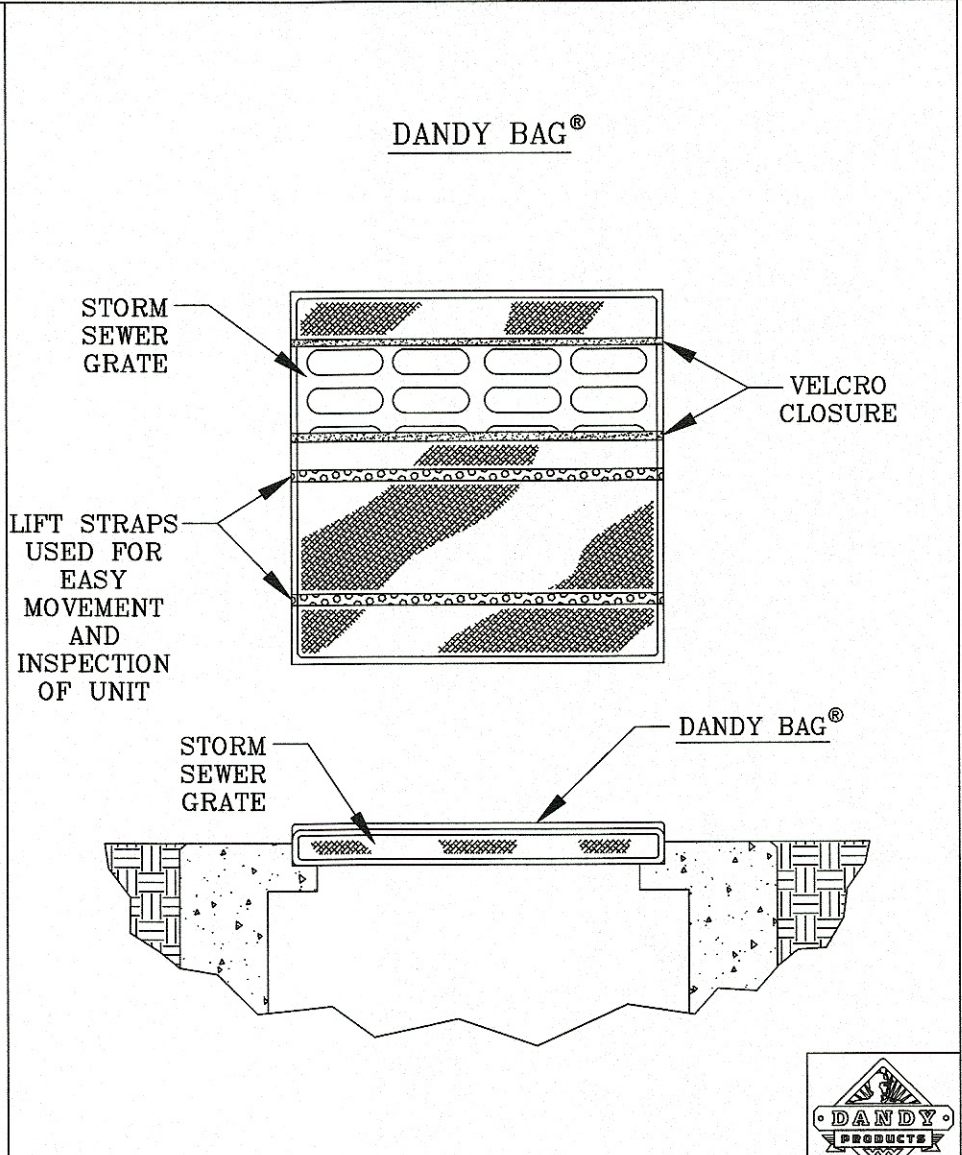
PROJECT:		DR. BY:	
CITY/STATE:	DATE:	DR. NO.:	

TEMPORARY SEEDING

SEEDING DATES	SPECIES	LB./1000 FT2	LB/ACRE
MARCH 1 TO AUGUST 15	OATS	3	128
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	ANNUAL RYEGRASS	1.25	55
	PERENNIAL RYEGRASS	3.25	142
	CREEPING RED FESCUE	0.40	17
	KENTUCKY BLUEGRASS	0.40	17
AUGUST 16TH TO NOVEMBER	OATS	3	128
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	RYE	3	112
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	WHEAT	3	120
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYE	1	40
NOVEMBER 1 TO FEB. 29	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	ANNUAL RYEGRASS	1.25	40
	PERENNIAL RYEGRASS	3.25	40
	CREEPING RED FESCUE	0.40	40
	KENTUCKY BLUEGRASS	0.40	40
	USE MULCH ONLY OR DORMANT SEEDING		

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED.

- 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.
- TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 14 DAYS OR GREATER. THESE IDLE AREAS SHALL BE SEEDED WITHIN 7 DAYS AFTER GRADING.
- THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. TEMPORARY SEEDING SHOULD NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
- SOIL AMENDMENTS: TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION, WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE USED.
- SEEDING METHOD: SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER 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 CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.



DANDY BAG® SPECIFICATIONS				
NOTE: THE DANDY BAG® WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:				
HI-FLOW DANDY BAG® (SAFETY ORANGE)				
Mechanical Properties	Test Method	Units	MARV	
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365)	x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24	x 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)	
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)	
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115)	x 0.33 (75)
UV Resistance	ASTM D 4355	%	90	
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)	
Flow Rate	ASTM D 4491	l/min/m ² (gal/min/ft ²)	5907 (145)	
Permittivity	ASTM D 4491	Sec	2.1	
*Note: All Dandy Bags® can be ordered with our optional oil absorbent pillows				

PROJECT:		DR. BY:	
CITY/STATE:	DATE:	DR. NO.:	

PERMANENT SEEDING

SEED MIX	SEEDING RATE		NOTES:
	LBS./ACRE	LBS./1,000 SQ. FEET	
GENERAL USE			
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20-40 10-20 20-40	1/2-1 1/4-1/2 1/2-1	FOR CLOSE MOWING & FOR WATERWAYS WITH <2.0 FT/SEC VELOCITY
TALL FESCUE TURF-TYPE (DWARF) FESCUE	40-50 90	1-1 1/4 2 1/4	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE CROWN VETCH TALL FESCUE	40-50 10-20 20-30	1-1 1/4 1/4-1/2 1/2-3/4	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20-25 20-30	1/2-3/4 1/2-3/4	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES			
TALL FESCUE TURF-TYPE (DWARF) FESCUE KENTUCKY BLUEGRASS	40-50 80 5	1-1 1/4 2 1/4 0.1	
LAWNS			
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100-120	2 2	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100-120	2 1-1/2	FOR SHADED AREAS

SITE PREPARATION:

- 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.
- THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
- TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION:

- 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 POUNDS PER 1,000-SQ. FT. OR 2 TONS PER ACRE.
- FERTILIZER: FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN PLACE OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1,000-SQ. FT. OR 1000 POUNDS PER ACRE OF A 10-10-10 OR 12-12-12 ANALYSES.
- 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 INCHES. 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 AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE-SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR 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:

- SEEDINGS SHOULD NOT BE MADE 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.

SILT FENCE N.T.S.

- SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- 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 THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
- SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
- WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (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 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
- THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
- SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND, (SEE DETAILS).
- MAINTENANCE--SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVER/FS20 TOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, 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.

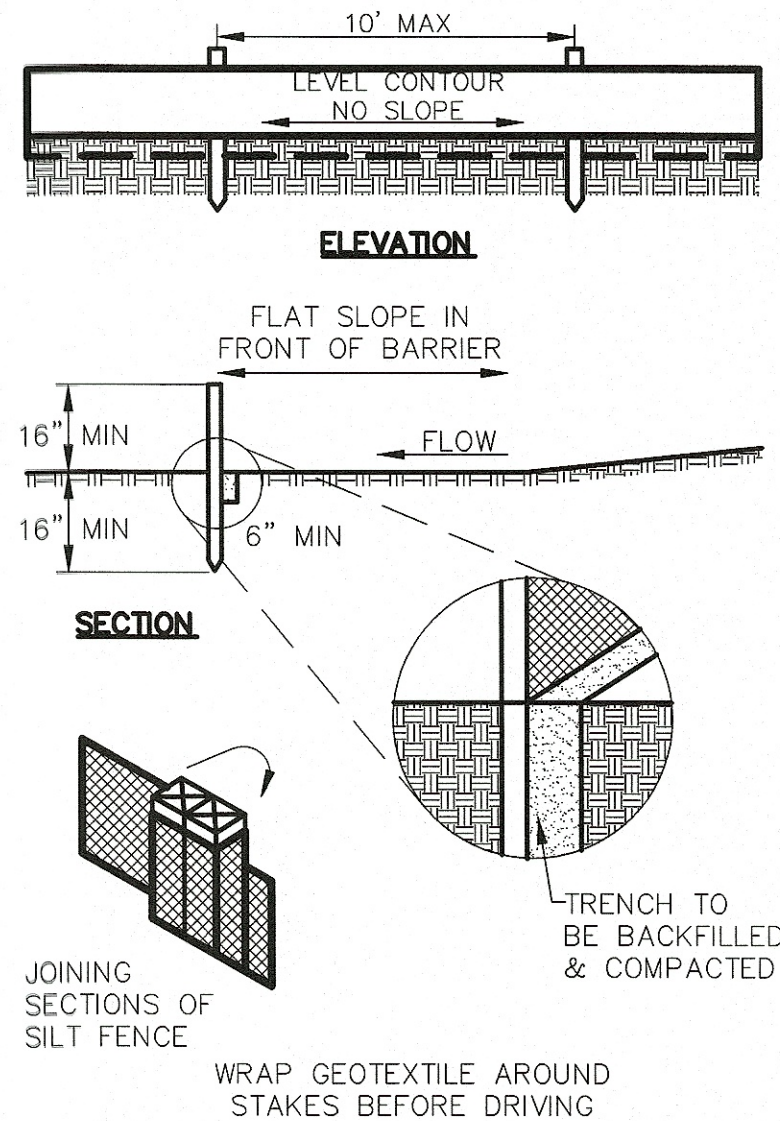
SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS

- FENCE POST -- THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
- SILT FENCE FABRIC -- SEE CHART BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MIN TENSILE STRENGTH	120 LBS	ASTM D 4632
MAX. ELONGATION AT 60 LBS	50%	ASTM D 4632
MIN. PUNCTURE STRENGTH	50 LBS	ASTM D 4833
MIN. TEAR STRENGTH	40 LBS	ASTM D 4533
APPARENT OPENING SIZE	0.84 MM	ASTM D 4751
UV EXPOSURE STRENGTH	70%	ASTM G 4355
MIN. PERMITTIVITY	1X10-2SEC.-1	ASTM D 4491



TOPSOILING

SALVAGING AND STOCKPILING:

- DETERMINE THE DEPTH AND SUITABILITY OF TOPSOIL AT THE SITE. (FOR HELP, CONTACT YOUR LOCAL SWCD OFFICE TO OBTAIN A COUNTY SOIL SURVEY REPORT).
- PRIOR TO STRIPPING TOPSOIL, INSTALL APPROPRIATE DOWNSLOPE EROSION AND SEDIMENTATION CONTROLS SUCH AS SEDIMENT TRAPS AND BASINS.
- REMOVE THE SOIL MATERIAL NO DEEPER THAN WHAT THE COUNTY SOIL SURVEY DESCRIBES AS "SURFACE SOIL" (IE. A OR AP HORIZON).
- CONSTRUCT STOCKPILES IN ACCESSIBLE LOCATIONS THAT DO NOT INTERFERE WITH NATURAL DRAINAGE. INSTALL APPROPRIATE SEDIMENT CONTROLS TO TRAP SEDIMENT SUCH AS SILT FENCE IMMEDIATELY ADJACENT TO THE STOCKPILE OR SEDIMENT TRAPS OR BASINS DOWNSTREAM OF THE STOCKPILE. STOCKPILE SIDE SLOPES SHALL NOT EXCEED A RATIO OF 2:1.
- IF TOPSOIL IS STORED FOR MORE THAN 21DAYS, IT SHOULD BE TEMPORARY SEEDED, OR COVERED WITH A TARP.

SPREADING THE TOPSOIL

- PRIOR TO APPLYING TOPSOIL, THE TOPSOIL SHOULD BE PULVERIZED.
- TO ENSURE BONDING, GRADE THE SUBSOIL AND ROUGHEN THE TOP 3-4 IN. BY DISKING.
- DO NOT APPLY WHEN SITE IS WET, MUDDY, OR FROZEN, BECAUSE IT MAKES SPREADING DIFFICULT, CAUSES COMPACTION PROBLEMS, AND INHIBITS BONDING WITH SUBSOIL.
- APPLY TOPSOIL EVENLY TO A DEPTH OF AT LEAST 4 INCHES AND COMPACT SLIGHTLY TO IMPROVE CONTACT WITH SUBSOIL.
- AFTER SPREADING, GRADE AND STABILIZE WITH SEEDING OR APPROPRIATE VEGETATION.

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Additions & Renovations for:

The Vasco Group

4270 Sterilite St. SE
Massillon, OH, 44646

MARK	DATE	DESCRIPTION

PROJECT NO: 18.026
DATE: 10/03/2018

EROSION & SEDIMENT CONTROL PLAN DETAILS

C6.2