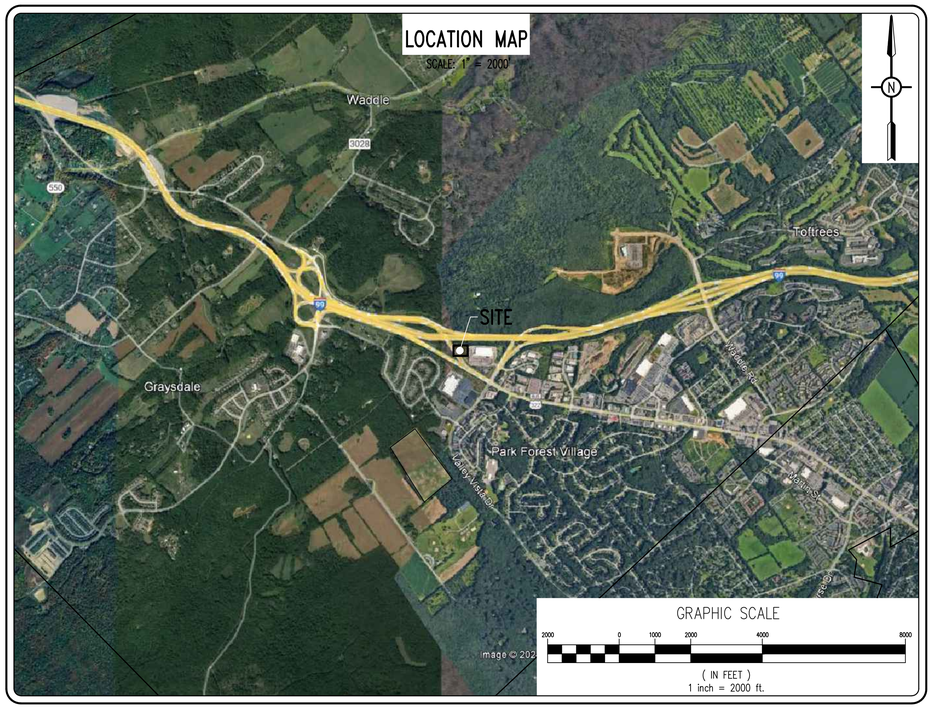
SPACE MART AT VALLEY VISTA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

PATTON TOWNSHIP * CENTRE COUNTY * PENNSYLVANIA

FEBRUARY 9, 2024



PennTerra
ENGINEERING, INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
C. ANTHONY FRUCHTL
ENGINEER
PE-062413

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ACT 287 UTILITY INFORMATION:
(SERIAL NUMBER: 20231361729)

All utility locations should be verified prior to any construction.
Utility information and locations should be considered approximate.
Contractor shall notify PA One Call prior to any excavation.

SANITARY SEWER
UNIVERSITY AREA JOINT AUTHORITY
1576 SPRING VALLEY ROAD
STATE COLLEGE, PA 16801
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STATE COLLEGE, PA 16801
PHONE: (814) 238-6766

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STATE COLLEGE, PA 16801
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224 SOUTH ALLEN STREET
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COMCAST
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STORM SEWER
PATTON TOWNSHIP
100 PATTON PLAZA
STATE COLLEGE, PA 16803
PHONE: (814) 234-0271

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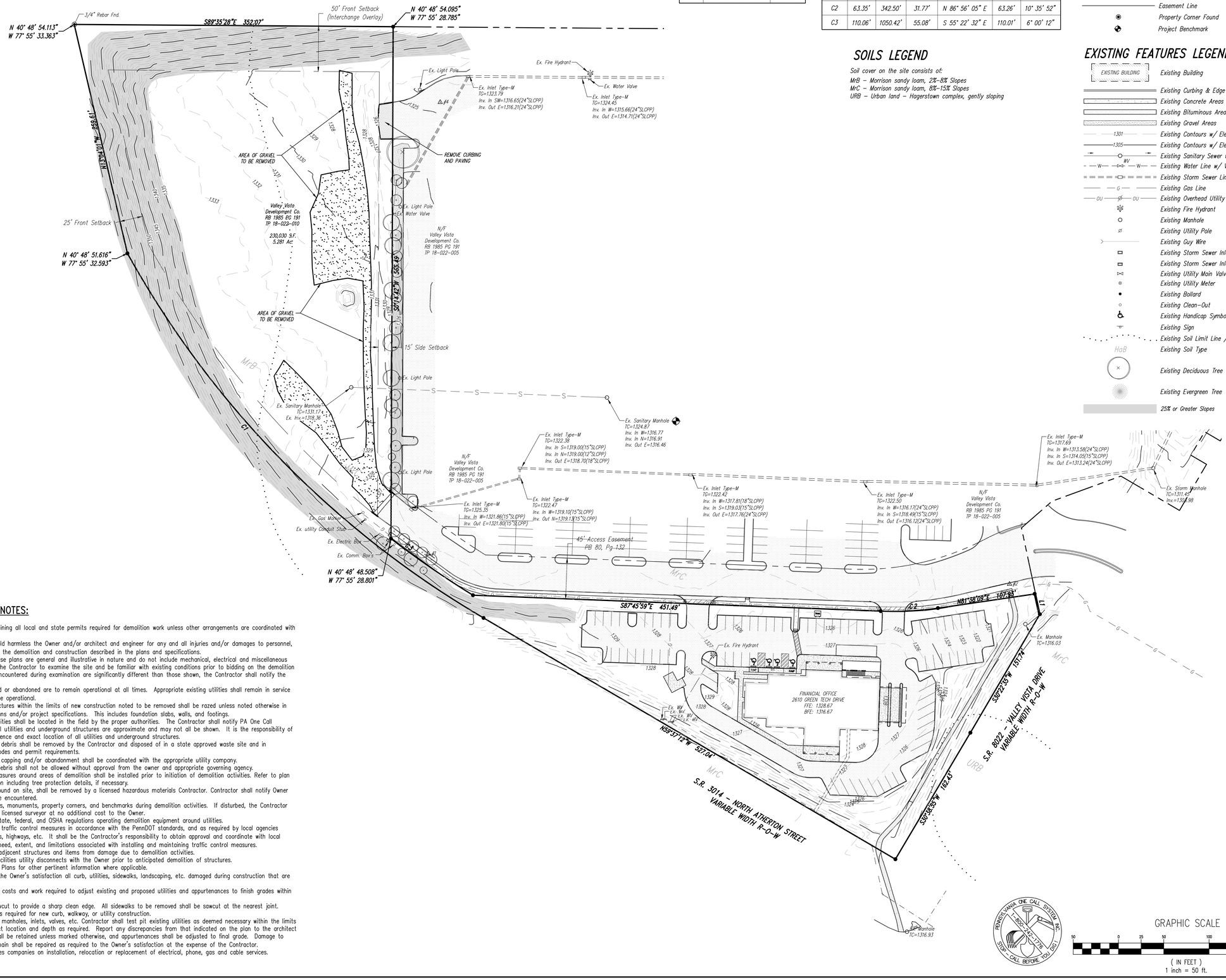
3/4" Rebar Fnd.
N 40° 48' 54.113"
W 77° 55' 33.363"
S89°35'28"E 352.07'
50' Front Setback
(Interchange Overlay)
N 40° 48' 54.095"
W 77° 55' 28.785"
Ex. Fire Hydrant
Ex. Water Valve
Ex. Light Pole
Ex. Inlet Type-M
TG=1323.79
Inv. In SW=1316.65(24"SLCPP)
Inv. Out E=1316.21(24"SLCPP)
Ex. Inlet Type-M
TG=1324.45
Inv. In W=1315.66(24"SLCPP)
Inv. Out E=1314.71(24"SLCPP)
REMOVE CURBING AND PAVING
AREA OF GRAVEL TO BE REMOVED
Valley Vista Development Co. RB 1985 PG 191 TP 18-022-010
230,030 S.F. 5.281 Ac.±
N/F Valley Vista Development Co. RB 1985 PG 191 TP 18-022-005
N 10° 11' 11" W 259.61'
25' Front Setback
N 40° 48' 51.616"
W 77° 55' 32.593"
S 10° 11' 11" E 565.48'
15' Side Setback
Ex. Sanitary Manhole
TC=1331.17
Ex. Inv.=1318.36
Ex. Sanitary Manhole
TC=1324.87
Inv. In W=1316.77
Inv. In N=1316.91
Inv. Out E=1316.46
Ex. Inlet Type-M
TG=1322.38
Inv. In S=1319.00(15"SLCPP)
Inv. In N=1319.00(12"SLCPP)
Inv. Out E=1318.70(18"SLCPP)
Ex. Inlet Type-M
TG=1325.16
Inv. In W=1321.86(15"SLCPP)
Inv. Out E=1321.80(15"SLCPP)
Ex. Inlet Type-M
TG=1322.47
Inv. In W=1319.10(15"SLCPP)
Inv. Out N=1319.13(15"SLCPP)
Ex. Inlet Type-M
TG=1322.42
Inv. In W=1317.81(18"SLCPP)
Inv. In S=1319.03(15"SLCPP)
Inv. Out E=1317.76(24"SLCPP)
Ex. Inlet Type-M
TG=1322.50
Inv. In W=1316.17(24"SLCPP)
Inv. In S=1318.49(15"SLCPP)
Inv. Out E=1316.12(24"SLCPP)
Ex. Inlet Type-M
TG=1317.69
Inv. In W=1313.58(24"SLCPP)
Inv. In S=1314.09(15"SLCPP)
Inv. Out E=1313.24(24"SLCPP)
Ex. Storm Manhole
TC=1317.47
Inv.=1304.98
N/F Valley Vista Development Co. RB 1985 PG 191 TP 18-022-005
N/F Valley Vista Development Co. RB 1985 PG 191 TP 18-022-005
Ex. Gas Meter
Ex. utility Conduit Stub
Ex. Electric Box
Ex. Comm. Box
N 40° 48' 48.508"
W 77° 55' 28.801"
45' Access Easement PB 80, Pg 132
S87°45'59"E 451.49'
N81°38'09"E 107.93'
Ex. Manhole
TC=1316.03
Ex. Fire Hydrant
FINANCIAL OFFICE
2610 GREEN TECH DRIVE
FFE: 1328.67
BFE: 1316.67
Ex. WV
Ex. WV
Ex. WV
N39°37'12"W 527.04'
S.R. 3014 - NORTH ATHERTON STREET
VARIABLE WIDTH R-O-W
S09°22'35"W 157.74'
S.R. 8022 - VALLEY VISTA DRIVE
VARIABLE WIDTH R-O-W
S09°38'35"W 182.43'
Manhole
TC=1316.93
MrB
MrC
URB
C1
C2
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
L13
L14
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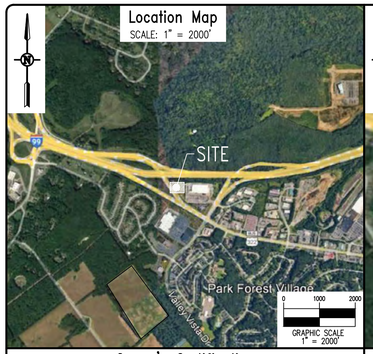

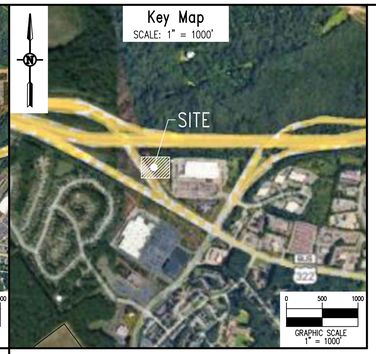

Owner's Certification

State of _____
County of _____

On this the _____ day of _____, 20_____,

_____,
personally appeared before me and certified that they were the owners of the properties shown on this plan and acknowledge the same to be their act and plan and designs, the same to be recorded as such, according to the law.

_____
Owner

witness my hand and seal, this date _____

_____
Notary Public Commission Expires

Storm Water Facilities Acknowledgement

I/We, _____ the landowner(s), my/our heirs and assigns, acknowledge the Stormwater Management System to be a permanent facility which can be altered or removed only after approval of a revised plan by the Patton Township Board of Supervisors. The stormwater management system is to be maintained in accordance with the approved ownership and maintenance program.

Patton Township Planning Commission

Patton Township Planning Commission Approved

_____
Chair Date

_____
Secretary Date

Patton Township Supervisors

Patton Township Supervisors Approved

_____
Chair Date

_____
Secretary Date

Fire Chief Certification

I have reviewed and hereby certify that the location of Fire Lanes and Fire Hydrants shown on this plan are adequate.

_____
Fire Chief Date

Design Engineer Stormwater Certification

I, _____, hereby certify that the Stormwater Management Plan meets all design standards and criteria of the Patton Township Stormwater Management Regulations, Chapter 147 of the Patton Township Code of Ordinances.

Professional Land Surveyor Certification

I, Nevin L. Grove, a Professional Land Surveyor in the Commonwealth of Pennsylvania, do hereby certify that this plan correctly represents the tracts of lands as shown.

_____
Signature Date

Recorder's Stamp Here

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PATTON TOWNSHIP
100 PATTON PLAZA
STATE COLLEGE, PA 16803
PHONE: (814) 234-0271

PROJECT NOTES:

1. General Site Information:
   a. Owner Information: Valley Vista Development Co., 2121 Old Gatesburg Road, State College, PA 16803
   b. Developer Information: Space Mart, 2121 Old Gatesburg Road, State College, PA 16803
   c. Tax Parcel Numbers: 18-022-010
   d. Deed Information: Record Book 1985, Page 191
   e. Total Parcel Area: 5.281 AC (230,030 SF)
   f. Property Address: Green Tech Drive, State College, PA 16803
   g. Municipality: Patton Township
   h. Zoning: Commercial with I-99 Interchange Overlay
   i. Existing Site Use: Bank Office and Meadow
   j. Proposed Site Use: Bank Office and Self Storage
   k. Minimum Lot Size: 3.00 AC (130,680 SF)
   l. Maximum Building Coverage: 30% (69,009 SF)
   m. Proposed Building Coverage: 19.8% (45,561 SF)
   n. Maximum Building Height: 50'
   o. Proposed Building Height: 36'
   p. Maximum Impervious: 65% (3.432 AC 149,526 SF)
   q. Proposed Lot Coverage: 50% (2.647 AC 115,329 SF)

	Building	Parking/Driveways/Sidewalks	Total
Existing Impervious:	0.211 AC (9,202 SF)	0.929 AC (40,467 SF)	1.140 AC (49,669 SF)
Proposed Additional Impervious:	0.880 AC (36,500 SF)	0.761 AC (33,167 SF)	1.599 AC (69,667 SF)
Total Site Impervious:	1.046 AC (45,561 SF)	1.598 AC (69,627 SF)	2.740 AC (119,336 SF)

2. Building Setbacks:

Zoning C2	I-99 Interchange Overlay
Front: 50'	75', 50' with enhanced plantings
Side: 15'	N/A
Rear: 30'	N/A

3. Parking Calculations:
   a. Required Parking Spaces: 1 Space per 50 Storage Units + 1 Space / Loading Zone + 1 Space / Full Time Employee (1 / 50 x 809 Units + 1 Loading Zone + 1 Full Time Employee = 16 + 1 + 1 = 18 Spaces) Required)
   b. Proposed Parking Spaces: 23 Standard + 2 ADA = 25 Spaces
   c. Required Bicycle Parking: 1 Space / 5,000 S.F. x 109,077 S.F. = 22 Spaces
      1. Short Term = 22 Spaces x 80% = 18 Spaces
      2. Long Term = 22 Spaces x 20% = 4 Spaces
   d. Proposed Bicycle Parking: A waiver has been requested to reduce the number of required short term spaces to 4 and long term spaces to 2.

4. The purpose of this plan is to develop Tax Parcel 18-022-10 with a self storage facility and related infrastructure.

5. Natural Site Features & Survey Information:
   a. Soil limits and descriptions have been taken from the Natural Resources Conservation Service Web Soil Survey dated January 2024.
   b. There are no wetlands on the site according to the National Wetland Inventory Mapping (U.S. Fish & Wildlife Service) for State College, PA last updated January 2024.
   c. There are no portions of this site within Flood Plain according to the Federal Emergency Management Agency (FEMA) Map Number 42027C0610F, effective date May 5, 2009.
   d. Contours shown are taken from survey data collected in the field by PennTerra Engineering, Inc.
   e. Horizontal Datum is Pennsylvania North Zone State Plane Coordinates, North American Datum Of 1983 (PA NAD83) U.S. Feet.
   f. Elevation Datum is the North American Vertical Datum Of 1988 (NAVD 88).
   g. The Project Benchmark is Existing Manhole HD-6 In The Home Depot Parking Lot. Elevation = 1324.87'.

6. Easement Information:
- "KISH BANK AT VALLEY VISTA FINAL LAND DEVELOPMENT PLAN", prepared by PENNTERRA ENGINEERING, INC., dated JANUARY 2, 2008, and recorded at Centre County Recodrer of Deeds in Plat Book 80, Page 132.
- All lots may be subject to future easements in favor of utility companies. Any future easements will be reflected in the deed for said lot.

7. Property corners and pins shall be set after lot development and landscaping is completed.

8. For additional information, refer to:
- "LOT CONSOLIDATION PLAN FOR VALLEY VISTA DEVELOPMENT COMPANY, TAX PARCELS 18-22-5 & 18-22-8", prepared by PENNTERRA ENGINEERING, INC., dated FEBRUARY 8, 2000, and recorded at Centre County Recorder of Deeds in Plat Book 62, Page 106.
- "VALLEY VISTA DEVELOPMENT COMPANY, PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR HOME DEPOT", prepared by PENNTERRA ENGINEERING, INC., dated JUNE 29, 2005, and recorded at Centre County Recorder of Deeds in Plat Book 79, Page 116.
- "KISH BANK AT VALLEY VISTA FINAL LAND DEVELOPMENT PLAN", prepared by PENNTERRA ENGINEERING, INC., dated JANUARY 2, 2008, and recorded at Centre County Recodrer of Deeds in Plat Book 80, Page 132.
- "VALLEY VISTA DEVELOPMENT COMPANY PRELIMINARY/FINAL LOT CONSOLIDATION PLAN OF TAX PARCELS 18-22-5 & 18-22-10 AND RESUBDIVISION OF TAX PARCEL 18-22-5", prepared by PENNTERRA ENGINEERING, INC., dated JUNE 28, 2005, and recorded at Centre County Recorder of Deeds in Plat Book 79, Page 44

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
C. ANTHONY FRUCHTL
ENGINEER PE-062413
Seal

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
NEVIN L. GROVE
LAND SURVEYOR No. SU061171
Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-03-SIGNATURES & NOTES
Layout SIGNATURES & NOTES

Date Description
REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

SIGNATURES & NOTES

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE N.T.S.
SHEET NO. 3

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EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Main Valve
- Existing Utility Meter
- Existing Bollard
- Existing Clean-Out
- Existing Handicap Symbol
- Existing Sign
- Existing Soil Limit Line / Boundary
- HaB — Existing Soil Type

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- VAN — PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)
- 15 — PROPOSED PARKING STALL COUNT
- S2 — PROPOSED SIGN W/ LABEL

SOILS LEGEND

Soil cover on the site consists of:

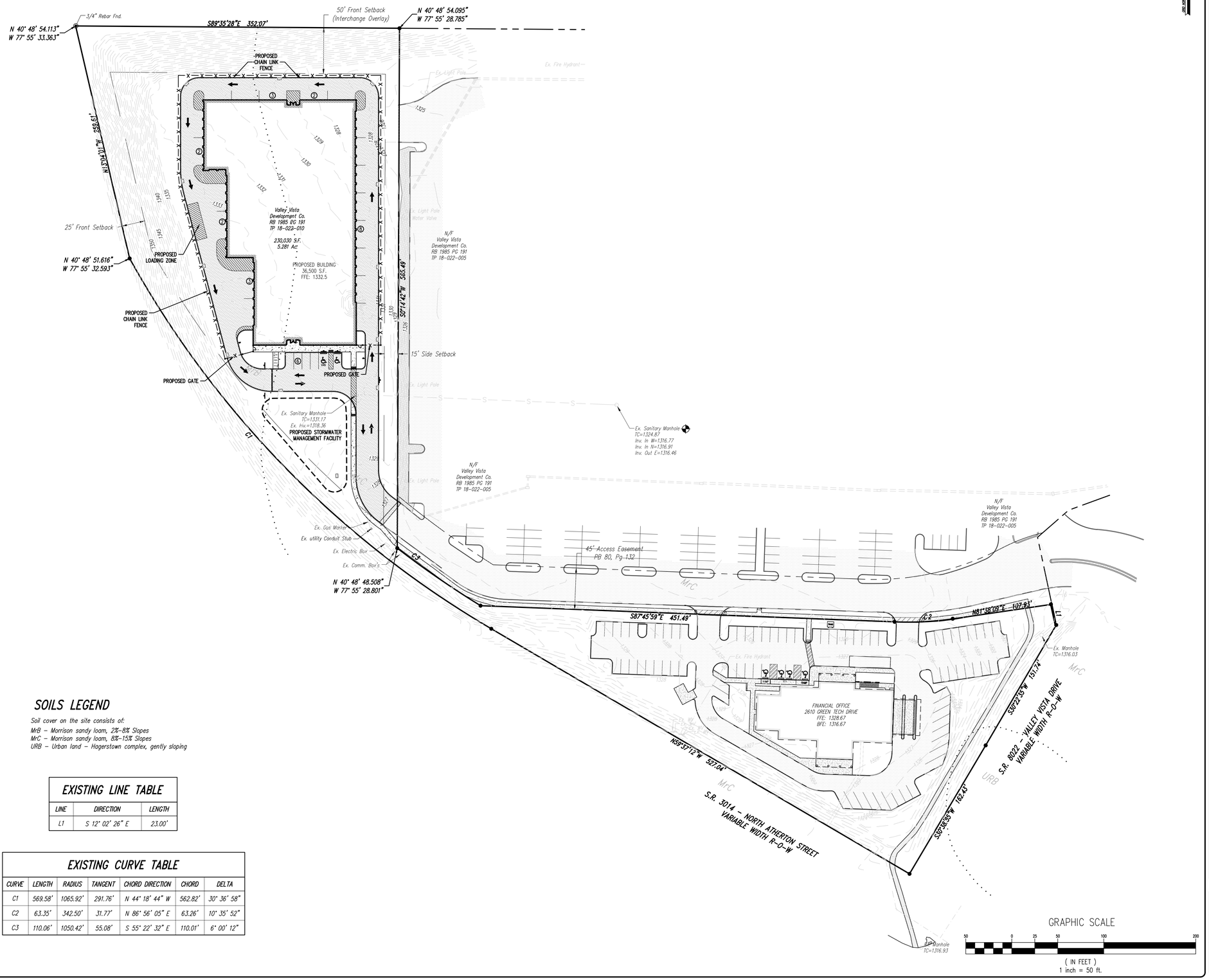
MrB – Morrison sandy loam, 2%-8% Slopes
MrC – Morrison sandy loam, 8%-15% Slopes
URB – Urban land – Hagerstown complex, gently sloping

EXISTING LINE TABLE

LINE	DIRECTION	LENGTH
L1	S 12° 02' 26" E	23.00'

EXISTING CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C1	569.58'	1065.92'	291.76'	N 44° 18' 44" W	562.82'	30° 36' 58"
C2	63.35'	342.50'	31.77'	N 86° 56' 05" E	63.26'	10° 35' 52"
C3	110.06'	1050.42'	55.08'	S 55° 22' 32" E	110.01'	6° 00' 12"



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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — C. ANTHONY FRUCHTL — ENGINEER PE-062413 — Seal

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — NEVIN L. GROVE — LAND SURVEYOR No. SU061171 — Seal

Designer(s)	MJA
Environmental	MSF
Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-04-RECORD
Layout	RECORD PLAN

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

RECORD PLAN

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE 1" = 50'
SHEET NO. 4

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CONSTRUCTION NOTES:

1. Field survey data prepared by PennTerra Engineering, Inc. Contractor shall field verify all information and contact the site Owner or Owner's representative and engineer in the event of a discrepancy.
2. The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid shall be construed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
3. The Contractor shall repair or replace all curb, pavement, utilities, sidewalks, landscaping, etc., within the site damaged during construction that are not indicated to be removed. All repairs or replacements are at the Contractor's expense.
4. All paving to be removed shall be sawcut to provide a sharp clean edge. Existing bituminous pavement shall be removed as required for new curb, walkway, or utility construction. Refer to the detail sheets for specific curb type installation. Contractor shall then mill and/or patch bituminous paving and install scratch course as required to meet existing or proposed grades. All new bituminous paving joints shall be sealed with PG64-22.
5. The Contractor shall verify elevations of existing paving at new paving connection locations before the paving subbase installation and report any discrepancies that will affect the drainage of the areas to the Owner's representative and engineer.
6. The Contractor shall maintain one set of contract documents on site to be utilized for record documents. Field records of the depth and locations of all underground service utilities (water, sanitary sewer, storm drains, primary and secondary electric, gas, and cable television) shall be added to the record set by the Contractor as well as all field revisions and adjustments
7. The Contractor shall provide and maintain traffic control measures in accordance with the PennDOT standards, and as required by local agencies when working in and/or along streets, roads, highways, etc. It shall be the Contractor's responsibility to obtain approval of the traffic control plan if a plan was not provided by the engineer or client's traffic consultant.
8. The Contractor shall refer to the architectural plans for the exact location of utility entrances, building dimensions, roof leaders exit doors, exit ramps, and porches. All site work shall be done in accordance with the plans prepared by PennTerra Engineering, the current regulations of the governing municipality, and all other pertinent federal, state & local laws. Any conflicts between the architectural plans and site plans shall be reported immediately to the Owner's representative.
9. The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the Federal Construction Safety Act (Public Law 91-54), Federal Register, Chapter XVII, Part 1926 of Title 29 regulations, occupational safety and health regulations for construction, and subsequent publications updating these regulations.
10. All site work shall be done in accordance with the plans prepared by PennTerra Engineering Inc., the current requirements of the Patton Township, Centre County, the applicable sections of the PennDOT Standard Specifications for Roadway Construction, and all other pertinent federal and state laws.
11. Any areas designated for approved septic systems must remain undisturbed. Any damage to approved septic areas shall be the responsibility to the contractor.
12. The storage or removal of excess topsoil shall be coordinated with the owner or owner's representative.

EXISTING FEATURES LEGEND

- *Existing Building*
- *Existing Curbing & Edge of Pavement*
- *Existing Concrete Areas*
- *Existing Bituminous Areas*
- *Existing Gravel Areas*
- *Existing Handicap Symbol*
- *Existing Sign*

SURVEY FEATURES LEGEND

- *Property Line, Lot Line or Right of Way Line*
- *Adjoining Property Line*
- *Building Setback Line*
- *Easement Line*
- *Property Corner Found*
- *Project Benchmark*

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
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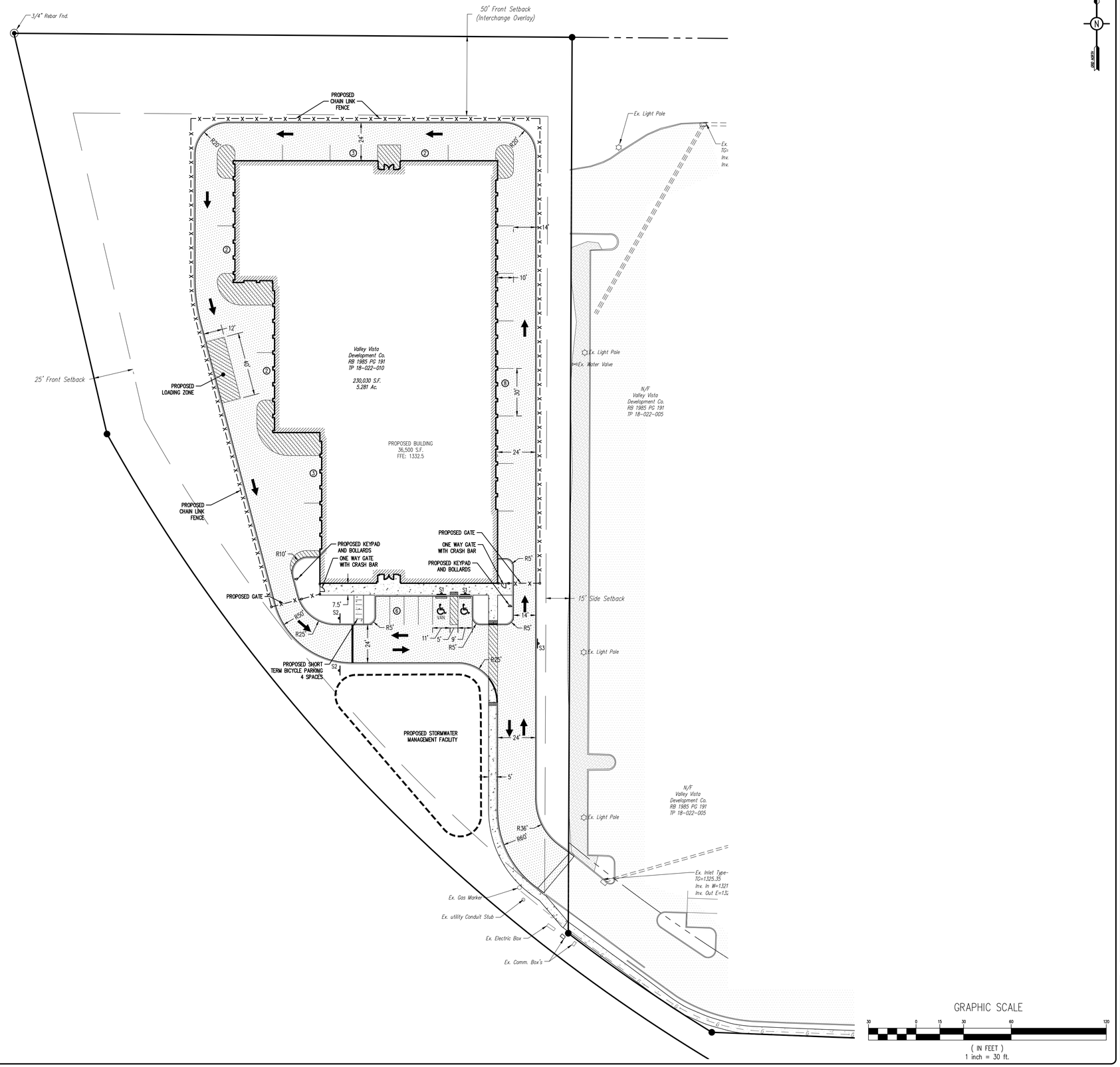
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN W/ LABEL



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Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-05-GEOMETRY
Layout	GEOMETRY PLAN

Date	Description

REVISIONS

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PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

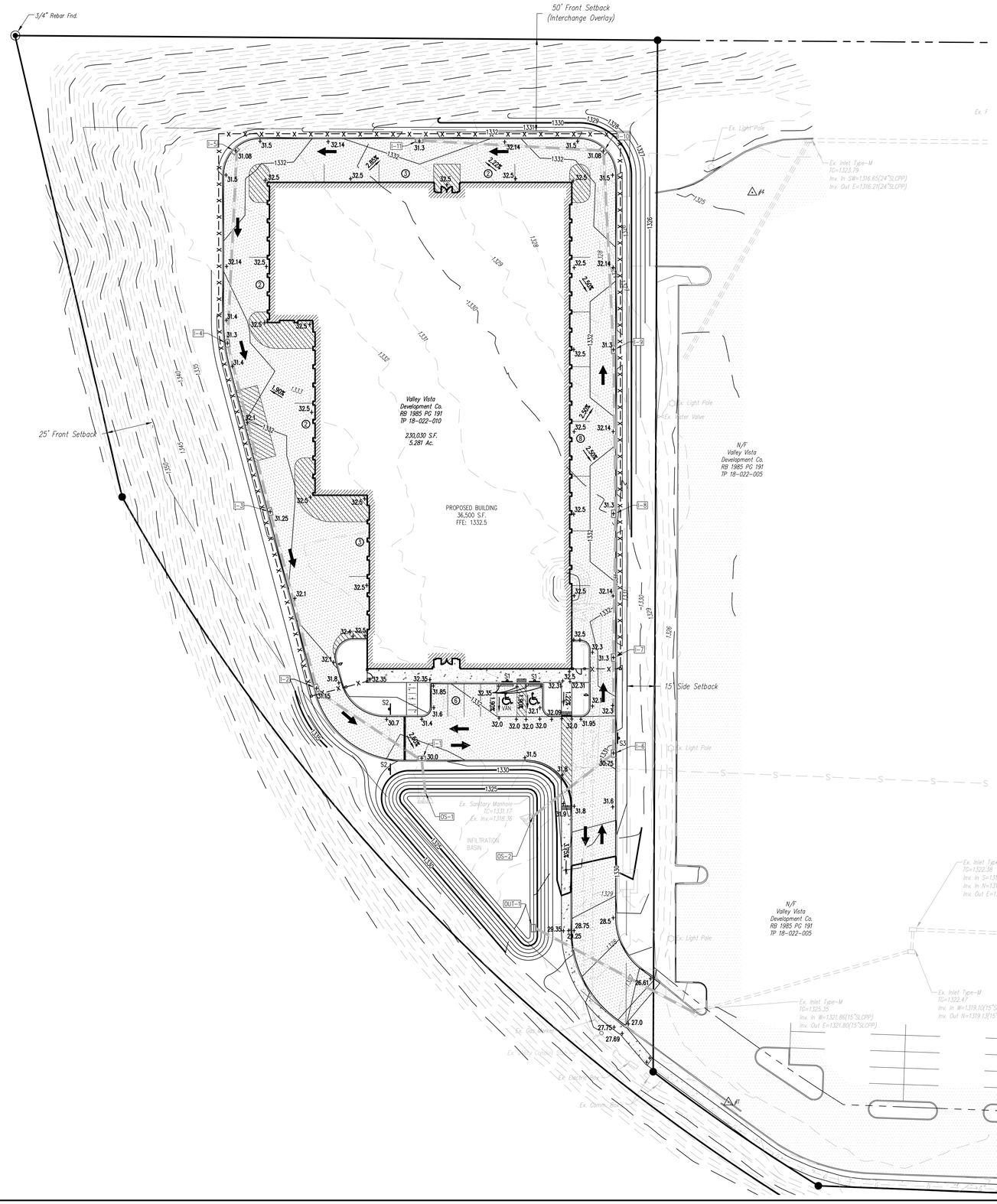
PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

GEOMETRY & MATERIALS PLAN

PROJECT NO.
22296
DATE
FEBRUARY 9, 2024
SCALE
1" = 30'
SHEET NO.
5

GRADING NOTES:

1. The project benchmark is Existing Manhole HD-6 in the Home Depot Parking Lot. Elev. = 1324.87.
2. All existing trees, vegetation, pavements, concrete foundations, structures and organic topsoil shall be stripped and removed from new construction areas unless noted otherwise.
3. All areas not paved shall be sodded, topsoiled, seeded, mulched or landscaped unless otherwise noted in the construction drawings, site specifications or instructed by the Owner.
4. Contractor shall refer to the geotechnical report prior to initiation of any earthwork activity.
5. The maximum slope within all the handicapped parking spaces shall be 2.00% in any direction.
6. The maximum slope for all on-site sidewalks shall be 4.90% with a maximum cross slope of 2.00% and curb ramps shall have a maximum slope of 8.30%
7. Proposed spot elevations are to the bottom of the curb unless noted otherwise.
8. The Contractor shall notify the assigned inspection agency before any retaining wall construction. Retaining walls shall be constructed per the project specification approved building permit and certified by the assigned inspection agency.
9. All fill material brought on to the job by the Contractor must comply with all applicable D.E.P. regulations regarding clean fill.
10. All areas disturbed during construction, not designated to receive paving or mulch, shall be fine graded, topsoiled, & seeded unless otherwise noted in the construction drawings, site specifications or instructed by the Owner.
11. The Contractor shall notify the Owner's testing agency before any placement and compaction of fills on the site. Fill areas shall be prepared and compacted per the project specifications and certified by the Owner's testing agency. Contractor shall be responsible for removal, retesting, and replacement of fills not meeting the specifications. The Contractor is also responsible for all expenses associated with replacement of fills not meeting the specifications.
12. The Contractor shall notify the assigned inspection agency before any retaining wall construction. Retaining walls shall be constructed per the project specification approved building permit and certified by the assigned inspection agency.
13. The Contractor shall stake out and protect all areas designated not to be disturbed, such as wetlands, environmentally sensitive area, etc.



EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Main Valve
- Existing Utility Meter
- Existing Bollard
- Existing Clean-Out
- Existing Handicap Symbol
- Existing Sign
- Existing Soil Limit Line / Boundary
- Existing Soil Type

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED 8" WATER LINE W/ VALVE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER INLET – TYPE M
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413

Seal

Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-06-GRADING
Layout GRADING PLAN

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

GRADING & STORMWATER MANAGEMENT PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP! CALL BEFORE YOU DIG!

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE 1" = 30'
SHEET NO. 6

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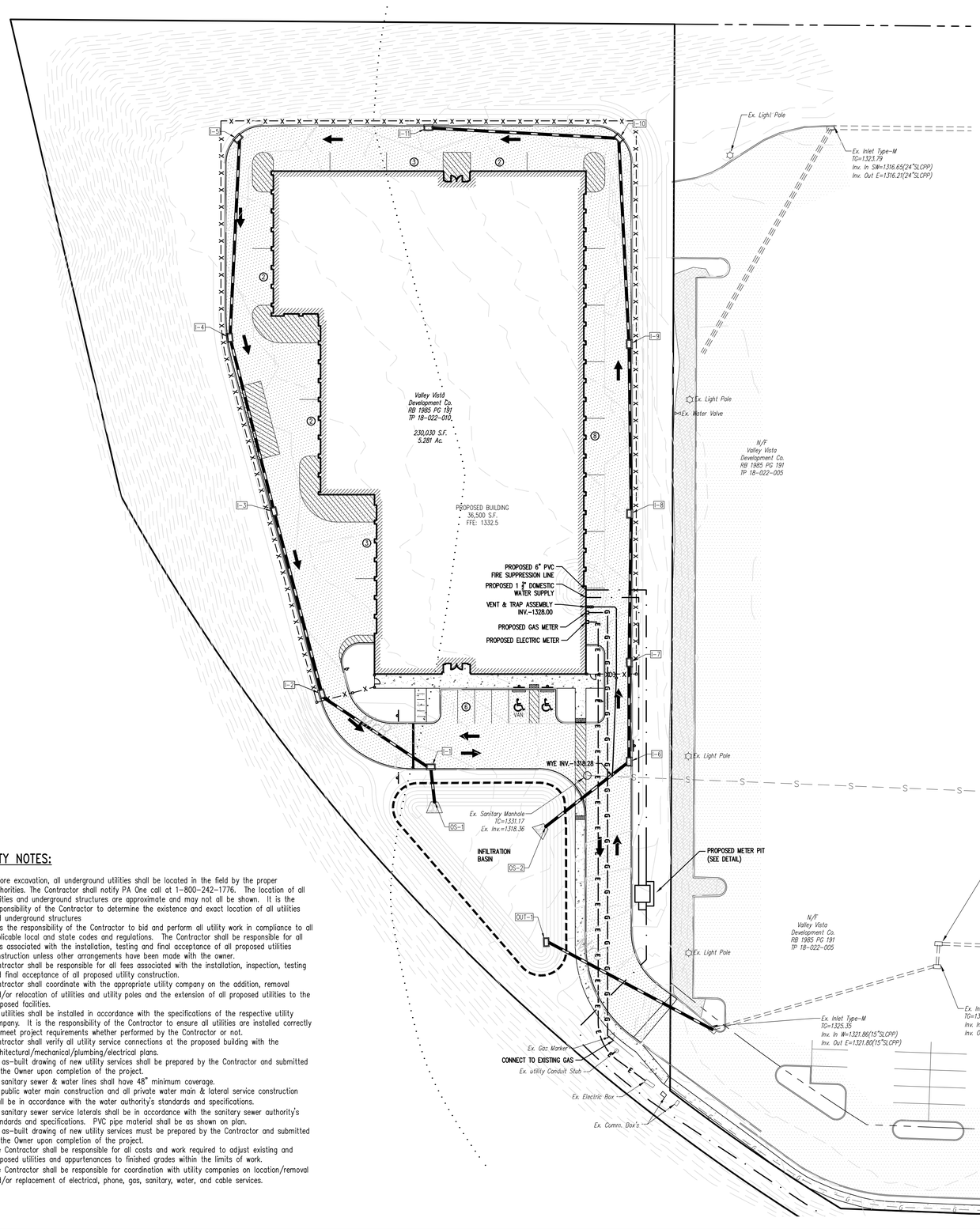

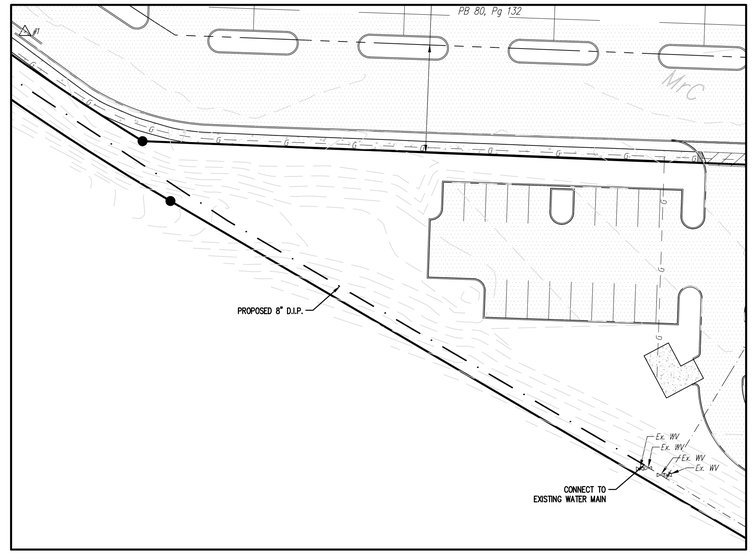

WATERLINE CONNECTION DETAIL

1" = 30'

UTILITY NOTES:

1. Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify PA One call at 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures
2. It is the responsibility of the Contractor to bid and perform all utility work in compliance to all applicable local and state codes and regulations. The Contractor shall be responsible for all fees associated with the installation, testing and final acceptance of all proposed utilities construction unless other arrangements have been made with the owner.
3. Contractor shall be responsible for all fees associated with the installation, inspection, testing and final acceptance of all proposed utility construction.
4. Contractor shall coordinate with the appropriate utility company on the addition, removal and/or relocation of utilities and utility poles and the extension of all proposed utilities to the proposed facilities.
5. All utilities shall be installed in accordance with the specifications of the respective utility company. It is the responsibility of the Contractor to ensure all utilities are installed correctly to meet project requirements whether performed by the Contractor or not.
6. Contractor shall verify all utility service connections at the proposed building with the architectural/mechanical/plumbing/electrical plans.
7. An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
8. All sanitary sewer & water lines shall have 48" minimum coverage.
9. All public water main construction and all private water main & lateral service construction shall be in accordance with the water authority's standards and specifications.
10. All sanitary sewer service laterals shall be in accordance with the sanitary sewer authority's standards and specifications. PVC pipe material shall be as shown on plan.
11. An as-built drawing of new utility services must be prepared by the Contractor and submitted to the Owner upon completion of the project.
12. The Contractor shall be responsible for all costs and work required to adjust existing and proposed utilities and appurtenances to finished grades within the limits of work.
13. The Contractor shall be responsible for coordination with utility companies on location/removal and/or replacement of electrical, phone, gas, sanitary, water, and cable services.

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED 8" WATER LINE W/ VALVE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)

EXISTING FEATURES LEGEND

- *Existing Building*
- *Existing Curbing & Edge of Pavement*
- *Existing Concrete Areas*
- *Existing Bituminous Areas*
- *Existing Gravel Areas*
- *Existing Contours w/ Elevation (1's & 2's)*
- *Existing Contours w/ Elevation (5's & 10's)*
- *Existing Sanitary Sewer w/ Manhole*
- *Existing Water Line w/ Valve*
- *Existing Storm Sewer Line w/ Inlet*
- *Existing Gas Line*
- *Existing Overhead Utility Line w/ Pole*
- *Existing Fire Hydrant*
- *Existing Manhole*
- *Existing Utility Pole*
- *Existing Guy Wire*
- *Existing Storm Sewer Inlet Type-M*
- *Existing Storm Sewer Inlet Type-C*
- *Existing Utility Main Valve*
- *Existing Utility Meter*
- *Existing Bollard*
- *Existing Clean-Out*
- *Existing Handicap Symbol*
- *Existing Sign*

SURVEY FEATURES LEGEND

- *Property Line, Lot Line or Right of Way Line*
- *Adjoining Property Line*
- *Building Setback Line*
- *Easement Line*
- *Property Corner Found*
- *Project Benchmark*

STATE COLLEGE BOROUGH WATER AUTHORITY:

All private water main & lateral service construction shall be in accordance with State College Borough Water Authority's (SCBWA) "material & installation specifications for "private" distribution lines, service lines & fire hydrants", latest edition

All water line pipes shall meet the State College Borough Water Authority's "public water main, service connections & fire hydrant specifications for Contractor installation" as well as "material & installation specifications for "private" distribution lines, service lines & fire hydrants", latest edition.

UNIVERSITY AREA JOINT AUTHORITY:

Sanitary sewer laterals & clean-outs beyond UAJA's utility easement shall be PVC schedule 40 in accordance with UAJA specifications. Sanitary sewer laterals within the utility easement shall be PVC SDR-35.

Contractor shall coordinate depths of non-gravity utility lines, gravity line inverts & other non-gravity lines to obtain adequate depths, clearances, & coverage.

The Contractor shall refer to the architectural plans for the exact location of utility entrances, building dimensions, roof leaders exit doors, exit ramps, and porches. All site work shall be done in accordance with the plans prepared by PennTerra Engineering, the current regulations of the governing municipality, and all other pertinent federal, state & local laws. Any conflicts between the architectural plans and site plans shall be reported immediately to the Owner's representative

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413 Seal

Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-07-UTILITIES
Layout UTILITY PLAN

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

UTILITY PLAN

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE 1" = 30'
SHEET NO. 7

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 STOP! CALL BEFORE YOU DIG!

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PLANTING SCHEDULE

SYMBOL	KEY	QTY	COMMON NAME	BOTANICAL NAME	SIZE
STREET TREES					
	WO	26	WHITE OAK	Quercus alba	2-1/2" CAL.
PARKING LOT / BUFFER YARD CANOPY TREES					
	WO	11	WHITE OAK	Quercus alba	2-1/2" CAL.
	GL	4	GREENSPIRE LINDEN	Tilia cordata 'Greenspire'	2-1/2" CAL.
	SL	11	AMERICAN HORNBEAM	Caprinus caroliniana	4" CAL.
UNDERSTORY/EVERGREEN TREES					
	DW	9	DOGWOOD	Cornus alternatofolia	1 1/2" CAL.
	ER	11	EASTERN REDBUD	Cercis canadensis	3" CAL.
	PD	21	WHITE PINE	Cornus alternatofolia	8' MS
	H	14	HEMLOCK	Tsuga canadensis	6' MS
SHRUBS					
	Y	42	DENSIFORMIS YEW	Taxus media 'Densiformis'	24" HT.
	BV	32	BURKWOODII VIBURNUM	Viburnum x burkwoodii	24"-30" HT.

NOTES: ALL TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH THE PATTON TOWNSHIP STANDARDS. STREET TREES SHALL BE ONE OF THE SPECIES LISTED. A SINGLE SPECIES SHALL ONLY COMPOSE A TOTAL OF 20% OF THE TOTAL STREET TREES.

LANDSCAPE NOTES:
1. THE MULCH IS TO BE DOUBLE SHREDDED HARDWOOD BARK MULCH, WELL AGED AND DARK IN COLOR. APPLY THE MULCH 4" THICK.
2. PLANT MATERIAL SUBSTITUTIONS MAY ONLY BE PERMITTED AT THE APPROVAL OF THE OWNER, TOWNSHIP AND ENGINEER OR LANDSCAPE ARCHITECT.
3. ANY PLANTINGS WHICH DO NOT SURVIVE FOR A PERIOD OF ONE YEAR FROM THE DATE OF PLANTING ARE TO BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. ALL NEW PLANT MATERIAL IS TO BE KEPT WATERED BY THE LANDSCAPE CONTRACTOR WHEN WORKING ON SITE UNTIL COMPLETION OF THE LANDSCAPE OR SEASON'S END (THEN RESUME NEXT SEASON UNTIL PROJECT IS COMPLETED). THE OWNER WILL BE RESPONSIBLE FOR WATERING THEREAFTER.
5. ALL DISTURBED AREAS NOT BEING PLANTED IN TREES OR SHRUBS ARE TO BE FINE GRADED AND SEEDED WITH A HARDY PERENNIAL GRASS SEED MIXTURE AND MULCHED WITH STRAW.
6. ALL CALIPER MEASUREMENTS FOR LANDSCAPING SHALL BE MEASURED AT 6" ABOVE THE ROOT BALL.
7. ALL LANDSCAPED ISLANDS SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 2' AND FILLED WITH SUITABLE MATERIAL.
8. ALL ABOVEGROUND UTILITY BOXES WILL BE SCREENED PER SECTION 175-40.4.C(2) OF THE TOWNSHIP ZONING ORDINANCE.
9. AN UNOBSTRUCTED 24" OVERHANG AREA SHALL BE PROVIDED ALONG ALL PERIMETER PARKING STALLS. ALL PLANTINGS SHALL BE LOCATED OUTSIDE OF THIS OVERHANG AREA.

BUFFER YARD CALCULATIONS:

1. BUFFER YARD 'B' = 565 LF @ 15' WIDE

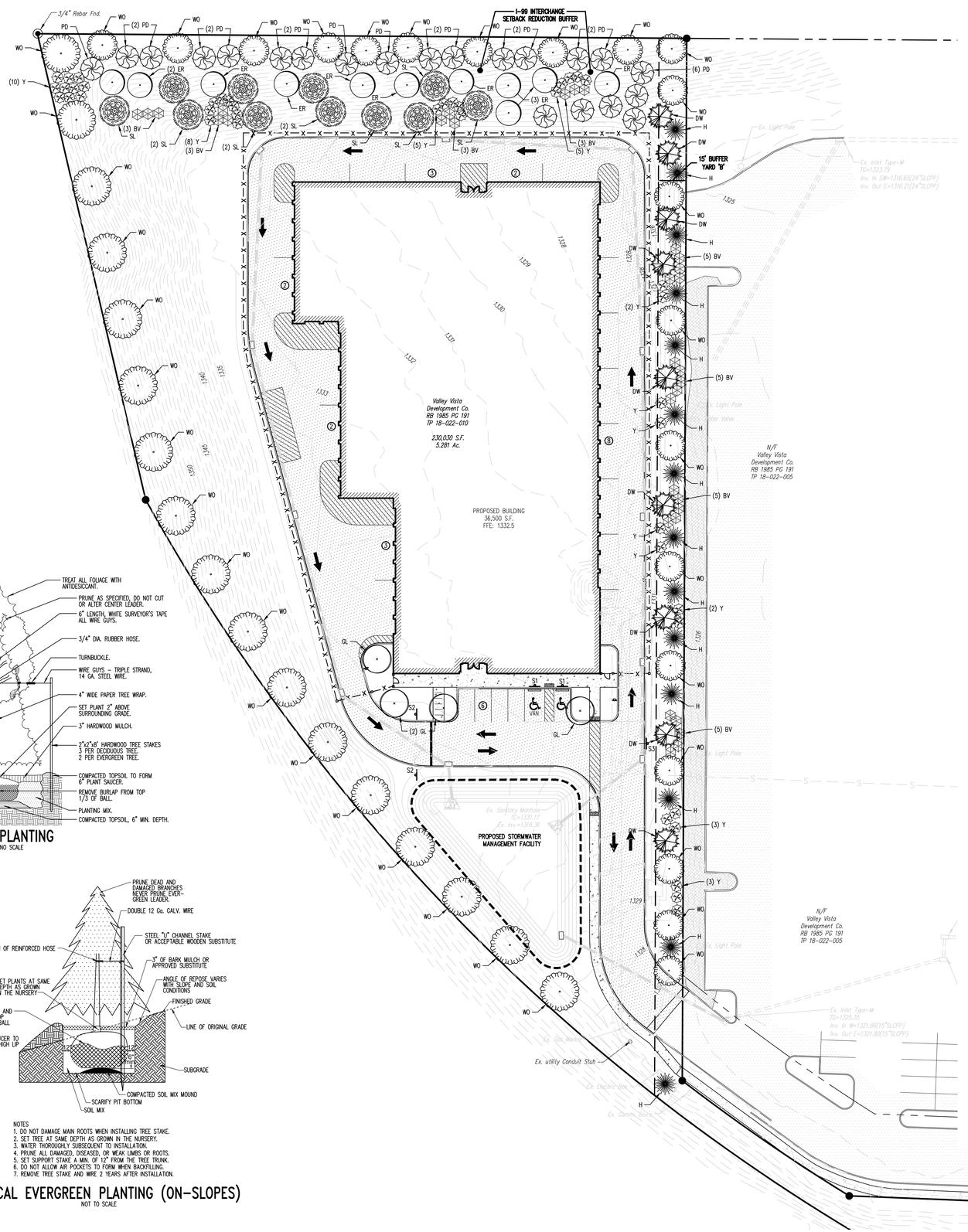
	REQUIRED:		PROPOSED:
2.0 CANOPY TREES / 100 LF	=	11 CANOPY TREES	11
4.0 UNDERSTORY TREES / 100 LF	=	23 UNDERSTORY TREES	23
6.0 SHRUBS / 100 LF	=	34 SHRUBS	34

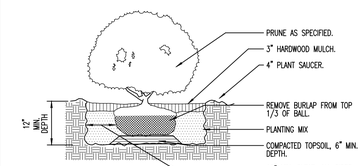
I-99 INTERCHANGE BUFFER YARD CALCULATIONS (FOR SETBACK REDUCTION):

REQUIRED:	PROPOSED:
4.0 CANOPY TREES (4" CALIPER) / 100 L.F. X 352 L.F. X 75% = 11 TREES	11 TREES
4.0 UNDERSTORY TREES (3" CALIPER) / 100 L.F. X 352 L.F. X 75% = 11 TREES	11 TREES
16.0 SHRUBS / 100 L.F. X 352 L.F. X 75% = 42 SHRUBS	42 SHRUBS
8.0 EVERGREEN TREES / 100 L.F. X 352 X 75% = 21 TREES	21 TREES

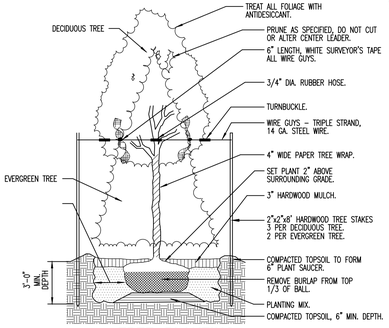
STREET TREES:

REQUIRED:	PROPOSED:
1 CANOPY TREE / 40 L.F. x 1,042 = 26 TREES	26 STREET TREES

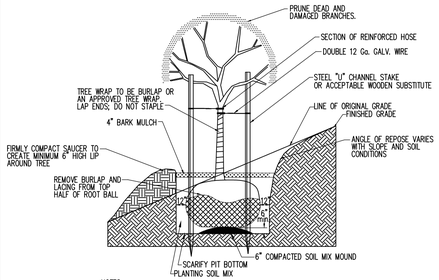




SHRUB PLANTING
NO SCALE

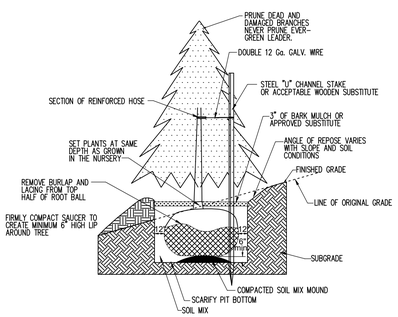


TREE PLANTING
NO SCALE



NOTES
1. DO NOT DAMAGE MAIN ROOTS WHEN INSTALLING TREE STAKES.
2. SET TREE AT SAME DEPTH AS GROWN IN THE NURSERY.
3. WATER THOROUGHLY SUBSEQUENT TO INSTALLATION.
4. PRUNE ALL DAMAGED, DISEASED, OR WEAK LIMBS OR ROOTS.
5. SET SUPPORT STAKES A MIN. OF 12" FROM THE TREE TRUNK.
6. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
7. REMOVE TREE STAKE AND WIRE 2 YEARS AFTER INSTALLATION.

TYPICAL DECIDUOUS TREE PLANTING (ON-SLOPES)
NOT TO SCALE



NOTES
1. DO NOT DAMAGE MAIN ROOTS WHEN INSTALLING TREE STAKE.
2. SET TREE AT SAME DEPTH AS GROWN IN THE NURSERY.
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5. SET SUPPORT STAKE A MIN. OF 12" FROM THE TREE TRUNK.
6. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
7. REMOVE TREE STAKE AND WIRE 2 YEARS AFTER INSTALLATION.

TYPICAL EVERGREEN PLANTING (ON-SLOPES)
NOT TO SCALE

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- 1301 Existing Contours w/ Elevation (1's & 2's)
- 1305 Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
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- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Main Valve
- Existing Utility Meter
- Existing Bollard
- Existing Clean-Out
- Existing Handicap Symbol
- Existing Sign

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
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- PROPOSED CHAINLINK FENCE
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- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 (811) STOP - CALL BEFORE YOU DIG!!

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413
Seal

Seal

Designer(s)	MJA
Environmental	MSF
Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-08-LANDSCAPE
Layout	LANDSCAPING PLAN

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

LANDSCAPING PLAN

PROJECT NO.	22296
DATE	FEBRUARY 9, 2024
SCALE	1" = 30'
SHEET NO.	8

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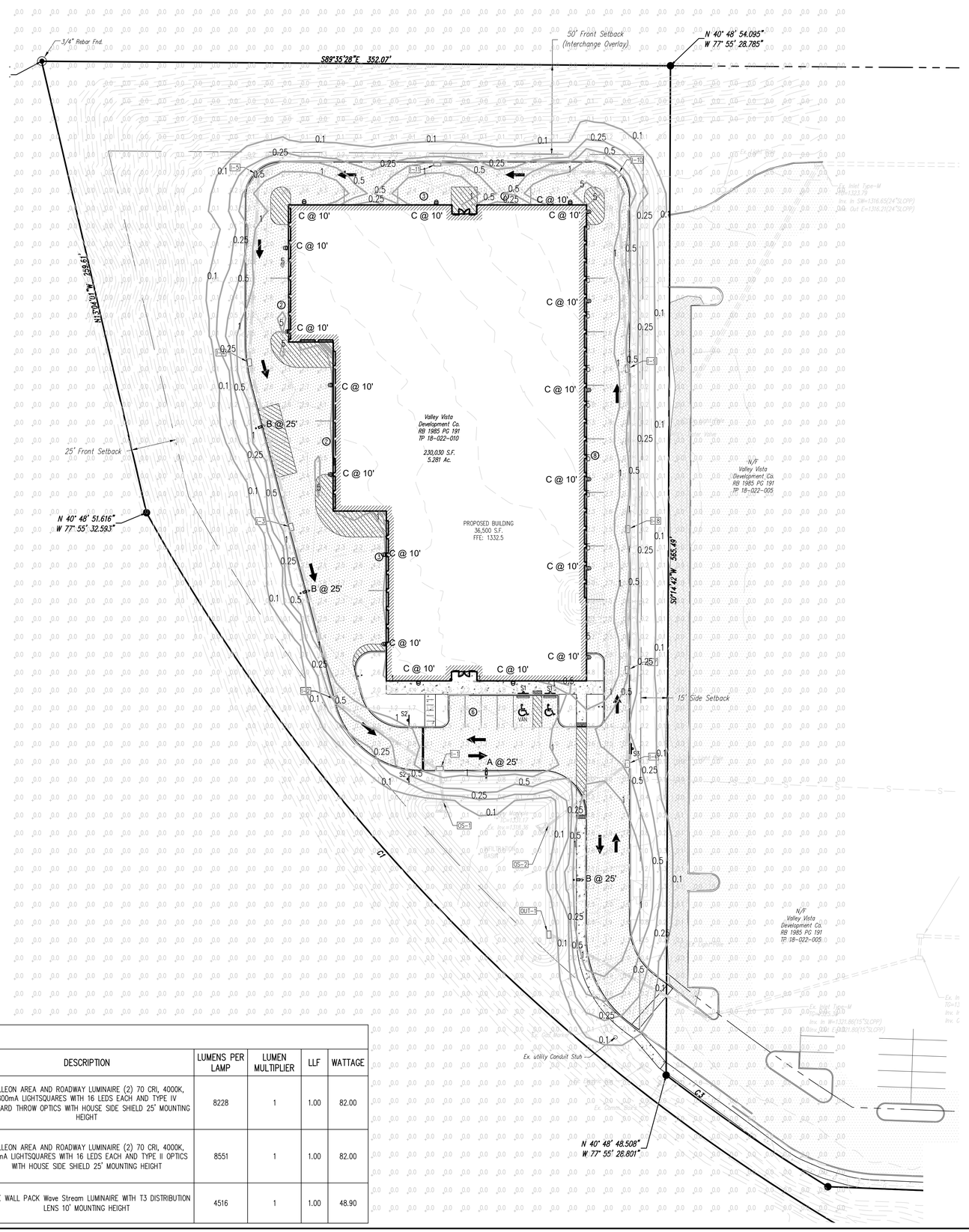
ELECTRICAL NOTES:

1. Electrical contractor shall verify and coordinate all existing and new underground facilities with all contractors, utility companies, etc. before beginning any underground construction.
2. Wiring under all pavement surfaces shall be in PVC conduit size as indicated – minimum size 1". Electrical contractor shall field verify location of all roadways, walkways, patios, terraces, etc. and provide conduit under all locations for wiring access.
3. All circuits shall be complete with ground wire.
4. All conduit shall be set at a minimum depth of 24".
5. All wiring trenches shall be run as close as possible to all curbs – no wiring shall run through the center of any island, planter, terrace, courtyard, etc. Electrical contractor shall verify conduit location in the field before excavating.
6. Contractor shall provide electrical design services and drawings per latest building & electrical code standards for lighting connections, circuitry & controller, and shall be responsible for any code approvals for the design.
7. Electrical installation for lighting shall include required wiring and conduit to 5' outside of the building. Building contractor to supply control panels, timing clocks and connection to exterior wiring.
8. A 75% reduction in lighting levels shall be maintained during post-curfew.



EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
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PROPOSED FEATURES LEGEND

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- PROPOSED STORM SEWER INLET – TYPE M
- VAN — PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

STATISTICS						
DESCRIPTION	SYMBOL	AVG.	MAX.	MIN.	MAX/MIN	AVG/MIN
PAVED AREA	*	2.0 FC	9.0 FC	0.2 FC	45.0:1	10.0:1
TRESPASS	+	0.2 FC	9.0 FC	0.0 FC	N/A	N/A

LUMINAIRE SCHEDULE								
SYMBOL	LABEL	QTY.	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LUMENS PER LAMP	LUMEN MULTIPLIER	LLF	WATTAGE
	A	1	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON (FORMERLY EATON)	GALN-SA2B-740-U-T4FT-HSS	GALLEON AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD 25' MOUNTING HEIGHT	8228	1	1.00	82.00
	B	3	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON (FORMERLY EATON)	GALN-SA2B-740-U-T2-HSS	GALLEON AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD 25' MOUNTING HEIGHT	8551	1	1.00	82.00
	C	17	COOPER LIGHTING SOLUTIONS – INVUE (FORMERLY EATON)	CCW-VA-3-740-U-T3	INVUE WALL PACK Wave Stream LUMINAIRE WITH T3 DISTRIBUTION LENS 10' MOUNTING HEIGHT	4516	1	1.00	48.90

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
C. ANTHONY FRUCHTL
ENGINEER
PE-062413
Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-9-LIGHTING PRE
Layout LIGHTING PLAN PRE CURFEW

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

LIGHTING PLAN PRE CURFEW

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 811 STOP! CALL BEFORE YOU DIG!

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE 1" = 30'
SHEET NO. 9

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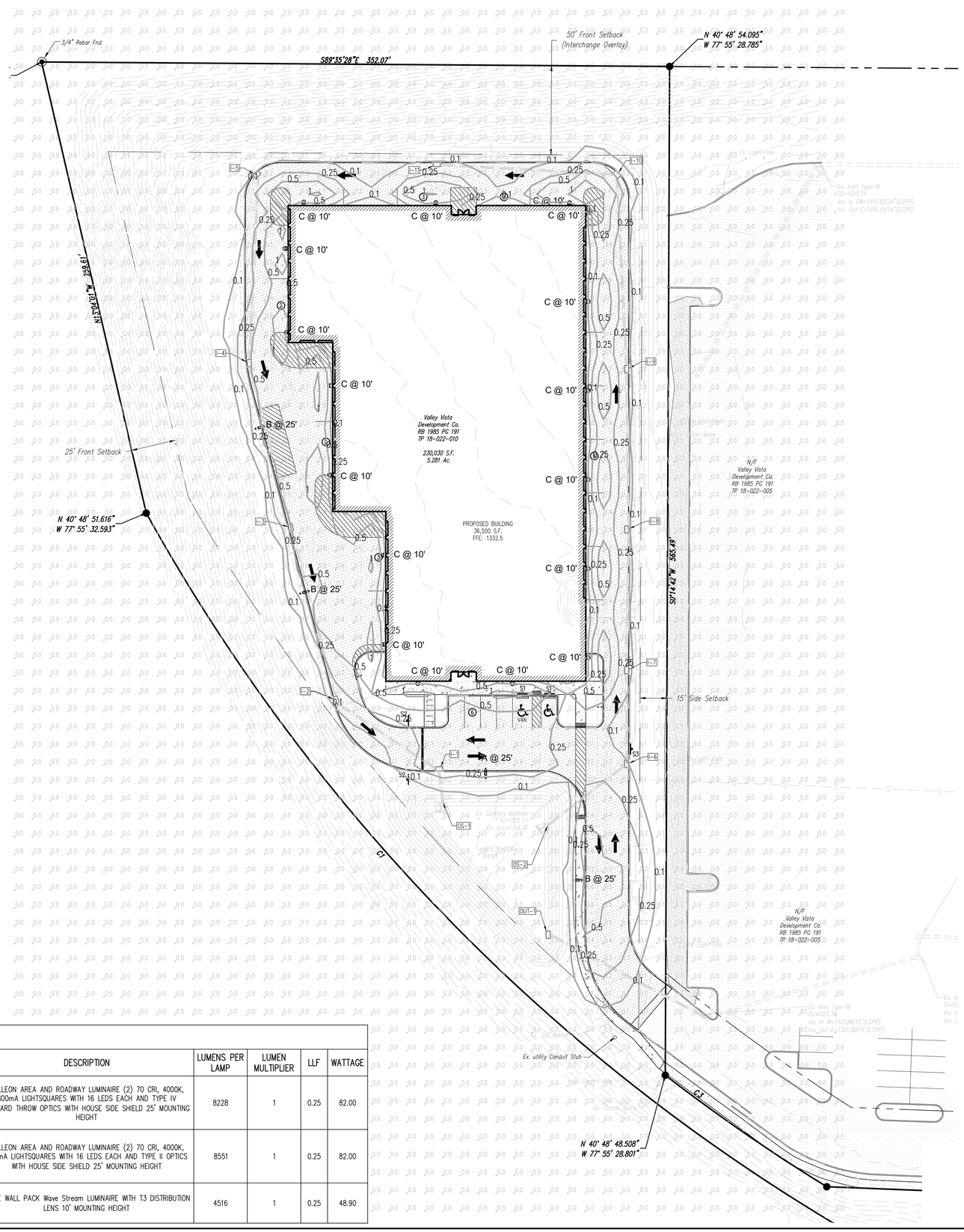
ELECTRICAL NOTES:

1. Electrical contractor shall verify and coordinate all existing and new underground facilities with all contractors, utility companies, etc. before beginning any underground construction.
2. Wiring under all pavement surfaces shall be in PVC conduit size as indicated – minimum size 1". Electrical contractor shall field verify location of all roadways, walkways, patios, terraces, etc. and provide conduit under all locations for wiring access.
3. All circuits shall be complete with ground wire.
4. All conduit shall be set at a minimum depth of 24".
5. All wiring trenches shall be run as close as possible to all curbs – no wiring shall run through the center of any island, planter, terrace, courtyard, etc. Electrical contractor shall verify conduit location in the field before excavating.
6. Contractor shall provide electrical design services and drawings per latest building & electrical code standards for lighting connections, circuitry & controller, and shall be responsible for any code approvals for the design.
7. Electrical installation for lighting shall include required wiring and conduit to 5' outside of the building. Building contractor to supply control panels, timing clocks and connection to exterior wiring.
8. A 75% reduction in lighting levels shall be maintained during post-curfew.



EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Main Valve
- Existing Utility Meter
- Existing Bollard
- Existing Clean-Out
- Existing Handicap Symbol
- Existing Sign
- Existing Soil Limit Line / Boundary
- Existing Soil Type

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED 8" WATER LINE W/ VALVE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER INLET – TYPE M
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PENNSYLVANIA ONE CALL SYSTEM, INC.
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STATISTICS

DESCRIPTION	SYMBOL	AVG.	MAX.	MIN.	MAX/MIN	AVG/MIN
PAVED AREA	✳	0.4 FC	2.2 FC	0.0 FC	N/A	N/A
TRESPASS	+	0.0 FC	2.2 FC	0.0 FC	N/A	N/A

LUMINAIRE SCHEDULE

SYMBOL	LABEL	QTY.	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LUMENS PER LAMP	LUMEN MULTIPLIER	LLF	WATTAGE
	A	1	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON (FORMERLY EATON)	GALN-SA2B-740-U-T4FT-HSS	GALLEON AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD 25' MOUNTING HEIGHT	8228	1	0.25	82.00
	B	3	COOPER LIGHTING SOLUTIONS – McGRAW-EDISON (FORMERLY EATON)	GALN-SA2B-740-U-T2-HSS	GALLEON AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD 25' MOUNTING HEIGHT	8551	1	0.25	82.00
	C	17	COOPER LIGHTING SOLUTIONS – INVUE (FORMERLY EATON)	CCW-VA-3-740-U-T3	INVUE WALL PACK Wave Stream LUMINAIRE WITH T3 DISTRIBUTION LENS 10' MOUNTING HEIGHT	4516	1	0.25	48.90

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Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-9.1-LIGHTING POST
Layout LIGHTING PLAN POST

Date Description
REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

LIGHTING PLAN POST CURFEW

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE 1" = 30'
SHEET NO. 9.1

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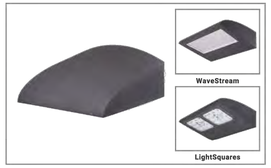
Project		Catalog #		Type	
Prepared by		Notes		Date	



Invue

ClearCurve Wall

Wall Mount Luminaire

Product Features

BAA

Product Certifications

IDA DARK SKY COMPLIANT · IP66 · DLC LISTED · DLC PREMIUM · UL CERTIFIED · 5 YEAR

Interactive Menu

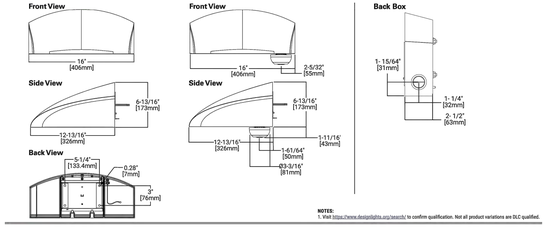
Quick Facts

- Available with Visual Comfort or Discrete optics configurations
- Lumen packages range from 1,600 up to 12,000 lumens (18W - 110W)
- Efficacy up to 149 lumens per watt

Connected Systems

- WaveLinx

Dimensional Details



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Light Affinities™ · BAA

Product Certifications

IDA DARK SKY COMPLIANT · DLC · DLC PREMIUM · 3G VIB · IP66 · UL CERTIFIED · 5 YEAR

Interactive Menu

Quick Facts

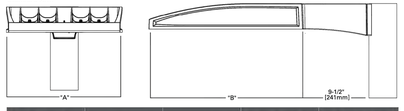
- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Connected Systems

- WaveLinx Lite
- WaveLinx

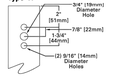
Dimensional Details

Standard Arm



Pole Drilling Patterns

Type "N"



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified (3000K CCT and warmer only, fixed mounting options)

Ordering Information

SAMPLE NUMBER: **CCW-VA4-740-U-T4W-GM**

Product Family [1]	Light Engine: Visual Comfort Configurations	Light Engine: Discrete Configurations	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Finish
CCW=ClearCurve Wall **BAA-CCW**=Classic, Invue Wall Buy American Act Compliant [2] **TAA-CCW**=ClearCurve Wall Trade Agreements Act Compliant [2]	**VA1**=Wavestream, 2,800 lumens **VA2**=Wavestream, 4,400 lumens **VA3**=Wavestream, 6,200 lumens **VA4**=Wavestream, 6,000 lumens **VA5**=Wavestream, 8,000 lumens [3] **VA6**=Wavestream, 10,000 lumens [3]	**SA1**=1 Light Square **SA2**=2 Light Squares	**A**=350mA **B**=450mA **C**=615mA **D**=800mA, **E**=1050mA **F**=1200mA [4]	**722**=702CRI, 2700K **730**=70CRI, 3000K **735**=70CRI, 3500K **740**=70CRI, 4000K **750**=70CRI, 5000K **760**=70CRI, 6000K **827**=80CRI, 2700K **830**=80CRI, 3000K **835**=80CRI, 3500K **840**=80CRI, 4000K **850**=80CRI, 5000K **AMB**=Amber, 590nm [5]	**U**=universal, 120-277V **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [6] **9**=347V	**T1**=Type I [7] **T2**=Type II **T4W**=Type IV Wide **SL2**=Type II w/Split Control [8] **SL3**=Type III w/Split Control [8] **SL4**=Type IV w/Split Control [8] **SLL**=90° Split Light Eliminator Left [8] **SLR**=90° Split Light Eliminator Right [8]	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White **RALXX**=Custom Color

Options (Add as Suffix)

FF = Double Fuse (208, 240, or 480V. Must Specify Voltage)
10MSP = 10kV MOV Surge Protective Device
20MSP = 20kV MOV Surge Protective Device
2SK = 2SKV UL 1449 Fused Surge Protective Device
2L = Two Circuits [9]
HA = 50°C High Ambient
HSS=Installed House Side Shield [10]
HSSR=Retrofit House Side Shield, Black [10]
GBSBK=Glare Reducing Shield, White [10]
LCF=Light Square Trim Painted to Match Housing [10]
TH=Tool-less Door Hardware [7]
CC=Coastal Construction finish [3]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° *Right*
AHD145=After Hours Dim, 5 Hours [11]
AHD245=After Hours Dim, 6 Hours [11]
AHD255=After Hours Dim, 7 Hours [11]
AHD355=After Hours Dim, 8 Hours [11]
DALI=DALI Drivers

Controls and Systems Options (Add as Suffix)

BPC=Button Type Photocontrol [12]
P5=NEMA 5-PIN Twistlock Photocontrol Receptacle [13]
P87=NEMA 7-PIN Photocontrol Receptacle [13]
FADC=Field Adjustable Dimming Controller [14]
SPD2=Dimming Motion Sensor, 9'-20' mounting [15]
SPD4=Dimming Motion Sensor, 21'-40' mounting [15]
SPD2/X=Dimming Motion Sensor, limited square count, 9'-20' mounting [16]
SPD4/X=Dimming Motion Sensor, limited square count, 21'-40' mounting [16]
ZM=Zhaga Receptacle for 2-PIN Twistlock Receptacle [13]
ZD=SR Dome-mount 4-PIN Twistlock Receptacle [13]
ZW-WOXBX=WaveLinx Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting [15,16,17]
ZD-WOXBX=WaveLinx Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting [15,16,18]
ZW-WOXSX=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'- 40' Mounting [15,16,18]
ZW-SWPDXXX=WaveLinx Pro, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting [15,16,19]
ZW-SWPDXXX-W=WaveLinx Pro, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting [15,16,19]
ZD-SWPD4XX=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting [15,16,19]
ZD-SWPDSXX=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting [15,16,19]
DIM10-MS/DIM-L20=Synapse Occupancy Sensor (9'-20' Mounting) [20]
DIM10-MS/DIM-L40=Synapse Occupancy Sensor (21'-40' Mounting) [20]

Accessories (Order Separately)

OA/RA1013 = Photocontrol Shorting Cap
OA/RA1014 = NEMA Photocontrol - 120V
OA/RA1016 = NEMA Photocontrol - Multi-Tap 105-285V
OA/RA1201 = NEMA Photocontrol - 347V
OA/RA1027 = NEMA Photocontrol - 480V
MA1252=120V Surge Module Replacement
MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1027-XX=@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1028-XX=@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1188-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1189-XX=@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1190-XX=@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1191-XX=@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1039-XX=@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1192-XX=@120° Tenon Adapter for 3-1/2" O.D. Tenon
MA1193-XX=@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1194-XX=@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1195-XX=@90° Tenon Adapter for 3-1/2" O.D. Tenon
SRA238=Adapter kit for mounting to 2-3/8" O.D. Tenon
LS/HSS=Field Installed House Side Shield [10]
LS/GBSBK-2PK=Glare Reducing Shield, Black [10]
LS/GBSWH-2PK=Glare Reducing Shield, White [10]
LS/PPS=Perimeter Shield, Black [10]
WOLC-7P-10A=WaveLinx Outdoor Control Module [13,19]
WOB-XX=WaveLinx Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting [15,16,18,19]
WOF-XX=WaveLinx Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 15'- 40' Mounting [15,16,18,19]
SWPD4-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting [15,16,19]
SWPDS-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting [15,16,19,24]

EMERGENCY OPTIONS (choose only one)
EBP = Emergency Battery Pack (Ambient Temp, 0° to 40°C) [3,4,15,17]
CBP = Cold Weather Emergency Battery Pack (Ambient Temp, -20° to 40°C) [3,4,15,17]
CBP-CEC = Cold Weather Emergency Battery Pack, CEC Compliant (Ambient Temp, -20° to 40°C) [3,4,15,17]
ITS = Internal Transfer Switch, UL Recognized Component [3,15]

NOTES:
1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Only available with Type IV Wide (T4W) distribution.
3. Not available with 2 Light Squares (SA2x).
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. Not available with Visual Comfort Light Engines (VAx).
6. Not available with 1 Light Square (SA1x).
7. Not available with other emergency options (EBP, CBP, CBP-CEC, or ITS).
8. Only available with Universal, 120-277V (UNV) voltage.
9. Light Square trim plate will be painted Black when HSS option is selected.
10. Not available with VA6 or SA2E Light Engine. Not available with emergency options (EBP, CBP, or CBP-CEC). Not available with AMB (amber lens)
11. Multi-Square configuration only. Luminaire tested per ASTM B117. Scribe rating of 7 per ASTM D1654.
12. Must specify voltage 120, 208, 240 or 277V.
13. Not available with VA6 or SA2E Light Engines.
14. If 347-480V (H) or 277-480V (J) voltage is specified, use a photocontrol that matches the input voltage used (either 277V, 347V, or 480V).
15. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information.
16. Utilizes the Wattstopper sensor FSP-211. Sensor color white unless specified otherwise via ETO.
17. Utilizes the Wattstopper sensor FSP-3x1. Sensor color determined by product finish. See reference table.
18. Sensor passive infrared (PIR) may be overly sensitive when operating below -20°C (-4°F).
19. In order for the device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more Wavelinx application information.
20. Not available with Back Box.
21. Requires 4-PIN twistlock receptacle option (Z0 or ZR) option.
22. Must order one per Light Square when ordering as a field-installable accessory (1 or 2).
23 This tool enables adjustment to Motion Sensor (MS) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative for more information.
24. Requires 3 PIN NEMA twistlock photocontrol receptacle (PR7) option. The WOLC-7 cannot be used in conjunction with other controls systems (MS, ZS, or ZW). Only for use at 120-347V.
25. Use for wildlife and observatory (Narrow-band 590nm +/- 5nm). Choose drive current B for SA1 or SA2. Choose lumen package VA2 for T2, T3, and T4FT; choose VA5 for T4W. Not available with ZL option.
26. Not available with DALI PR7, MS/DIM, SPB1, SPB2, ZS, ZW, SWPD (any sensors or network dimming control devices).
27. Battery systems are UL924 Listed
28. ZL not available with FF, AHD or DALI options. Controls and/or battery packs operate only one of the two circuits when ZL is specified. ZL with controls options not available with 347V or 480V.
29. Product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1,2]	Light Engine: Configuration	Light Engine: Drive Current	Color Temperature	Voltage	Distribution	Mounting	Finish
BAA-GALN=Galleon II Buy American Act Compliant [3] **TAA-GALN**=Galleon II Trade Agreements Act Compliant [3]	**SA1**=1 Square **SA2**=2 Square **SA3**=3 Squares **SA4**=4 Squares **SA5**=5 Squares **SA6**=6 Squares **SA7**=7 Squares **SA8**=8 Squares **SA9**=9 Squares	**A**=400mA **C**=530mA **D**=1000mA **E**=1200mA [4,12]	**722**=70CRI, 2200K **727**=70CRI, 2700K **730**=70CRI, 3000K **735**=70CRI, 3500K **740**=70CRI, 4000K **750**=70CRI, 5000K **760**=70CRI, 6000K **827**=80CRI, 2700K **830**=80CRI, 3000K **835**=80CRI, 3500K **840**=80CRI, 4000K **850**=80CRI, 5000K **AMB**=Amber, 590nm [5,6]	**U**=120-277V **H**=347V-480V [7,8] **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [7] **9**=347V **DV**=277V-480V DuraVolt Drivers [9,10,31]	**T2**=Type II **T2R**=Type II Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **SNQ**=Type V Narrow **SMQ**=Type V Square Medium **SWQ**=Type V Square Wide **SL2**=Type II w/Split Control **SL3**=Type III w/Split Control **SL4**=Type IV w/Split Control **SLL**=90° Split Light Eliminator Left **SLR**=90° Split Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline	**[Blank]**=Standard Pole Mount Arm **QM**=Quick Mount Arm Kit with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=Slipfitter, Adjustable [9] **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White **RALXX**=Custom Color

Options (Add as Suffix)

DIM=External 0-10V Dimming Leads [28]
F=Single Fuse (120, 277 or 347V Specify Voltage)
FF=Double Fuse (208, 240 or 480V Specify Voltage)
20K=20kV UL 1449 fused surge protective device [28]
2L=Two Circuits [9]
HA=50°C High Ambient
HSS=Installed House Side Shield [10]
HSSR=Retrofit House Side Shield, Black [28]
GBSBK=Glare Reducing Shield, White [28]
LCF=Light Square Trim Painted to Match Housing [28]
TH=Tool-less Door Hardware [9]
CC=Coastal Construction finish [3]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° *Right*
AHD1455=After Hours Dim, 5 Hours [13]
AHD245=After Hours Dim, 6 Hours [13]
AHD255=After Hours Dim, 7 Hours [13]
AHD355=After Hours Dim, 8 Hours [13]
DALI=DALI Drivers

Controls and Systems Options (Add as Suffix)

BPC=Button Type Photocontrol [4]
P5=NEMA 5-PIN Photocontrol Receptacle
P87=NEMA 7-PIN Photocontrol Receptacle [4]
FADC=Field Adjustable Dimming Controller [29]
SPD2=Dimming Motion Sensor, 9'-20' mounting [14]
SPD4=Dimming Motion Sensor, 21'-40' mounting [14]
SPD2/X=Dimming Motion Sensor, limited square count, 9'-20' mounting [24]
SPD4/X=Dimming Motion Sensor, limited square count, 21'-40' mounting [24]
ZM=Zhaga Receptacle for 2-PIN Twistlock Receptacle [4]
ZD=SR Dome-mount 4-PIN Twistlock Receptacle [4]
ZW-WOXBX=WaveLinx Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting [14,15,16]
ZD-WOXBX=WaveLinx Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting [14,15,16]
ZW-WOXSX=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'- 40' Mounting [14,15,16]
ZW-SWPD4XX=WaveLinx Pro, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting [14,15,16]
ZW-SWPDSXX=WaveLinx Pro, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting [14,15,16]
ZD-SWPD4XX=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting [14,15,16]
ZD-SWPDSXX=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting [14,15,16]
DIM10-MS/DIM-L20=Synapse Occupancy Sensor (9'-20' Mounting) [14]
DIM10-MS/DIM-L40=Synapse Occupancy Sensor (21'-40' Mounting) [14]

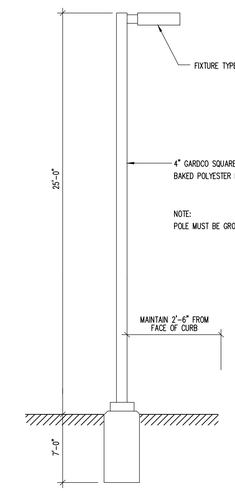
Accessories (Order Separately) [30]

OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
MA1252=120V Surge Module Replacement
MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1027-XX=@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1028-XX=@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1188-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1189-XX=@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1190-XX=@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1191-XX=@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1039-XX=@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1192-XX=@120° Tenon Adapter for 3-1/2" O.D. Tenon
MA1193-XX=@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1194-XX=@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1195-XX=@90° Tenon Adapter for 3-1/2" O.D. Tenon
SRA238=Adapter kit for mounting to 2-3/8" O.D. Tenon
LS/HSS=Field Installed House Side Shield [10]
LS/GBSBK-2PK=Glare Reducing Shield, Black [10]
LS/GBSWH-2PK=Glare Reducing Shield, White [10]
LS/PPS=Perimeter Shield, Black [28]
WOLC-7P-10A=WaveLinx Outdoor Control Module [11,18]
WOB-XX=WaveLinx Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting [14,15,16,18]
WOF-XX=WaveLinx Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 15'- 40' Mounting [14,15,16,18]
SWPD4-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting [14,15,16,18]
SWPDS-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting [14,15,16,18]

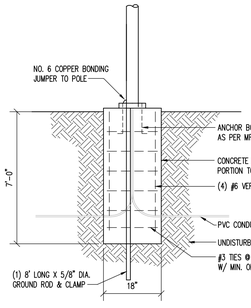
NOTES:
1. The customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513007EN for additional support information.
2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with T4 option.
4. Not available with VA6 or SA2E. Not available with color temperatures 722, 727 or 830 when either HA or HSS options are selected.
5. TH option not DC rated. Not available with Coastal Construction (CC) option.
6. Not available with voltage options H, 8 or 9.
7. Requires the use of an internal step down transformer when combined with sensor options. Not available in combination with the HA high ambient and sensor options at 5A.
8. Only available with Universal, 120-277V (U) voltage.
9. One required for each Light Square.
10. ZL is not available with SPB at 347V or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option.
11. Not available with Back Box.
12. Replace E2 with sensor code ONLY for BK3.
13. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (1W PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Requires ZW or ZD receptacle.
15. Luminaire is shipped at full light output for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with SWD, SMQ, SLQ, SL3 and SL4 distributions. Can be used with HSS option.
16. Set of 4 pcs. One set required per Light Square.
17. Not available with HA option.
18. Not for use with SNQ, SMQ, SWQ or RW optics.
19. Cannot be used with other control options.
20. Low voltage control lead brought out 18" outside fixture. Not available with DALI or integrated controls options
21. Not available if any SPB, UNV, or WaveLinx sensor is selected. Motion sensor has an integral photocell.
22. Requires 3 PIN NEMA twistlock photocontrol receptacle (PR7) option. Not available with receptacle with photocontrol accessory.
23. Not for use with T4FT, T4W or SL4 optics. See IES files for details.
24. Sensor configuration multiple application required for configuration. See controls page for details.
25. Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page.
26. Not available with HSS, GBSBK or GBSWH.
27. Product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
28. Not available with SPB. Controls and/or battery packs operate only one of the two circuits when ZL is specified. ZL with controls options not available with 347V or 480V.
29. Durovolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/galeon2 for more information.
30. 480V not to be used with ungrounded or impedance grounded systems.
31. Not available in 5 square configuration at 800mA or below. Not available with any control option except SPB.
32. Cannot be used with PR7 or other motion response control options.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	**D**=Standard Dome Camera **H**=Hi-Res Dome Camera **Z**=Remote PTZ Camera	**C**=Cellular, No SIM **A**=Cellular, AT&T **V**=Cellular, Verizon **S**=Cellular, Sprint	**R**=Cellular, Rogers **W**=Wi-Fi Networking w/ Omni-Directional Antenna **E**=Ethernet Networking



SITE LIGHTING POLE DETAIL
NOT TO SCALE



POLE LIGHT BASE DETAIL
NOT TO SCALE

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413 Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-9.2-LIGHTING DETAILS
Layout LIGHTING DETAILS

Date	Description
	REVISIONS

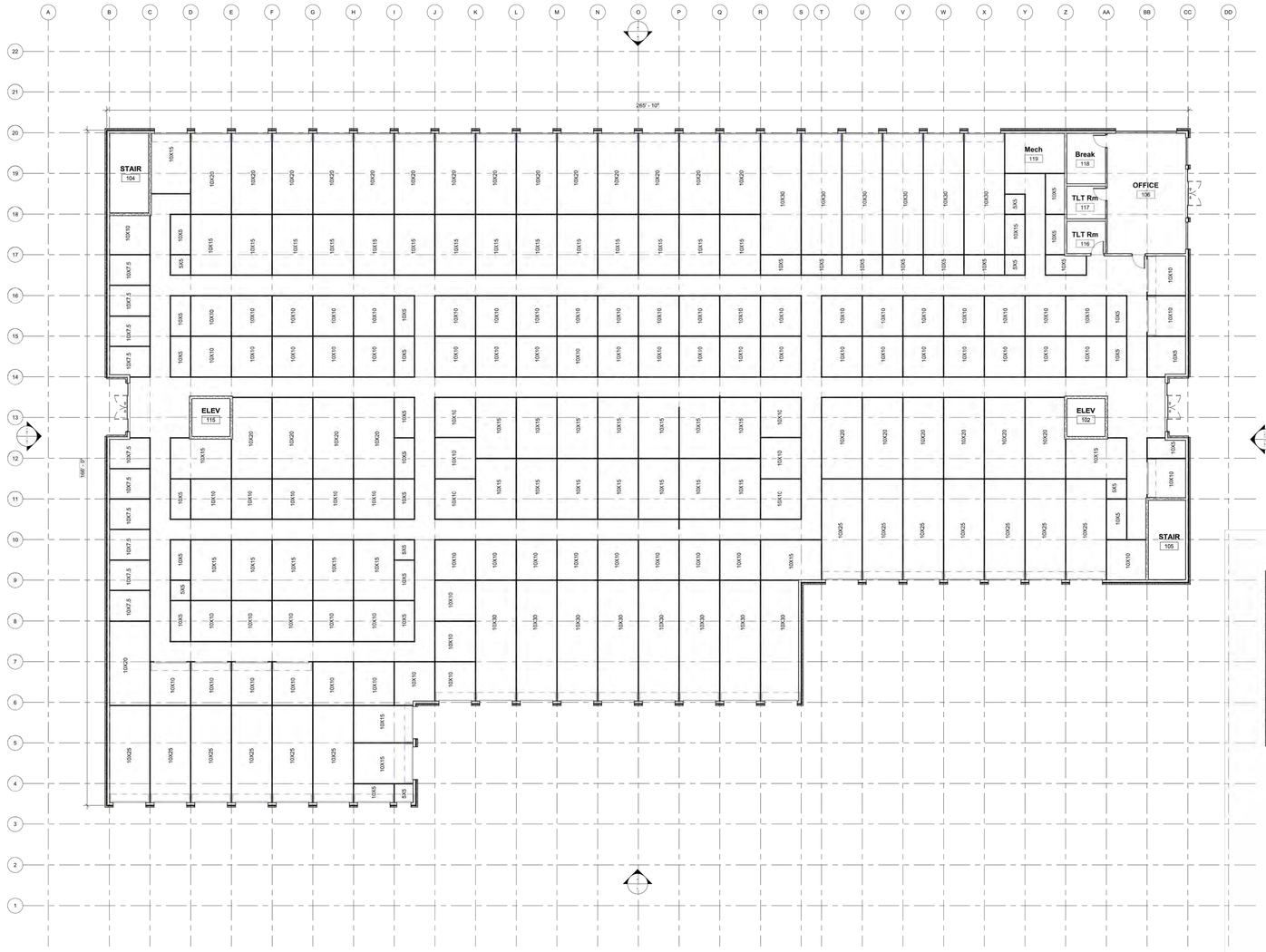
SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

LIGHTING DETAILS

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE N/A
SHEET NO. 9.2



SAAarchitects — UNIT COUNT MATRIX

PROJECT No. 23-032	State College North - Green Space Storage				DATE
PHASE 1					17-Jan-24

INTERIOR UNITS	1ST FLOOR	2ND FLOOR	3RD FLOOR	SUBTOTAL UNIT COUNT/ SIZE	SF/UNIT	SF TOTAL
(TEMPERATURE CONTROLLED)						
5 x 5	7	5	11	23	25	575
10 x 5	28	43	131	202	50	10,100
10 x 7-6	10	18	18	46	75	3,450
10 x 10	82	148	104	334	100	33,400
10 x 15	39	46	45	130	150	19,500
10 x 20	25	11	11	47	200	9,400
10 x 25	13	0	0	13	250	3,250
10 x 30	14	0	0	14	300	4,200
SUBTOTAL UNIT COUNT/ FLOOR	218	271	320	809		83,875
TOTAL RENTABLE SQUARE FEET						83,875
GROSS BUILDING SQUARE FEET						109,500
PERCENTAGE OF RENTABLE SF						76.6%
AVERAGE UNIT SIZE (SF)						103.7

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Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-10-FLOOR PLANS AND ELEVATIONS
Layout FIRST FLOOR

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

FIRST FLOOR PLAN

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE 1/16" = 1'
SHEET NO. 10

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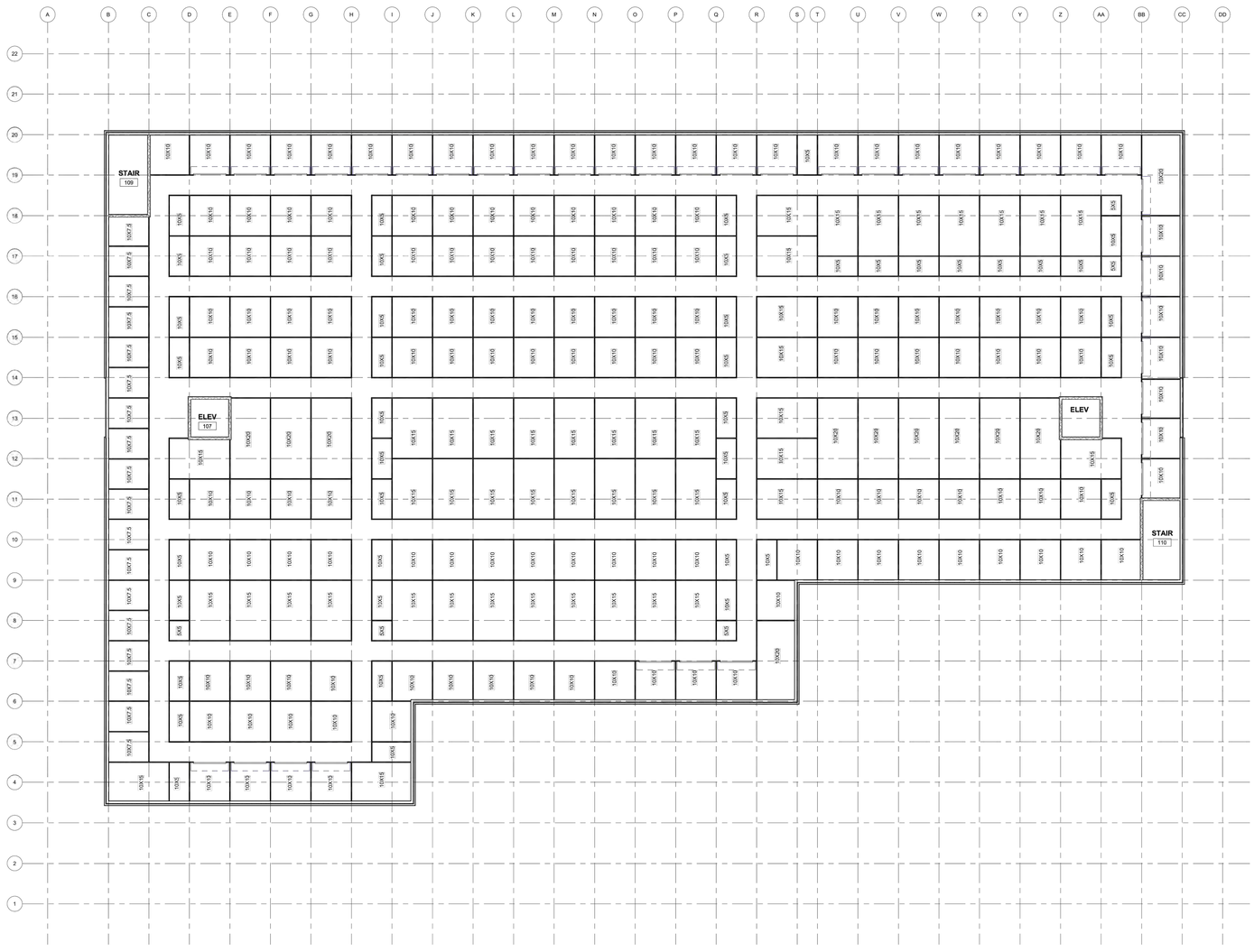

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Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-10-FLOOR PLANS AND ELEVATIONS
Layout SECOND LOOR

Date Description
REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

SECOND FLOOR PLAN

PROJECT NO.
22296
DATE
FEBRUARY 9, 2024
SCALE
1/16" = 1'
SHEET NO.
11

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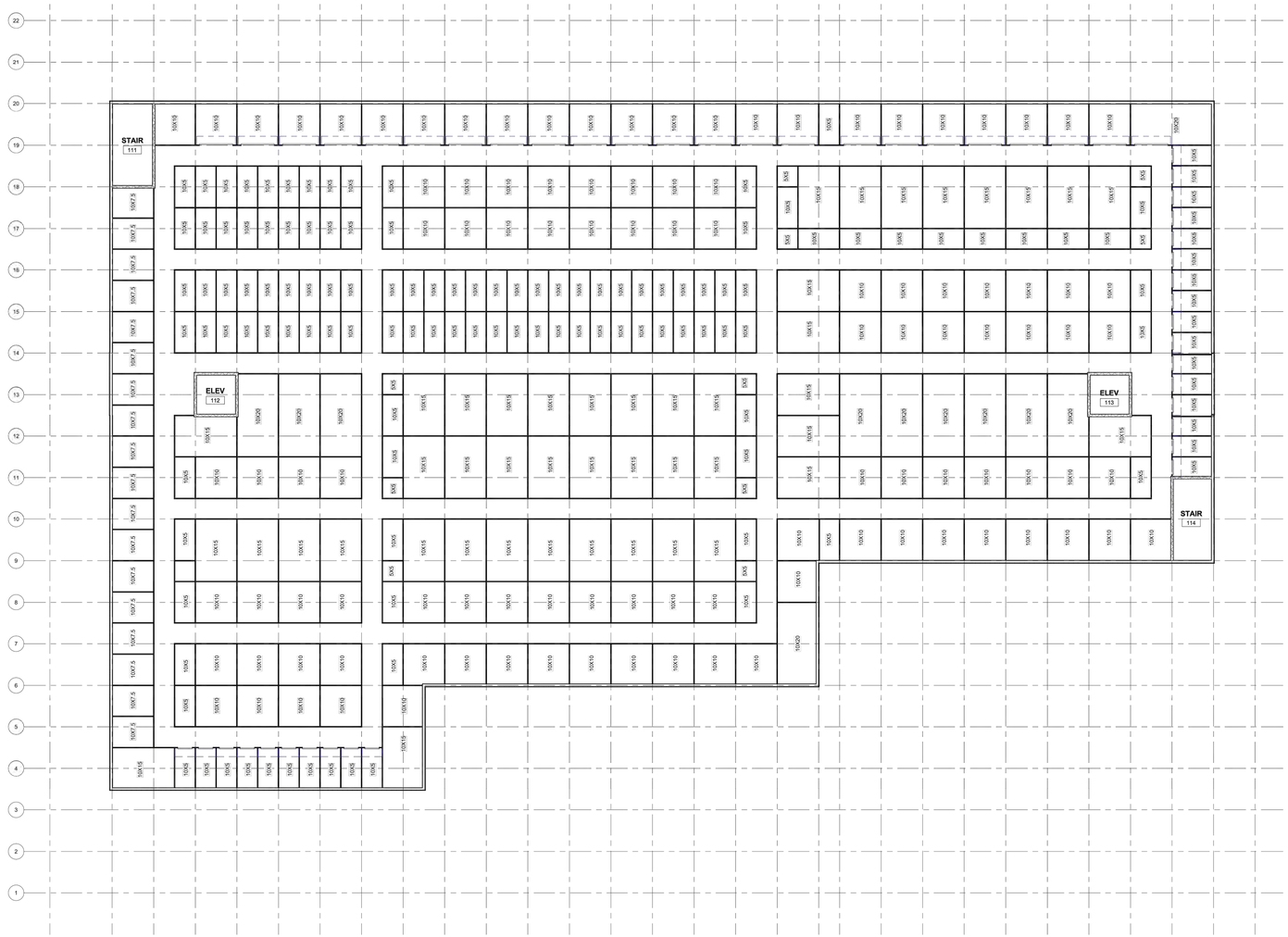

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Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-10-FLOOR PLANS AND ELEVATIONS
Layout THIRD FLOOR

Date	Description

REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

THIRD FLOOR PLAN

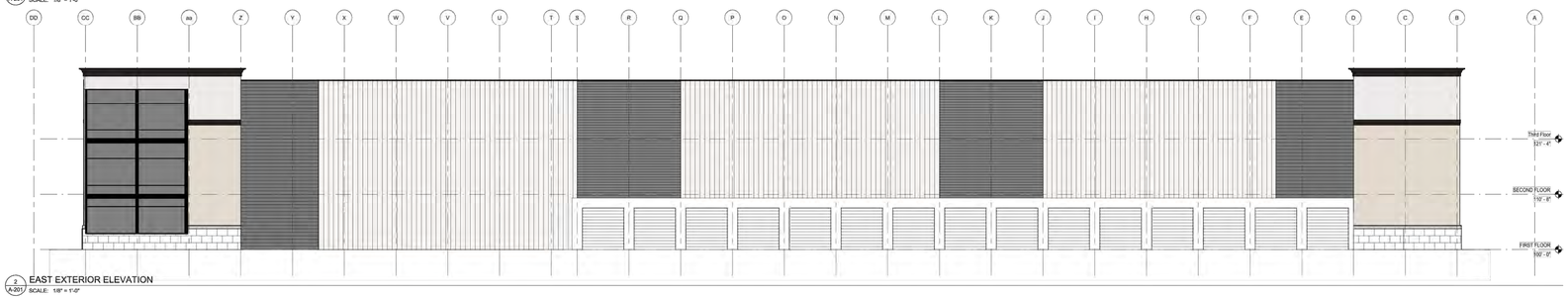
PROJECT NO.
22296

DATE
FEBRUARY 9, 2024

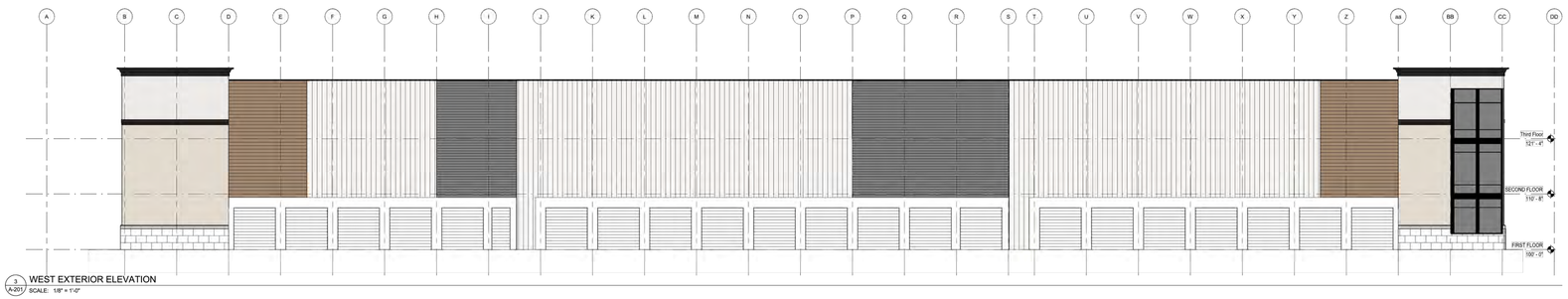
SCALE
1/16" = 1'

SHEET NO.
12

1 A-201 SOUTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"



2 A-201 EAST EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"



3 A-201 WEST EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

4 A-201 NORTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

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Perimeter Ck.
Book Pg.
File 22296-FINAL-10-FLOOR PLANS AND ELEVATIONS
Layout ELEVATIONS

Date Description
REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

ELEVATIONS

PROJECT NO.
22296
DATE
FEBRUARY 9, 2024
SCALE
N.T.S.
SHEET NO.
13

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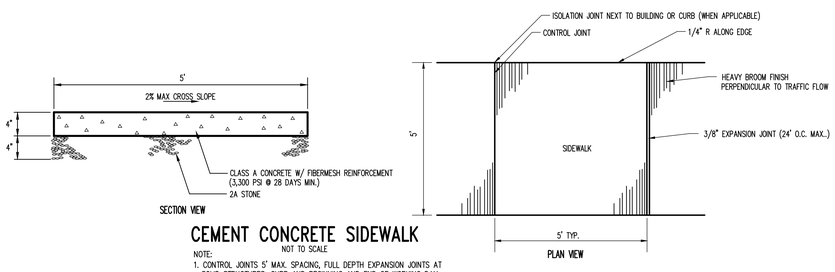
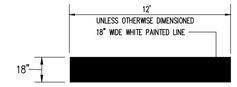


CEMENT CONCRETE SIDEWALK

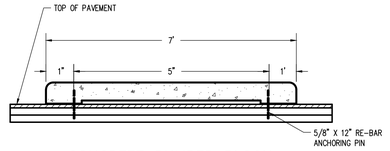
NOT TO SCALE

NOTE:
1. CONTROL JOINTS 5' MAX. SPACING, FULL DEPTH EXPANSION JOINTS AT SOLID STRUCTURES, CURB AND BEGINNING AND END OF WORKING DAY.
2. USE SIDEWALK DESIGN SECTION FOR MUNICIPAL CNG FUELING STATION AREA PAD & GATE OPENER PAD.



PAINTED STOP BAR

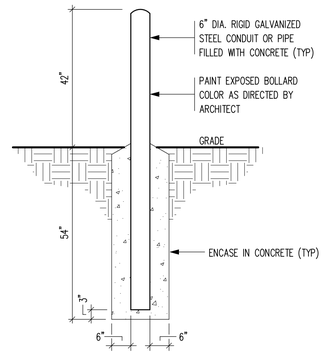
NOT TO SCALE



CONCRETE BUMPER BLOCK

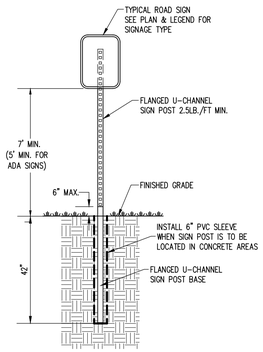
NOT TO SCALE

PDS023



VEHICLE BOLLARD DETAIL

NOT TO SCALE



NOTES:
1. MOUNT SIGN AT RIGHT ANGLE TO DIRECTION OF TRAFFIC FLOW.
2. PROVIDE A MINIMUM CLEARANCE OF ONE FOOT FROM FACE OF CURB.
3. ALL SIGNAGE IS TO BE HIGH INTENSITY REFLECTIVE SHEETING.

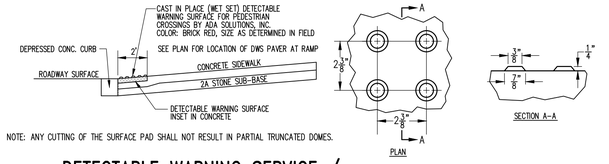
SIGN POST DETAIL

NOT TO SCALE

SIGN – S1

SIGN – S2

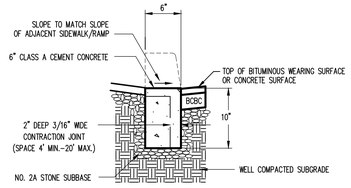
SIGN – S3



NOTE: ANY CUTTING OF THE SURFACE PAD SHALL NOT RESULT IN PARTIAL TRUNCATED DOMES.

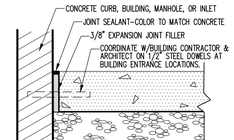
DETECTABLE WARNING SERVICE / RAMP CROSS SECTION

NOT TO SCALE



DEPRESSED CONCRETE CURB

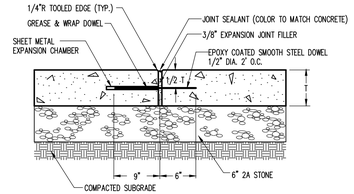
NOT TO SCALE



NOTE: INSTALL ISOLATION JOINTS AT ABUTTING CURBS AND BUILDINGS

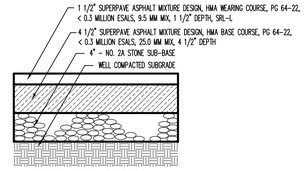
CONCRETE ISOLATION JOINT

NOT TO SCALE



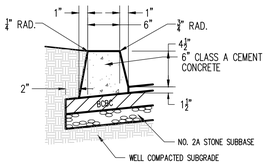
CONCRETE EXPANSION JOINT DETAIL

NOT TO SCALE



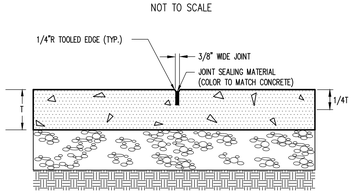
PAVEMENT SECTION PARKING LOT

NOT TO SCALE



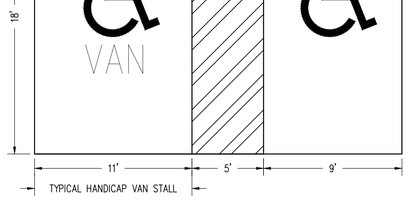
6" EXTRUDED STRAIGHT FACE CONCRETE CURB

NOT TO SCALE



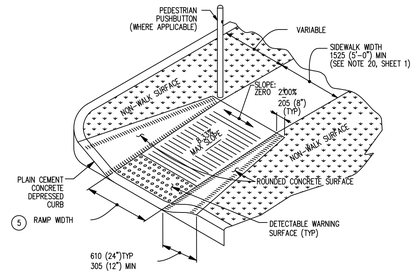
CONCRETE CONTROL JOINT

NOT TO SCALE

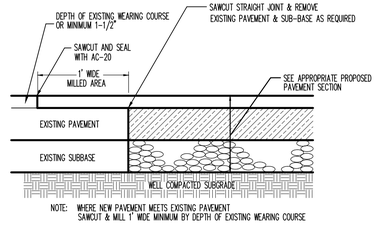


HANDICAP PARKING LAYOUT

NOT TO SCALE



ALTERNATE
TYPE 4A
CURB RAMP
(PARALLEL)

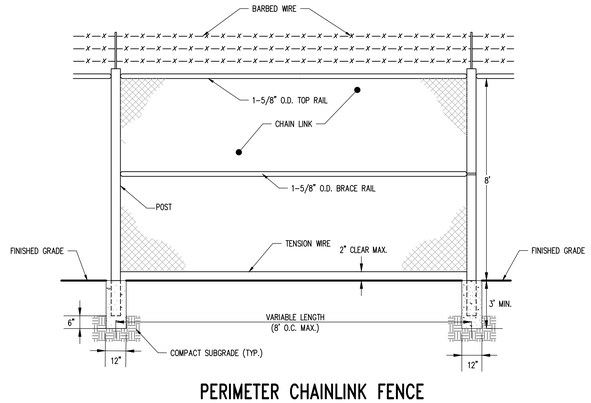


NOTE: WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT SAWCUT & MILL 1' WIDE MINIMUM BY DEPTH OF EXISTING WEARING COURSE

PAVEMENT NOTCH DETAIL

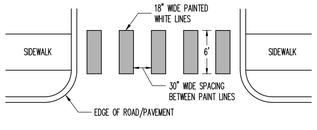
CONNECTION TO LOCAL ROADS

NOT TO SCALE



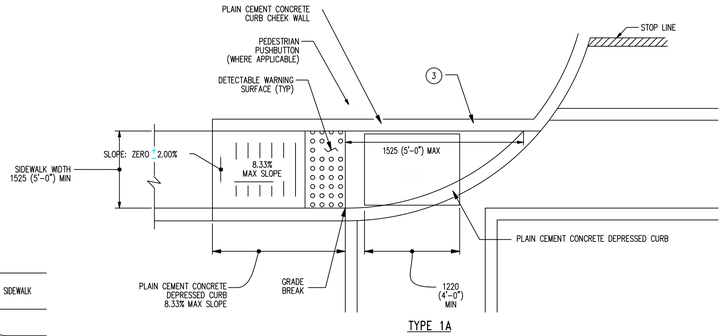
PERIMETER CHAINLINK FENCE

NOT TO SCALE

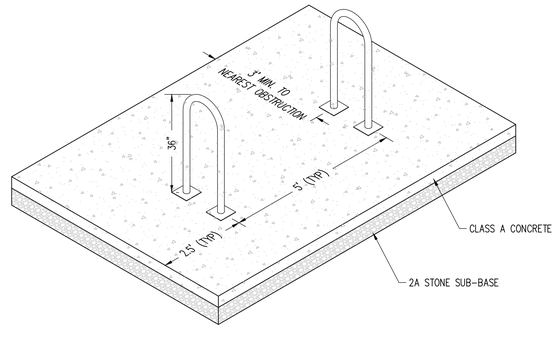


STANDARD PERPENDICULAR CROSSWALK DETAIL

NOT TO SCALE



TYPE 1A
CURB RAMP



BIKE RACK DETAIL

NOT TO SCALE

NOTES
1. BIKE RACK MATERIAL SHALL BE 2" SCHEDULE 40 STEEL.
2. BIKE RACK SHALL BE SURFACE MOUNTED ON CONCRETE.
3. COLOR TO BE DETERMINE BY OWNER.
4. BIKE RACK SHALL HAVE 8 BENDS TO ACCOMMODATE 16 BICYCLES.

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413 Seal

Seal

Designer(s)	MJA
Environmental	MSF
Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-15-DETAILS
Layout	GENERAL SITE DETAILS

Date Description

REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

GENERAL SITE DETAILS

PROJECT NO.	22296
DATE	FEBRUARY 9, 2024
SCALE	N.T.S.
SHEET NO.	14

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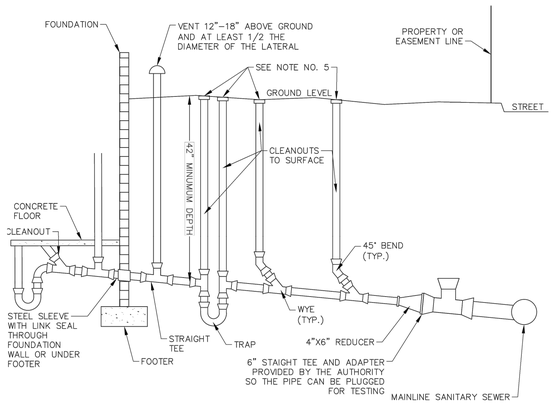


LATERAL SPECIFICATIONS:

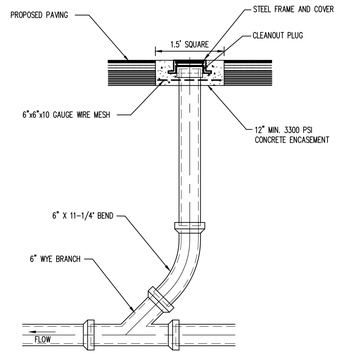
1. 4" DIAMETER IS THE MINIMUM SIZE. LARGER SIZES WILL BE SPECIFIED BY THE AUTHORITY WHEN THE AMOUNT OF FLOW WARRANTS IT.
2. SLOPE SHALL BE 1/4" PER FOOT UNLESS APPROVED OTHERWISE BY THE AUTHORITY.
3. CLEANOUTS MUST BE INSTALLED EVERY 50' ON 4" PIPE AND EVERY 100' ON 6" PIPE.
4. LATERALS SHALL BE LAID IN AGGREGATE CUSHION AND BEDDING, REFER TO STANDARD PIPE TRENCH DETAIL.
5. CLEANOUT TERMINAL(S) SHALL HAVE TREATMENT AT RESPECTIVE LOCATION. REFER TO DWG. NO.'S 10 & 10A.
6. ALL PIPING MATERIALS INCLUDING TRAPS FOR GRAVITY APPLICATIONS SHALL BE SCHEDULE 40 PVC. ANSI/ASTM D2665.
7. ALL SCHEDULE 40 PVC PIPE USED FOR PRESSURE APPLICATIONS MAY BE STAMPED ASTM D2665 BUT MUST ALSO INCLUDE A SECOND NUMBER, EITHER ASTM D1785 OR ASTM F480, WHICH ARE PRESSURE DESIGNATIONS.

INSPECTION:

1. WORK MUST BE INSPECTED AND TESTED BEFORE BACKFILLING.
2. THERE IS NO CHARGE FOR ONE–TIME INSPECTION UNLESS THE LATERAL IS LONGER THAN 150' AND/OR IF THE PIPE IS MORE THAN 4" IN DIAMETER.
3. INSPECTIONS REQUIRING MORE THAN ONE VISIT TO THE SITE WILL BE BILLED AT THE RATE IN EFFECT AT THE TIME OF INSPECTION.

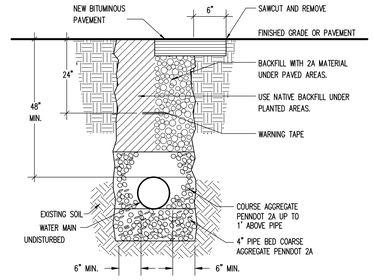
TYPICAL SANITARY SEWER LATERAL

NOT TO SCALE



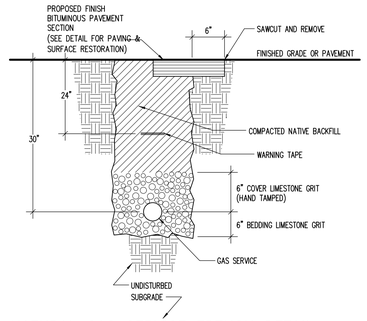
6" SANITARY SEWER CLEAN–OUT DETAIL

NOT TO SCALE



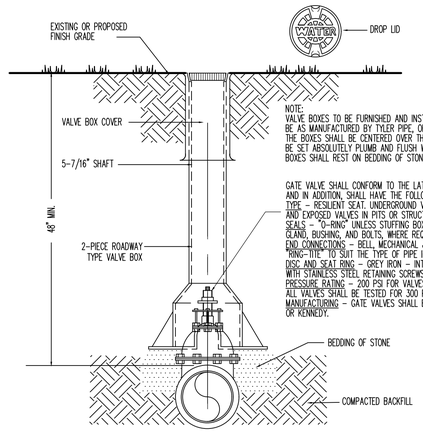
WATER SERVICE TRENCH DETAIL

NOT TO SCALE



NATURAL GAS SERVICE TRENCH DETAIL

NOT TO SCALE

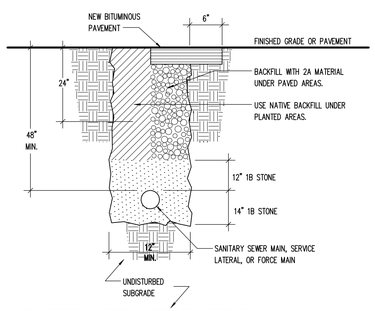


NOTE:
VALVE BOXES TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR, AND SHALL BE AS MANUFACTURED BY TYLER PIPE, OR EQUAL, CAST IRON, COMPLETE W/COVERS. THE BOXES SHALL BE CENTERED OVER THE OPERATING NUT OF THE VALVE AND SHALL BE SET ABSOLUTELY PLUMB AND FLUSH WITH THE FINISHED SURFACE. BOXES SHALL REST ON BEDDING OF STONE, NOT DIRECTLY ON VALVE.

GATE VALVE SHALL CONFORM TO THE LATEST REVISION OF A.W.W.A. SPECIFICATIONS C-509 AND IN ADDITION, SHALL HAVE THE FOLLOWING FEATURES OF CONSTRUCTION:
TYPE – RESILIENT SEAT. UNDERGROUND VALVES SHALL BE OF THE NONRISING STEM AND EXPOSED VALVES IN PITS OR STRUCTURES SHALL BE OF THE OPEN RISING STEM AND YOKE TYPE.
SEALS – "O-RING" UNLESS STUFFING BOX AND GLAND ARE REQUIRED BY THE ENGINEER.
GLAND, BUSHING, AND BOLTS, WHERE REQUIRED, SHALL BE OF BRONZE.
END CONNECTIONS – BELL MECHANICAL JOINT, FLANGED (AMERICAN STANDARD), OR RING–TITE TO SUIT THE TYPE OF PIPE IN WHICH THE VALVE IS INSTALLED.
DISC AND SEAT RING – GREY IRON – INTERNALLY REINFORCED MOLDED NATURAL RUBBER WITH STAINLESS STEEL RETAINING SCREWS.
PRESSURE RATING – 200 PSI FOR VALVES 3" TO 16", 150 PSI FOR VALVES OVER 16".
ALL VALVES SHALL BE TESTED FOR 300 PSI.
MANUFACTURING – GATE VALVES SHALL BE AS MANUFACTURED BY THE AMERICAN FLOW CONTROL OR KENNEDY.

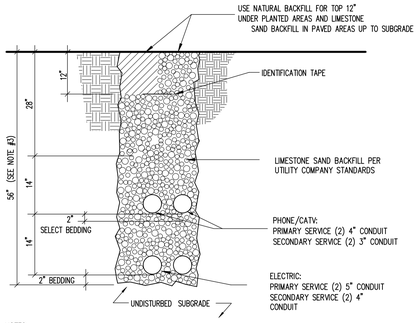
TYPICAL GATE VALVE INSTALLATION

NOT TO SCALE



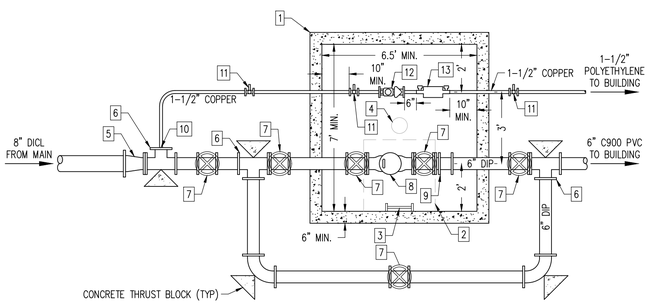
SANITARY LATERAL TRENCH DETAIL

NOT TO SCALE



NOTES:
1. LIMESTONE SAND BACKFILL PER UTILITY COMPANY STANDARDS.
2. REFER TO UTILITY COMPANY DESIGN PLANS FOR LOCATIONS AND SIZES OF PVC CONDUITS.
3. REDUCE DEPTH OF TRENCH TO 44" FOR SEPARATE SECONDARY TRENCHES FOR ELECTRIC AND COMM (PHONE/CATV) LINES.
4. INSTALL CONDUIT FOR POWER, TELEPHONE, & CATV AS SHOWN ON UTILITY PROVIDER PLANS.
5. PROVIDE 2' MIN. HORIZONTAL CLEARANCE FOR GAS SERVICE WHEN IN COMMON PRIMARY TRENCH. INSTALL GAS SERVICE PER COLUMBIA GAS STANDARD SPECIFICATIONS.

ELECTRIC & CABLE TRENCH DETAIL

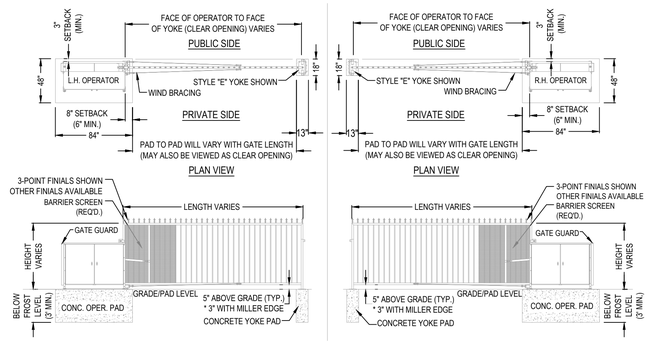


BASIC MATERIALS SCHEDULE		
ITEM	SIZE	DESCRIPTION
1	PLAN	PRECAST CONCRETE METER VAULT (6" WALLS)
2	–	BILCO PCM–4 ALUMINUM HATCH, CAST IN PLACE (MIN. WIDTH 36")
3	–	POLYPROPYLENE ENCASED STEEL STEPS, 12" C TO C
4	8"	FLOOR DRAIN, EITHER CAST OPENING OR GRATED CAST IRON
5	8"x6"	REDUCER
6	6"x6"x6"	MJ TEE
7	6"	GATE VALVE
8	6"	6" DOUBLE CHECK ASSEMBLY, ZURN 350 DA (OR SCBWA APPROVED EQUAL)
9	6"	FLANGED COUPLING ADAPTER
10	6"x1–1/2"	COMPANION FLANGE
11	1–1/2"	BALL VALVE
12	1–1/2"	SENSUS OMNI T² METER
13	1–1/2"	WATTS 007M2QT – 1–1/2" DOUBLE CHECK VALVE ASSEMBLY (OR SCBWA APPROVED EQUAL)

NOTES:
1. PIT MAY BE PRECAST OR BUILT ON SITE WITH CONCRETE BLOCKS WITH PRIOR APPROVAL OF MATERIALS AND METHOD OF CONSTRUCTION BY THE AUTHORITY.
2. HATCH LOCATION MAY BE MOVED WITH AUTHORITY APPROVAL.
3. MEGA–LUGS MUST BE USED ON ALL FITTINGS OR THE FITTINGS MUST BE RODDED (4" MIN.) AND ANCHORED IN CONCRETE IF DUCTILE IRON PIPE IS USED.
4. CONCRETE THRUST BLOCKS MUST BE USED ON ALL UNDERGROUND BENDS AND TEE'S IF DUCTILE IRON PIPE IS USED.
5. IF 4" PIPE IS USED, METER PIT MUST BE LARGER FOR THE ADDITIONAL FITTING
6. NO SOLDER JOINTS ALLOWED INSIDE PIT OR UNDERGROUND.
7. METER SETTING INSIDE THE PIPE SHALL CONSIST OF: GATE/BALL VALVE, METER, BACKFLOW PREVENTER, & GATE/BALL VALVE.

METER VAULT FOR 1–1/2" DOMESTIC LINE & 6" FIRE LINE

NOT TO SCALE



MANUFACTURER NOTES:
1. ALL OF OUR GATES ARE TYPICALLY DRAWN FROM THE PRIVATE SIDE LOOKING OUT.
2. LENGTH AND HEIGHT VARIES. CONSULT WITH AUTOGATE SALES FOR MORE INFORMATION.
3. SHOWN WITH STANDARD 5' STYLE "E" YOKE. SEE DRAWING #105 FOR YOKE STYLES.
4. CONTOURS AND CURBS WILL REQUIRE CUSTOM DRAWINGS. (CONSULT WITH AUTOGATE).

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 22296-FINAL-15-DETAILS

VERTICAL PIVOT GATE SYSTEMS
500 BUCKEYE VERTICAL PIVOT GATE (VPG)

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SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413 Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-15-DETAILS
Layout UTILITY DETAILS

Date Description
REVISIONS

SPACE MART AT VALLEY VISTA
PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

UTILITY DETAILS

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE N.T.S.
SHEET NO. 15

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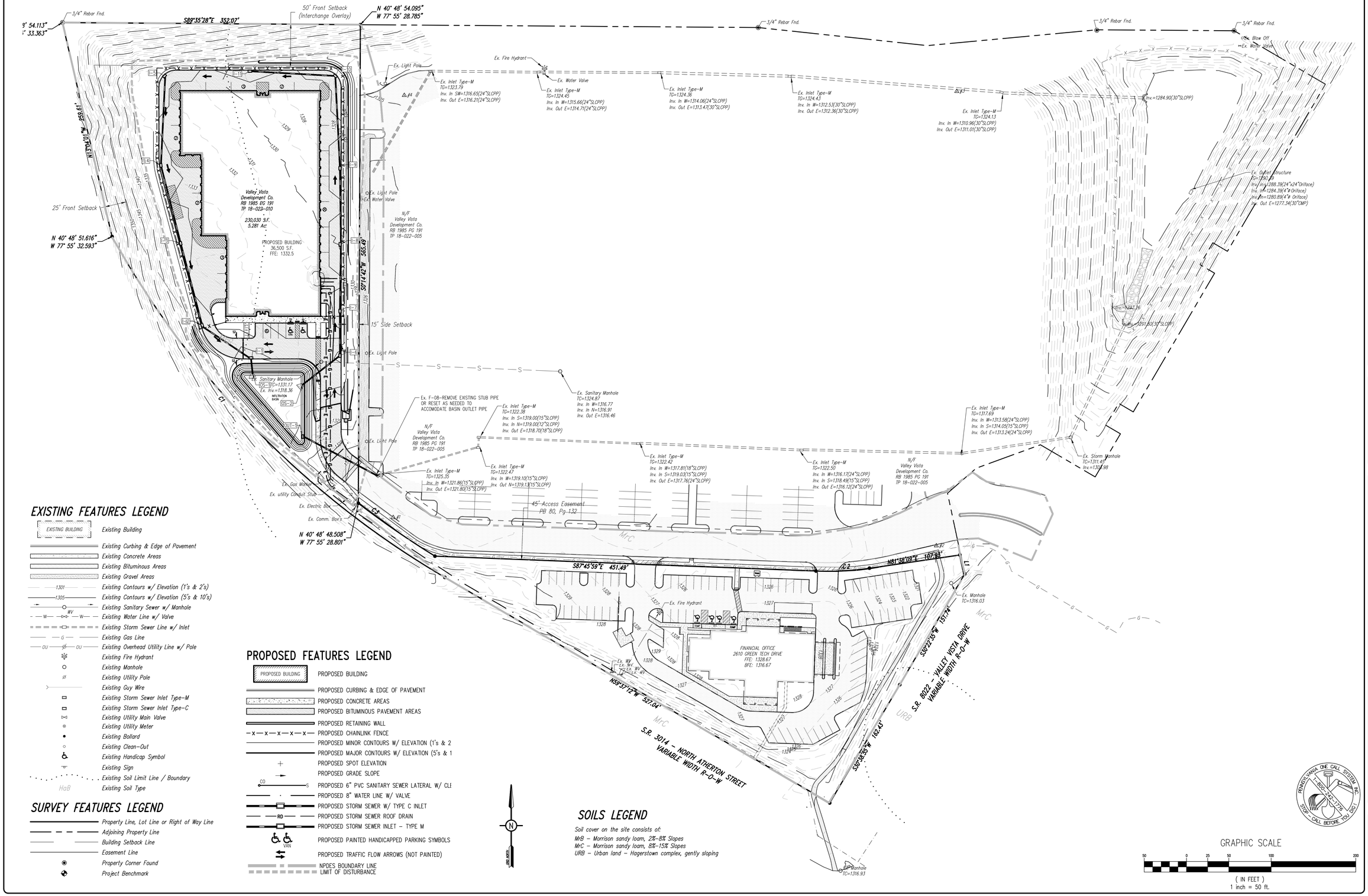
3/4" Rebar Fnd.
S89°35'28"E 352.02'
50' Front Setback
(Interchange Overlay)
N 40° 48' 54.095"
W 77° 55' 28.785"
9' 54.113"
i' 33.363"
N 19°25'10" W 570.43'
25' Front Setback
N 40° 48' 51.616"
W 77° 55' 32.593"
Valley Vista
Development Co.
RB 1985 PG 191
TP 18-022-010
230,030 S.F.
5.281 Ac.
PROPOSED BUILDING
36,500 S.F.
FFE: 1332.5
S0°14'42"W 565.49'
15' Side Setback
N/F
Valley Vista
Development Co.
RB 1985 PG 191
TP 18-022-005
Ex. Light Pole
Ex. Water Valve
Ex. Sanitary Manhole
OS-1
TC=1331.17
Inv.=1316.36
INFILTRATION
BASIN
OS-2
Ex. F-08-REMOVE EXISTING STUB PIPE
OR RESET AS NEEDED TO
ACCOMODATE BASIN OUTLET PIPE
Ex. Sanitary Manhole
TC=1324.87
Inv. In W=1316.77
Inv. In N=1316.91
Inv. Out E=1316.46
Ex. Inlet Type-M
TG=1322.38
Inv. In S=1319.00(15"SLCPP)
Inv. In N=1319.00(12"SLCPP)
Inv. Out E=1318.70(18"SLCPP)
Ex. Inlet Type-M
TG=1322.47
Inv. In W=1319.10(15"SLCPP)
Inv. Out N=1319.13(15"SLCPP)
Ex. Inlet Type-M
TG=1325.35
Inv. In W=1321.86(15"SLCPP)
Inv. Out E=1321.80(15"SLCPP)
Ex. Gas Marker
Ex. utility Conduit Stub
Ex. Electric Box
Ex. Comm. Box's
N 40° 48' 48.508"
W 77° 55' 28.801"
45' Access Easement
PB 80, Pg. 132
Ex. Light Pole
Ex. Fire Hydrant
Ex. Water Valve
Ex. Inlet Type-M
TG=1323.79
Inv. In SW=1316.65(24"SLCPP)
Inv. Out E=1316.21(24"SLCPP)
Ex. Inlet Type-M
TG=1324.45
Inv. In W=1315.66(24"SLCPP)
Inv. Out E=1314.71(24"SLCPP)
Ex. Inlet Type-M
TG=1324.36
Inv. In W=1314.06(24"SLCPP)
Inv. Out E=1313.47(30"SLCPP)
Ex. Inlet Type-M
TG=1324.43
Inv. In W=1312.53(30"SLCPP)
Inv. Out E=1312.36(30"SLCPP)
Ex. Inlet Type-M
TG=1324.13
Inv. In W=1310.96(30"SLCPP)
Inv. Out E=1311.01(30"SLCPP)
3/4" Rebar Fnd.
3/4" Rebar Fnd.
3/4" Rebar Fnd.
Ex. Blow Off
Ex. Water Valve
Inv.=1284.90(30"SLCPP)
Ex. Outlet Structure
TG=1293.23
Inv. In=1288.39(24"x24" Orifice)
Inv. In=1284.39(4"x 4" Orifice)
Inv. In=1280.89(4"x 4" Orifice)
Inv. Out E=1277.34(30"CMP)
Inv.=1291.26
Inv.=1291.30(30"SLCPP)
Ex. Inlet Type-M
TG=1317.69
Inv. In W=1313.58(24"SLCPP)
Inv. In S=1314.05(15"SLCPP)
Inv. Out E=1313.24(24"SLCPP)
Ex. Storm Manhole
TG=1311.45
Inv.=1307.98
Ex. Inlet Type-M
TG=1322.42
Inv. In W=1317.81(18"SLCPP)
Inv. In S=1319.03(15"SLCPP)
Inv. Out E=1317.76(24"SLCPP)
Ex. Inlet Type-M
TG=1322.50
Inv. In W=1316.17(24"SLCPP)
Inv. In S=1318.49(15"SLCPP)
Inv. Out E=1316.12(24"SLCPP)
N/F
Valley Vista
Development Co.
RB 1985 PG 191
TP 18-022-005
S87°45'59"E 451.49'
N81°38'09"E 107.93'
Ex. Manhole
TC=1316.03
Ex. Fire Hydrant
FINANCIAL OFFICE
2610 GREEN TECH DRIVE
FFE: 1328.67
BFE: 1316.67
Ex. W
Ex. W
Ex. W
N59°37'12"W 527.04'
S.R. 3014 - NORTH ATHERTON STREET
VARIABLE WIDTH R-O-W
S30°23'35"W 151.74'
S.R. 8022 - VALLEY VISTA DRIVE
VARIABLE WIDTH R-O-W
S30°18'35"W 162.43'
Ex. Manhole
TC=1316.93
MrC
URB
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C15
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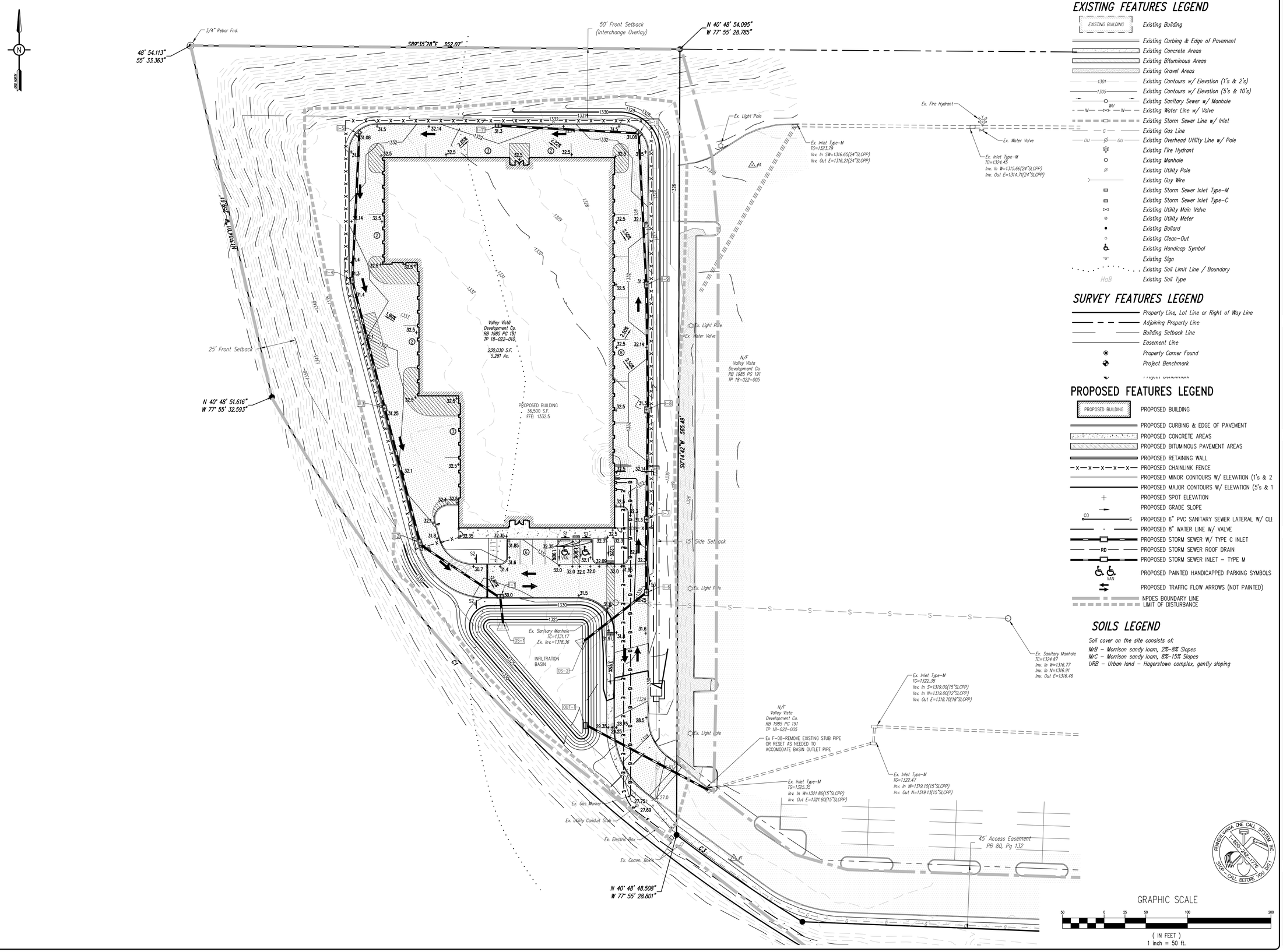

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Main Valve
- Existing Utility Meter
- Existing Bollard
- Existing Clean-Out
- Existing Handicap Symbol
- Existing Sign
- Existing Soil Limit Line / Boundary
- HaB Existing Soil Type

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 1
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLI
- PROPOSED 8" WATER LINE W/ VALVE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER INLET – TYPE M
- PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)
- NPDES BOUNDARY LINE / LIMIT OF DISTURBANCE

SOILS LEGEND

Soil cover on the site consists of:

MrB – Morrison sandy loam, 2%–8% Slopes
MrC – Morrison sandy loam, 8%–15% Slopes
URB – Urban land – Hagerstown complex, gently sloping

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
C. ANTHONY FRUCHTL
ENGINEER
PE-062413
Seal

Seal

Designer(s)	MJA
Environmental	MSF
Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-PCSM-02-PLAN
Layout	PCSM PLAN

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

PROJECT NO.	
22296	
DATE	
FEBRUARY 9, 2024	
SCALE	SHEET NO.
1" = 30'	PC2

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STORMWATER MANAGEMENT NOTES:

1. All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
2. The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
3. The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site,
4. Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures.
5. An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
6. All storm pipe shall be as noted. All joints shall be watertight.
7. Contractor shall refer to other plans within this construction set for other pertinent information.
8. Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the individual NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
9. Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
   a. Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
   b. Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, rain garden and outlet structures, outlet pipes, tops of berms and spillways).
   c. Provide double-ring infiltrometer tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom soil mix prior to installation to certify that the soil mix meets the infiltration requirements noted on the plans.
10. Contractor shall have a licensed professional submit as-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of filter fabric/amended soils must also be submitted to the governing municipality.
11. As-built infiltration testing in infiltration basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 9.c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.

NPDES PERMIT CO-PERMITTEE AND NOTICE OF TERMINATION NOTES:

1. The contractor shall process forms with the Local County Conservation District to become a co-permittee on the NPDES. The contractor shall remain a co-permittee until the applicant releases them from the permit.
2. The Notice of Termination requires certification by a licensed professional of the stormwater facilities as noted on the Post Construction Stormwater Management Plan under the section labeled "Critical Stages of Construction".
3. The licensed professional responsible for certifying the Notice of Termination (NOT) of the NPDES permit shall be selected prior to commencing earth disturbance activities on the project site. The general site contractor shall be responsible for supplying & coordinating the licensed professional.
4. The licensed professional responsible for certifying the NOT shall be present for all "Critical Stages of Construction".
5. A pre-construction meeting between the contractor, owner and licensed professional responsible for certifying the NOT is required to ensure all "Critical Stages of Construction" are reviewed, acknowledged and milestones established to ensure the licensed professional is present onsite during the "Critical Stages of Construction."
6. The licensed professional will be required to certify and seal as-built drawings at the end of construction that the stormwater facilities have been built to the specifications on the post construction stormwater management plans and details.
7. Upon completion of all earth moving activities and once site stabilization is achieved in accordance with the Erosion and Sediment Control Plan, The contractor shall then file the as-built drawings and NOT certification with the Local County Conservation District

CRITICAL STAGES OF CONSTRUCTION FOR PROJECTS REQUIRING A GENERAL OR INDIVIDUAL NPDES PERMIT:

Critical Stages of Construction are key components of the construction sequence of the Post Construction Stormwater Management Plan and require certification and construction oversight by the licensed professional responsible for certification of the certified stormwater as-built plan and the NOT.

At least two weeks in advance of construction, the contractor shall schedule a coordination meeting with the licensed professional to review the critical stages and establish a schedule for inspections/verifications of all critical stages. At the discretion of the licensed professional, the contractor will provide photo documentation of the installation of certain items in lieu of the licensed professional being present.

The critical stages for each Post Construction Stormwater Best Management Practice are as follows:

INFILTRATION BASINS

1. In order to ensure the basin floor is not compacted, equipment shall not be permitted to operate within the basin when the floor is less than 36" from subgrade elevation. A typical infiltration facility bottom excavation detail has been provided on the plans for construction. The Contractor may develop their own written plan incorporating methods for bottom excavation for review by the municipality and Conservation District. The Contractor must review the proposed methods with the licensed professional, Conservation District and municipality during the Coordination Meeting.
2. Once the subgrade of the facility has been reached, and prior to topsoil placement, the licensed professional and responsible testing firm shall be notified to schedule infiltration testing verification of the subgrade.
3. A typical rock over excavation detail has been provided on the plans. Once the subgrade of the basin floor has been reached, the contractor shall request the licensed professional review the subgrade to determine if rock over excavation is required.
4. Infiltration testing of the final basin floor elevation to verify infiltration rates of the soil mixture (i.e. topsoil and amendments) placed on the basin floor is required. The contractor shall coordinate infiltration testing with the licensed professional and responsible testing firm. It is recommended that this soil mixture also be tested prior to placement.
5. The contractor must notify the licensed professional of the installation of the outlet structure, outfall pipe and anti-seep collars prior to backfill to ensure installation has been completed in accordance with the approved plan.
6. Compaction testing reports are required on the basin berm. The contractor shall coordinate compaction testing with the licensed professional and responsible testing firm.
7. Berms shall be installed and compacted in conformance with the requirements of the local municipality's Stormwater Management Ordinance. If the municipality does not specify compaction requirements, then all berms shall be in installed as follows:
   a. Whenever berm fill material in excess of 3 feet in height is to be used, each layer of compacted fill shall be tested to determine its density per ASTM D2922 or ASTM D3017.
   b. All berm lifts shall be 8" or less.
   c. The density of each layer shall be 98% of a Standard Proctor Density analysis per ASTM D698.
8. All proposed vegetation within the limits of construction shall be established to a 70% uniform vegetated cover prior to final notice of termination certification.

NATURALLY OCCURING GEOLOGIC FORMATIONS/SOIL CONDITIONS:

There are no known naturally occurring geologic formations or soil conditions that pose the potential for pollution during construction. If a sinkhole is encountered due to karst topography, the sinkhole shall be repaired as specified on the sinkhole repair detail and/or a geotechnical engineer must be contacted for proper repair procedures.

GENERAL STORMWATER FACILITY CONSTRUCTION NOTES:

1. All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
2. The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
3. The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site,
4. Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures.
5. All storm pipes shall be as noted. All joints shall be watertight.
6. Contractor shall refer to other plans within this construction set for other pertinent information.

STORMWATER FACILITY MAINTENANCE NOTES:

All stormwater management facilities on the site of the Spacemart at Valley Vista not contained in a Patton Township Right-of-Way shall be owned and maintained by the developer. Patton Township, its agents and assigns shall have the uninterrupted right to access the property for inspection and maintenance of the stormwater facilities. This note applies to the entire property shown on these plans and shall be in effect for perpetuity.

Patton Township and/or the Centre County Conservation District may require The Owner to maintain a record of all inspections, repairs, and maintenance activities associated with the proposed Stormwater management and permanent erosion and sediment pollution control facilities at this project site. The Owner shall immediately notify Patton Township and Centre County Conservation District prior to initiating any major repair activities.

The Owner hereby acknowledges Patton Township's right to periodically access the project site to inspect the permanent stormwater management facilities that are part of this project. The Owner acknowledges Patton Township's right to access the project site with notice to repair and/or maintain the permanent stormwater management facilities in accordance with this Maintenance Program. Any maintenance and/or repair activities conducted by Patton Township shall be at the expense of the Owner.

The facilities that will require maintenance are the inlets, storm sewer pipes, rip-rap aprons, stormwater basins and swale. All stormwater facilities should be inspected monthly or after any rainfall events producing 1" of runoff and maintained as follows:

1. The proposed storm sewer pipes, inlets and outlets shall be cleaned of all debris, litter, and other deleterious material.
2. The rip-rap apron at the outlet of the pipe need to be inspected to ensure proper erosion protection. If erosion occurs, additional rip-rap should be added.
3. The stormwater infiltration basin shall be cleaned of debris, vegetation maintained to a height of twelve inches, and if any erosion is present the area is to be backfilled with topsoil and seeded with a permanent mixture. The outlet structures shall be kept clean of trash and debris. Vehicular traffic in the basin bottoms shall be limited to the maximum extent possible. The design drain time for the infiltration basins is 72 hours. If standing water persists, contact a registered professional, as the amended topsoil may need re-evaluated for infiltration capacity or be re-tilled and the bottom area re-seeded with the proposed seeding mixture.

RECYCLING AND DISPOSAL OF MATERIALS

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES.

WASTES GENERATED DURING THE CONSTRUCTION OF THIS PROJECT SHALL BE RECYCLED IF AT ALL POSSIBLE. ANY MATERIALS THAT CANNOT BE RECYCLED OR REUSED SHALL BE DISPOSED OF AT A PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION APPROVED LANDFILL. IF SOIL AND/OR ROCK DISPOSAL AREAS ARE REQUIRED, EROSION AND SEDIMENTATION CONTROLS SHALL BE IMPLEMENTED AT THESE AREAS. ANY EXCESS SOIL WASTE MAY ONLY BE DISPOSED OF AT AN APPROVED E&S/NPDES PERMITTED SITE.

RESPONSIBILITIES FOR FILL MATERIALS

THE CONTRACTOR IS RESPONSIBLE TO USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE ANY FILL MATERIAL REQUIRED TO BE IMPORTED TO OR EXPORTED FROM THE SITE QUALIFIES AS CLEAN FILL.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.)

ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".

PROPOSED STORM DRAINAGE STRUCTURE DATA

ID	STRUCTURE TYPE	TG ELEV	INVERT IN	INVERT OUT	PIPE RUN	PIPE TYPE	LENGTH (FT)	SIZE (IN)	SLOPE(%)
OS-1	HDPE END SECTION	1325.43	1324.00 (I-1)						
I-1	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1330.00	1325.70 (I-2)	1325.60	I-1 TO OS-1	HDPE	17.8	15	8.99%
I-2	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.15	1326.13 (I-3)	1326.03	I-2 TO I-1	HDPE	66.4	15	0.50%
I-3	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.25	1326.73 (I-4)	1326.63	I-3 TO I-2	HDPE	100.0	15	0.50%
I-4	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.30	1327.31 (I-5)	1327.21	I-4 TO I-3	HDPE	95.1	15	0.50%
I-5	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.08		1327.83	I-5 TO I-4	HDPE	105.0	15	0.50%

PROPOSED STORM DRAINAGE STRUCTURE DATA

ID	STRUCTURE TYPE	TG ELEV	INVERT IN	INVERT OUT	PIPE RUN	PIPE TYPE	LENGTH (FT)	SIZE (IN)	SLOPE(%)
OS-2	HDPE END SECTION	1325.43	1324.00 (I-6)						
I-6	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.70	1325.49 (I-7)	1325.39	I-6 TO OS-2	HDPE	55.8	15	2.49%
I-7	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.30	1325.85 (I-8)	1325.75	I-7 TO I-6	HDPE	52.6	15	0.50%
I-8	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.30	1326.34 (I-9)	1326.24	I-8 TO I-7	HDPE	78.9	15	0.50%
I-9	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.30	1326.89 (I-10)	1326.79	I-9 TO I-8	HDPE	90.0	15	0.50%
I-10	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.08	1327.54 (I-11)	1327.44	I-10 TO I-9	HDPE	109.2	15	0.50%
I-11	24"X48" PRECAST TYPE C MODIFIED INLET W/ BICYCLE SAFE GRATE	1331.30		1328.05	I-11 TO I-10	HDPE	101.1	15	0.50%

ALL ROOF DRAINS SHALL BE CONNECTED TO THE STORMSEWER SYSTEM WITH 12" PVC SET AT A MINIMUM OF 0.02% SLOPE AND 2' DEPTH

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
C. ANTHONY FRUCHTL
ENGINEER
PE-062413
Seal

Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-PCSM-02-DETAILS
Layout PCSM NOTES & DETAILS

Date Description
REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE N.T.S.
SHEET NO. PC3

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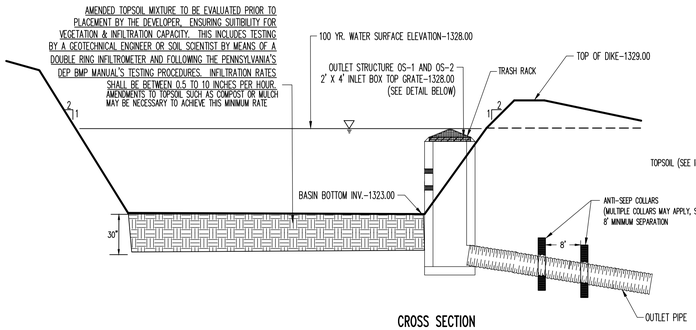
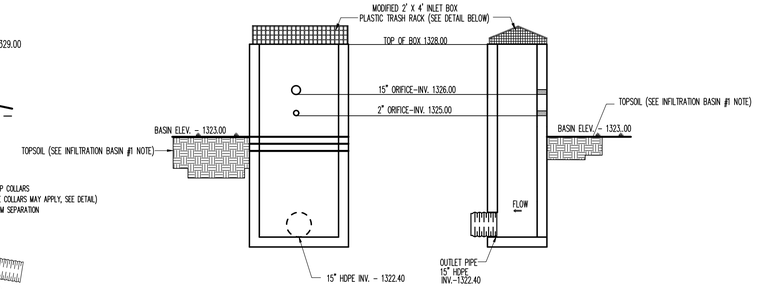


CROSS SECTION



FRONT VIEW SIDE VIEW

INFILTRATION BASIN - OUTLET STRUCTURE OS

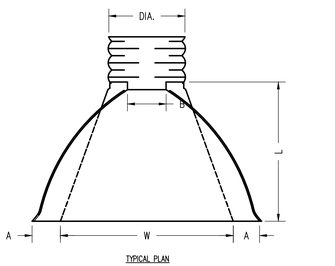
NOT TO SCALE

INFILTRATION BASIN NOTES:

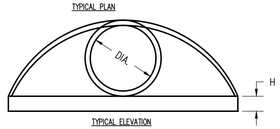
1. THE BASIN SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH ANY EARTH MOVING OR LAND DISTURBANCE WHICH IT WILL SERVE.
2. THE EMBANKMENT SHALL BE COMPACTED IN LAYERS TO A DENSITY OF 100% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
3. THE EMBANKMENT SHALL BE CONSTRUCTED WITH SOIL THAT HAS LOW TO MODERATE ERODIBILITY (K FACTOR OF 32 OR LESS).
4. TEMPORARY AND PERMANENT GRASSES OR STABILIZATION MEASURES SHALL BE ESTABLISHED IN THE SIDES AND BASE OF ALL EARTHEN BASINS WITHIN 15 DAYS OF CONSTRUCTION.

INFILTRATION BASIN #1 DETAIL

NOT TO SCALE



TYPICAL PLAN

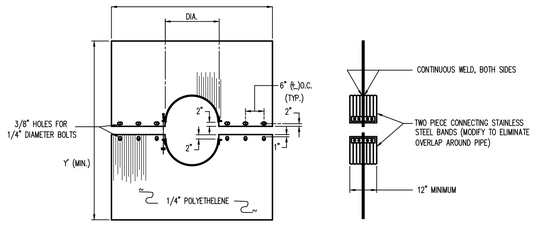


TYPICAL ELEVATION

DIAM.	A (±1)	B (MAX)	H (±1)	L (± ½)	W (±2)
15"	6.5"	10"	6.5"	25"	29"

HDPEP END SECTION

NOT TO SCALE

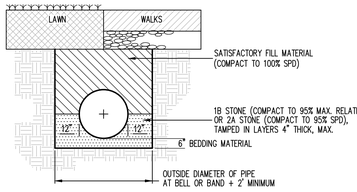


ELEVATION END VIEW

BASIN	DIA.	X	Y	NUMBER
INFILTRATION BASIN	1.25'	5.50'	5.50'	1

ANTI-SEEP COLLAR

NOT TO SCALE

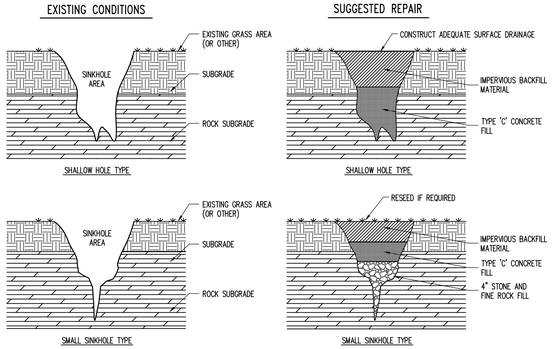


NOTES:

1. EXCAVATE THE TRENCH TO THE WIDTH OF THE OUTSIDE DIAMETER OF THE PIPE + 2' AND CREATE AN APPROPRIATE BEDDING 6" DEEP.
2. AT UNPAVED AREAS SUITABLE MATERIAL MAY BE UTILIZED THE ENTIRE DEPTH OF TRENCH (LESS 6" TOPSOIL). PLACEMENT AND COMPACTION TO BE AS NOTED FOR PAVED AREAS.
3. ALL STORM SEWER PIPE IS TO BE HIGH-DENSITY POLYETHYLENE (HDPE) AND HAVE A SMOOTH LINED INTERIOR WITH WATER-TIGHT JOINTS.
4. SATISFACTORY FILL MATERIAL: SOILS MEETING ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GC, GM, SW, SC, SM, AND CL WITH LIQUID LIMIT NOT GREATER THAN 35, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER; WITHIN 3% OF OPTIMUM MOISTURE CONTENT. (INCLUDES 2A)
5. PLACE SATISFACTORY FILL MATERIAL IN LAYERS 8" THICK MAX. COMPACT TO 100% SPD.
6. OWNER WILL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY ASSURANCE TESTING. NOTIFY TESTING AGENCY AT LEAST 48 HOURS PRIOR TO FILL PLACEMENT ACTIVITIES. ALLOW TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.

STORMSEWER (HDPE) INSTALLATION

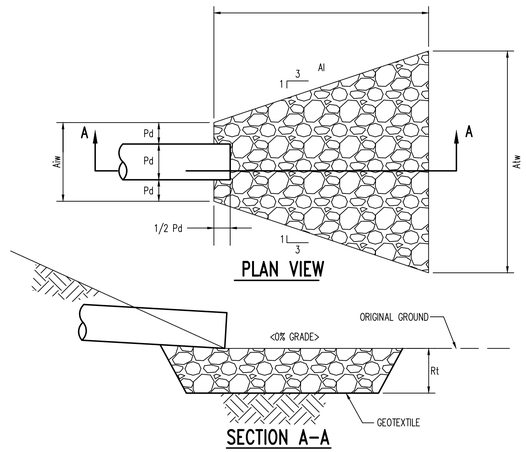
NOT TO SCALE



NOTE: THESE DETAILS REPRESENT TYPICAL SINKHOLE SHAPES AND REPAIR TECHNIQUES. SINKHOLES VARY IN SIZE AND TYPE. THEREFORE, THE OWNER'S GEOTECHNICAL ENGINEER SHALL BE CONTACTED PRIOR TO FIELD REPAIR OF ANY SINKHOLE. (NOT INCLUDED IN UTILITY/EARTHWORK BASE BID)

SINKHOLE REPAIR

NOT TO SCALE



PLAN VIEW

SECTION A-A

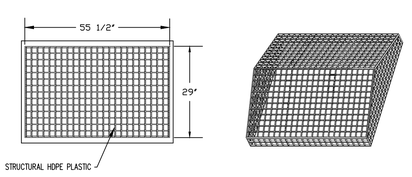
RIPRAP APRON AT PIPE OUTLET WITHOUT FLARED ENDWALL

NOT TO SCALE

OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE (R-_)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Alw (FT)	APRON TERMINAL WIDTH Atw (FT)
OUT-1	15"	R-3	9"	8.00'	3.75'	11.75'
OUT-2	15"	R-3	9"	8.00'	3.75'	11.75'

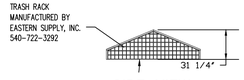
NOTES:

1. All aprons shall be constructed to the dimensions shown. Terminal widths shall be adjusted as necessary to match receiving channels.
2. All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately.
3. Extend riprap on back side of apron to at least ½ depth of pipe on both sides to prevent scour around the pipe.



TOP VIEW

TRASH RACK ASSEMBLY



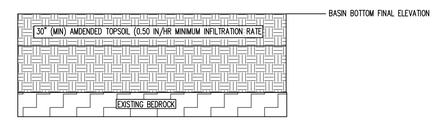
SIDE VIEW

NOTES FOR PLASTIC TRASH RACK:

1. MOUNTING HOLES ARE PROVIDED IN THE BASE OF THE PLASTIC RACK.
2. PLASTIC RACK IS SECURED BY 5/16" ZINC PLATED ANCHOR BOLTS, FLAT WASHERS, AND NUTS DIRECTLY TO THE CONCRETE.
3. OPENINGS SHALL BE 4" MINIMUM.

PLASTIC TRASH RACK-MODIFIED 2' X 4' INLET BOX (OS)

NOT TO SCALE



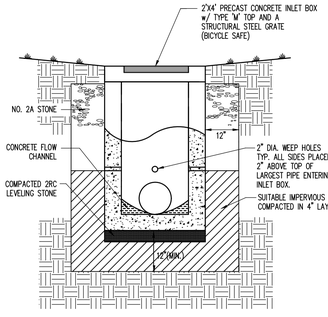
CROSS-SECTION VIEW

NOTES:

1. CONSULTATION WITH OWNER'S GEOTECHNICAL CONSULTANT REQUIRED PRIOR TO IMPLEMENTATION OF THIS DETAIL.
2. AN INFILTRATION RATE RANGE OF 0.5 IN/HR OR GREATER MUST BE MAINTAINED IN THE 30" OF AMENDED TOPSOIL MIXTURE. AN ADJUSTMENT TO THE TOPSOIL MAY BE NECESSARY BY ADDING MORE 1-YEAR AGED TRIPLE GROUND MULCH. COORDINATION WITH THE OWNER'S GEOTECHNICAL CONSULTANT REQUIRED.

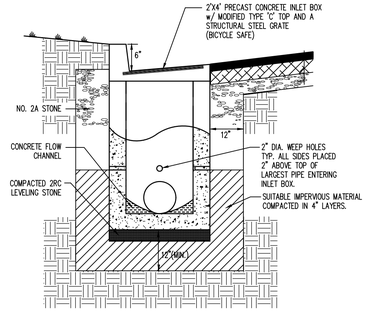
INFILTRATION BASIN BOTTOM OVER-EXCAVATION DETAIL

NOT TO SCALE



TYPE 'M' PRECAST CONCRETE INLET

NOT TO SCALE

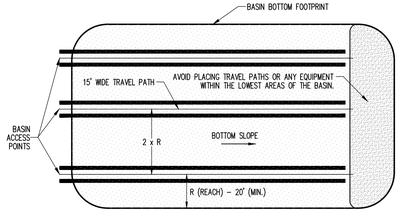


NOTE

Any Type 'C' Inlet exceeding 4' in depth is required to have steps installed.

MODIFIED TYPE 'C' PRECAST CONCRETE INLET

NOT TO SCALE



THIS DETAIL REPRESENTS A TYPICAL BASIN BOTTOM EXCAVATION TECHNIQUE. EACH BASIN VARIES WITH GEOMETRY AND OTHER VARIOUS PHYSICAL FEATURES. THE CONTRACTOR MUST DEVELOP A BASIN BOTTOM EXCAVATION PLAN AND CONSULT WITH THE SITE ENGINEER PRIOR TO COMMENCING THE BASIN BOTTOM EXCAVATION.

1. ALL EQUIPMENT MOBILIZATION AND MANEUVERS MUST BE LIMITED TO THE TRAVEL PATH LOCATIONS. THE CONTRACTOR SHALL LOCATE AND CLEARLY POST ALL TRAVEL PATHS IN THE FIELD.
2. TRAVEL PATH LOCATIONS SHALL BE SELECTED BASED UPON EQUIPMENT REACH CAPABILITY AND BASIN GEOMETRY. TRAVEL PATH LOCATIONS SHOULD BE SELECTED SUCH THAT THEY PARALLEL THE LONGEST SIDE OF THE BASIN.
3. TRAVEL PATH SPACING SHALL VARY WITH EQUIPMENT REACH CAPABILITY. REACH CAPABILITY SHOULD BE A MINIMUM OF 20 FEET.
4. MATERIAL SHALL BE REMOVED FROM THE TRAVEL PATH LOCATIONS WORKING TOWARD THE BASIN ACCESS POINTS. ONCE MATERIAL IS REMOVED FROM EACH TRAVEL PATH LOCATION AND FINAL GRADE IS ACHIEVED, ALL EQUIPMENT SHALL BE PROHIBITED FROM THESE LOCATIONS.
5. THIS PROCEDURE SHALL BE FOLLOWED FOR THE INITIAL SEDIMENT FACILITY CONSTRUCTION AND FINAL DETENTION BASIN GRADING. THE CONTRACTOR MUST USE THE SAME TRAVEL PATHS FOR BOTH CONSTRUCTION PHASES.

TYPICAL INFILTRATION BASIN BOTTOM EXCAVATION

NOT TO SCALE

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413 Seal

Seal

Designer(s)	MJA
Environmental	MSF
Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-PCSM-02-DETAILS
Layout	PCSM DETAILS

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE N.T.S.
SHEET NO. PC4

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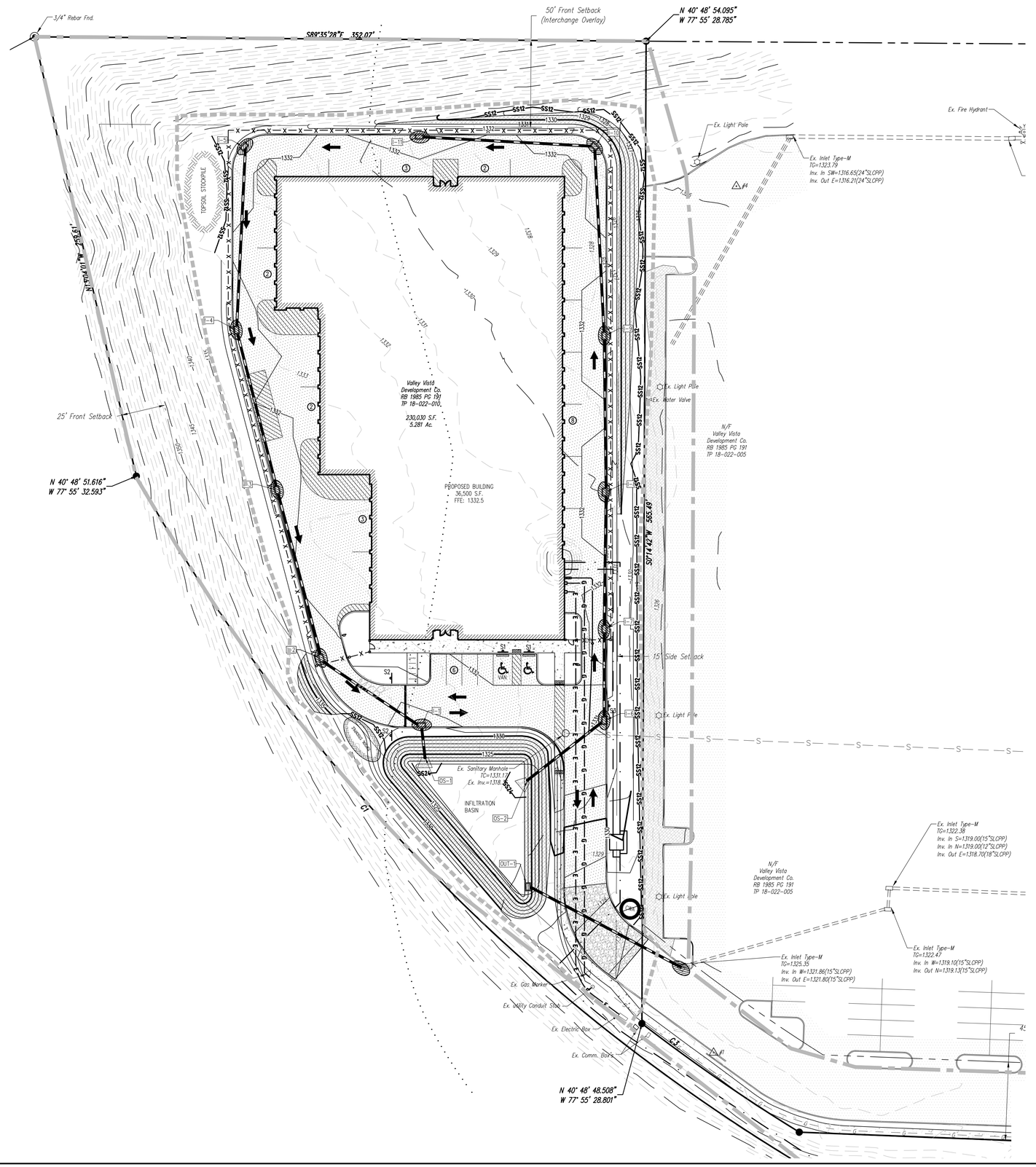
STORMWATER MANAGEMENT NOTES:

1. All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
2. The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
3. The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site,
4. Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures.
5. An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
6. All storm pipes shall be as noted. All joints shall be watertight.
7. Contractor shall refer to other plans within this construction set for other pertinent information.
8. Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the individual NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Certification shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
9. Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
   a. Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
   b. Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, rain garden and outlet structures, outlet pipes, tops of berms and spillways).
   c. Provide double-ring infiltrometer tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom soil mix prior to installation to certify that the soil mix meets the infiltration requirements noted on the plans.
10. Contractor shall have a licensed professional submit as-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with chapter 147 of the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of filter fabric/amended soils must also be submitted to the governing municipality.
11. As-built infiltration testing in infiltration basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 9.c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.

CRITICAL STAGES OF CONSTRUCTION NOTES:

The following stages of construction require that a licensed professional or designee registered within the Commonwealth of Pennsylvania be present onsite. Notice shall be given two weeks prior to commencing construction activities for which the licensed professional will be present. The general site contractor shall be responsible for supplying & coordinating the licensed professional. The licensed professional will be required to certify and seal as-built drawings at the end of construction that the stormwater facilities have been built to the specifications on the post construction stormwater management plans and details. The contractor shall then file this certification with the Centre County Conservation District when the Notice of Termination (NOT) document is completed.

A. Installation of proposed Infiltration Basin.



EROSION & SEDIMENTATION CONTROL LEGEND

- NPDES BOUNDARY LINE / LIMIT OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- INLET PROTECTION
- RIP-RAP APRON
- EROSION CONTROL LINING (CURLEX I OR APPROVED EQUAL)
- TOPSOIL STOCKPILE
- SS12 SS12 — 12" SILT SOCK
- SS24 SS24 — 24" SILT SOCK
- CWA — CONCRETE WASHOUT AREA

EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- 1301 — Existing Contours w/ Elevation (1's & 2's)
- 1305 — Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- W — Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- G — Existing Gas Line
- OU — Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Main Valve
- Existing Utility Meter
- Existing Bollard
- Existing Clean-Out
- Existing Handicap Symbol
- Existing Sign
- Existing Soil Limit Line / Boundary
- HaB — Existing Soil Type

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Property Corner Found
- Project Benchmark

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE AREAS
- PROPOSED BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- CO — S — PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED 8" WATER LINE W/ VALVE
- PROPOSED STORM SEWER W/ TYPE C INLET
- RD — PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER INLET - TYPE M
- VAN — PROPOSED PAINTED HANDICAPPED PARKING SYMBOLS
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 STOP! CALL BEFORE YOU DIG!

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL C. ANTHONY FRUCHTL ENGINEER PE-062413 Seal

Seal

Designer(s)	MJA
Environmental	MSF
Proj. Manager	CAF
Surveyor	MAK
Perimeter Ck.	
Book	Pg.
File	22296-FINAL-E&S-01-PLAN
Layout	E&SPC PLAN

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL PLAN

PROJECT NO.	22296
DATE	FEBRUARY 9, 2024
SCALE	1" = 30'
SHEET NO.	ES1

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Standard Erosion and Sedimentation Control Plan Notes

1. All earth disturbances, including clearing and grubbing as well as cuts and fills shall be done in accordance with the approved E&S plan. A copy of the approved drawings (stamped, signed and dated by the Centre County Conservation District) must be available at the project site at all times. The Centre County Conservation District shall be notified of any changes to the approved plan prior to implementation of those changes. The Centre County Conservation District may require a written submittal of those changes for review and approval at its discretion.
2. At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan , and a representative from the Centre County Conservation District to an on-site preconstruction meeting.
3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.
4. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the Centre County Conservation District or by the Department prior to implementation
5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
6. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the BMP sequence for that stage or phase have been installed and are functioning as described in this E&S plan.
7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.
8. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan maps(s) in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter.
9. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the Centre County Conservation District and/or the regional office of the Department.
10. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharge at the site.
11. All off-site waste and borrow areas must have an E&S plan approved by the Centre County Conservation District or the Department fully implemented prior to being activated.
12. The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance by qualifying as clean fill due to analytical testing.
13. All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetated areas.
14. Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, remulching and renetting must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required.
15. A log showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained on the site and be made available to regulatory agency officials at the time of inspection.
16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.
17. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.
18. Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches – 6 to 12 inches on compacted soils – prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outslopes shall have a minimum of 2 inches of topsoil.
19. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes.
20. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.
21. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills.
22. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.
23. Fill shall not be placed on saturated or frozen surfaces.
24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
25. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated. Seeded areas within 50 feet of a surface water, or as otherwise shown on the plan drawings, shall be blanketed according to the standards of this plan.
26. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non-germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent stabilization specifications.
27. Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
28. E&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Centre County Conservation District or the Department.
29. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Centre County Conservation District for an inspection prior to removal of the E&S BMPs.
30. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed. Areas disturbed during removal of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal are to be done only during the germinating season.
31. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Centre County Conservation District to schedule a final inspection.
32. Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Department as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to $10,000 per day in civil penalties, up to $10,000 in summary criminal penalties, and up to $25,000 in misdemeanor criminal penalties for each violation.
33. Concrete wash water shall be handled in the manner described on the plan drawings. In no case shall it be allowed to enter any surface waters or groundwater systems.
34. All channels shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction material/wastes.
35. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work area in the manner described in this plan until such restoration is complete.

General Construction Site Notes:

1.) All permanent and temporary seeding shall be done within 72 hours of the completion of disturbances for all areas requiring vegetative cover.

2.) Temporary and/or permanent grasses or stabilization shall be established in the sides and base of all earthen basins within 15 days of construction.

3.) In order to avoid compaction of the proposed infiltration basin bottoms, special procedures shall be implemented as follows:

a. The final excavation shall be completed utilizing equipment located outside the infiltration basin bottom area (if excavation cannot fully be completed from outside the bottoms, refer to the typical infiltration basin bottom excavation detail.)

4.) Prior to exiting the site, all construction vehicles must drive over the construction entrance.

5.) All disturbed slopes 3:1 and steeper shall be lined with adequate erosion control lining immediately after seeding.

6.) Silt Socks must be placed and maintained downslope of all topsoil stockpiles. Topsoil stockpiles must also be seeded with the temporary seeding mixture.

7.) All utility installation shall be done at a rate of which all trenching excavated shall be backfilled within the same day. All utility installation shall begin at the very downslope and precede upslope.

8.) Each item/step within the sequence of construction must be completed as presented prior to continuing the next step or phase of construction.

9.) The contractor is responsible for preparing and implementing any required PPC plans associated with the construction of the site.

10.) Failure to correctly install sediment control facilities or failure to prevent sediment laden runoff from leaving the construction site or failure to take corrective actions to immediately resolve failures of sediment control facilities may result in administrative, civil and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Clean Streams Law of Pennsylvania. The Clean Streams Law provides for up to $10,000 per day in civil penalties, up to $10,000 in summary criminal penalties, and up to $25,000 in misdemeanor criminal penalties for each violation.

Critical Stages of Construction

A. Existing Infiltration Basin. Needs converted to final post construction basin. Remove skimmer, and connect the 6"Perf. PVC underdrain. Once complete installation of the proposed detention basin can occur at this time in accordance with 'Note-2'above. Installation of the Forebay can occur at this time as well.

B. Installation of proposed Infiltration Basin.

Staging of Earthmoving Activities Construction Sequence

All earth disturbance activities shall proceed in accordance with the following staging of earthmoving activities. Each stage shall be completed before a subsequent stage is initiated.

A. Install the proposed rock construction entrance to the site off of the existing gravel access road as shown on the Erosion and Sedimentation Control Plan (E&SCP).
B. Installation of the proposed infiltration basin can occur at this time in accordance with 'Note 2'above. Installation shall include the outlet structure, outfall pipe, anti-seep collar, and placement of the soil mixture. Stabilize the interior/exterior slopes and top of berm with topsoil, erosion control lining and the permanent seeding mixture. Seed the bottom of the infiltration basin with the infiltration basin bottom permanent seeding mixture. Ensure that the silt sock placed where shown in the basin bottom to protect the bottom of the infiltration basin from sedimentation.
C. Install proposed silt sock as shown on the (E&SCP). Install concrete washout, where shown for use of concrete trucks leaving the site.
D. As construction progresses, stabilize all vegetated areas, with topsoil and the appropriate seeding mixture immediately after they are brought to final grade. Install the appropriate erosion control lining, where shown on the E&SCP. All areas abandoned for more than four (4) days are to be seeded with the temporary seeding mixture.
E. Strip existing topsoil from the site and place the topsoil on the topsoil stockpile as shown on the E&SCP. Place silt sock on the downslope side of the topsoil stockpile as shown on the E&SCP. Seed the topsoil stockpile with the temporary seeding mixture.
F. Begin the rough grading of the remainder of the site.
G. Once final grade of the individual buildings is reached, commence with the building construction. Continue with all parking and driveway construction.
H. Commence with construction of all utilities. All utilities are to be installed at the rate of the length of the utility that can be installed and backfilled in one day. All stormsewer shall be installed beginning at the downstream end and working upstream. Any erosion controls disturbed from the installation of these utilities shall be repaired or replaced properly at the end of each day. Inlet protection shall be placed immediately on all newly installed inlets and outlet protection installed at outlets.
I. Continue with the driveway and parking construction until all utilities are installed. Bring them to sub grade and stabilize with stone.
J. Begin the paving operations, thus removing the rock construction entrance. All curbing and sidewalks shall also be installed.
K. Current regulations state: (a) Upon completion of an earth disturbance activity or any stage or phase of an activity, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation. (b) Erosion and sediment control BMP's shall be implemented and maintained until the permanent stabilization is completed. (c) For an earth disturbance activity or any stage or phase of an activity to be considered permanently stabilized, the disturbed areas shall be covered with one of the following: (1) A minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation. (2) An acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Once stabilization has been achieved, all temporary erosion and sediment controls may be removed as follows:
   - Remove all temporary controls, such as silt sock, topsoil stockpiles, concrete washout and inlet protection. Any areas disturbed by the removal of these controls shall be stabilized immediately with a permanent seeding mixture.

Temporary Control Measures

Temporary control measures will be implemented to ensure that erosion is minimized and that sediment is retained during construction. The rock construction entrance and construction entrance rumble pads (if necessary) will be provided at the site entrance to prevent tracking of sediment from the site. Silt sock will be placed at the locations shown on the Erosion and Sedimentation Control Plan to provide proper filtration of the site runoff. Erosion control lining will be installed to help stabilize the steeper sloped areas to ensure full vegetation is obtained. The topsoil stockpile is provided for a convenient place to stock onsite topsoil. Inlet/yard drain protection and rock filters will be used to prevent sedimentation of the storm sewer systems. Temporary orange construction fence will be used to ensure that sensitive areas are not disturbed.

Temporary seeding on all disturbed areas shall be done immediately after grading is finished and shall consist of the following:

Item	Rate
1. Agricultural grade limestone	1 ton / acre
2. Fertilizer 10-10-10	500 lbs. / acre
3. Annual ryegrass	40 lbs. / acre
4. Mulch (straw)	3 tons / acre

Permanent Control Measures

Permanent control measures include the stormwater infiltration basin, riprap aprons, swales, storm sewer systems, and seeding / landscaping. Seeding specifications are for graded or cleared areas where permanent vegetative cover is needed.

Soil Enhancements: It is recommended that site specific soil testing be performed. Lieu of soil test recommendations, use the following schedule:

1) Acceptable – Apply 6 tons per acre Dolomitic Limestone (240 lbs/ 1000 s.f.) and 1000 lbs/acre 10-20-20 (25 lbs/ 1000 s.f.) before seeding. Harrow or disc into upper three inches of soil.

Permanent Seeding shall consist of the following:

Item	Rate
1. Seed Mixture Consisting of	102 lbs./acre
50% Poa pratensis (Kentucky Bluegrass	
30% Festuca rubra (Creeping Red Fescue)	
20% Lolium perenne L. (Perennial Rye)	
2. *Mulch (straw)	3 tons / acre

Basin Bottom Seeding Mix (To be placed on the bottom and interior sides of the infiltration basin, detention basin, and forebay)

Item	Rate
1. Seed Mixture Consisting of:	50 lbs / acre
20% Agrostis alba (Redtop)	
20% Agrostis stolonifera (Creeping Bentgrass)	
20% Elymus riparius (Riverbank Wild Rye)	
20% Carex vulpinoidea (Fox Sedge)	
20% Puccinellia distans (Alkali Grass)	
2. *Mulch	3 tons / acre

*Mulching: Apply mulch immediately after seeding and anchor properly with an anchoring tool or following one of the methods listed below.

1) Tracking: The process of cutting mulch into the soil via equipment that runs on tracks, is employed primarily on slopes 3:1 or steeper.
2) Mulch Nettings: Staple lightweight biodegradable paper, plastic or cotton netting over the mulch according to the manufacturer's recommendations.
3) Synthetic Binders: Synthetic binders such as acrylic DLR (AGRI-TAC), DCA-70, Petroset or Terratack may be used at rates recommended by the manufacturer to anchor mulch material.
4) Wood Cellulose Fiber: The fiber binder shall be applied at a net dry weight of 750 lb/acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs of wood cellulose fiber per 100 gallons.
5) Peg & Twine: Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more turns.

Maintenance Program

During construction, the contractor will be responsible for maintenance and repair of all erosion and sedimentation control facilities. These facilities should be inspected daily and after every runoff event. Any erosion control disturbed during construction, installation of utilities or found to be inadequate upon inspection shall be repaired or replaced within 24 hours after the disturbance or the discrepancy is discovered. The maintenance of the erosion control facilities will include the following:

During inspection of these facilities, written documentation for each inspection for all BMP repair, replacement, and/or maintenance activities shall be completed using the DEP Form 3800-FM-BCW0271d (A copy of this form is located in the Appendix of this report). Inspection reports should be kept onsite at all times.

Construction Entrance:

a. The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measure used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately. Sediment removed from the structure shall be spread over an existing stockpile with controls already in place and be seeded with the temporary seeding mixture.

Silt Socks:

a. The Contractor shall maintain the socks in a functional condition at all times and it shall be routinely inspected.
b. Where the sock requires repair, it will be routinely repaired.
c. The contractor shall remove sediment collected at the base of the sock when they reach 1/2 of the exposed height of the sock, or as directed by the Engineer. Alternatively, rather than create a soil disturbing activity, the engineer may call for additional sock to be added at areas of high sedimentation, placed immediately on top of the existing sediment laden sock. The sock will be dispersed on site when no longer required, as determined by the Engineer.

Topsoil Stockpile/Windrow:

a. The topsoil stockpile shall be seeded with the temporary seeding mixture to ensure proper stabilization. Any additional topsoil spread at these locations shall also be seeded with the temporary seeding mixture.

Permanent Seeding:

a. If the vegetative cover is not established uniformly by the third mowing, the contractor shall reapply topsoil if necessary and seed and mulch as needed to provide adequate cover.

Inlet Protection(Bag Type-Installed on Ex F-08):

a. Inlet filter bags should be inspected on a weekly basis and after each runoff event. Needed repairs should be initiated immediately after the inspection.
b. Filter bags should be cleaned and/or replaced when the bag is ½ full. Damaged bags should be replaced.

Inlet Protection (Stone Filter-Installed on I-11 – I-1):

a. Sediment shall be removed from the structure and spread over an existing stockpile with controls already in place, and be seeded with the temporary seeding mixture.
b. The structure should be checked regularly to ensure its soundness. If the stone filter has been disturbed and cannot perform its proper protective function, additional stone should be installed to provide adequate filtration.

Yard Drain Protection:

a. Sediment shall be removed from the structure and spread over an existing stockpile with controls already in place and be seeded with the temporary seeding mixture.
b. The structure should be checked regularly to ensure its soundness. If the stone filter has been disturbed and cannot perform its proper protective function, additional stone should be installed to provide adequate filtration.

Concrete Washout Maintenance:

a. All concrete washout facilities should be inspected daily.
b. Damaged or leaking washouts should be deactivated and repaired or replaced immediately.
c. Accumulated materials should be removed when they reach 75% capacity.
d. Plastic liners should be replaced with each cleaning of the washout facility..

Spoil Materials:

a. All sediment removed from erosion and sedimentation pollution control facilities shall be spread over spoil areas with controls already in place. Stabilize the spoil material with the temporary seeding mixture.

Pumped Water Filter Bag:

a. The contractor shall maintain the filter bag in a functional condition at all times and routinely inspect and repair as required.
b. Filter bags shall be replaced when they become ½ full and spare bags shall be kept available for replacement of failed or filled filter bags.
c. The pumping rate shall be observed and be no greater than 750 GPM or ½ the maximum specified by the manufacturer, whichever is less.

Recycling and Disposal of Materials

The operator shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 PA. Code 260.1et seq., 271.1 et seq., and 287.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes.

Wastes generated during the construction of this project shall be recycled if at all possible. Any materials that cannot be recycled or reused shall be disposed of at a Pennsylvania Department of Environmental Protection approved landfill. If soil and/or rock disposal areas are required, erosion and sedimentation controls shall be implemented at these areas. Any excess soil waste may only be disposed of at an approved E&S/NPDES permitted site.

Responsibilities for Fill Materials

The contractor is responsible to use environmental due diligence to ensure any fill material required to be imported to or exported from the site qualifies as Clean Fill.

Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.)

Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance. If the fill may have been affected by a spill or release of a regulated substance, it must be tested to determine if it qualifies as clean fill. Testing should be performed in accordance with Appendix A of the Department's policy "Management of Fill".

Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the Department's municipal or residual waste regulations based on 25 Pa. Code Chapters 287 Residual Waste management or 271 Municipal Waste Management, whichever is applicable.

PennTerra ENGINEERING INC.
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
www.PENNTERRA.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
C. ANTHONY FRUCHTL
ENGINEER
PE-062413
Seal

Seal

Designer(s) MJA
Environmental MSF
Proj. Manager CAF
Surveyor MAK
Perimeter Ck.
Book Pg.
File 22296-FINAL-E&S-02-NARRATIVE
Layout E&SPC NARRATIVE

Date	Description
	REVISIONS

SPACE MART AT VALLEY VISTA

PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL NARRATIVE

PROJECT NO. 22296
DATE FEBRUARY 9, 2024
SCALE N.T.S.
SHEET NO. ES2

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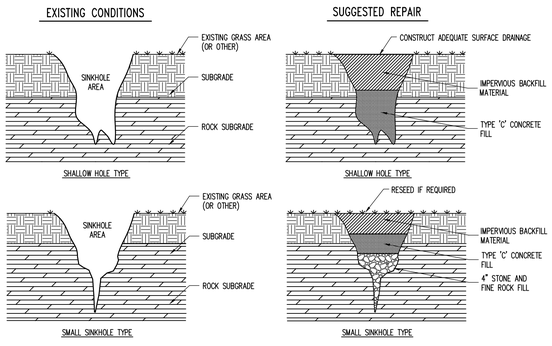
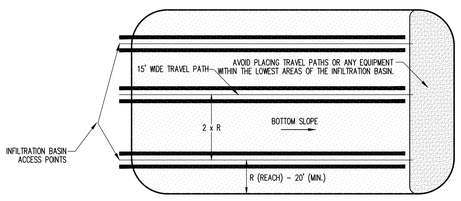


NOTE:
THESE DETAILS REPRESENT TYPICAL SINKHOLE SHAPES AND REPAIR TECHNIQUES. SINKHOLES VARY IN SIZE AND TYPE. THEREFORE, THE OWNER'S GEOTECHNICAL ENGINEER SHALL BE CONTACTED PRIOR TO FIELD REPAIR OF ANY SINKHOLE. (NOT INCLUDED IN UTILITY/EARTHWORK BASE BID)

SINKHOLE REPAIR
NOT TO SCALE

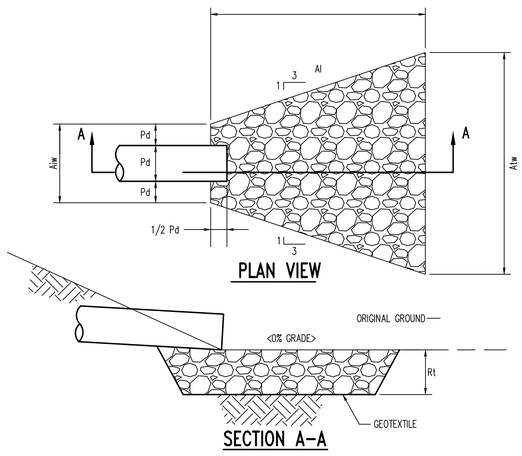


THIS DETAIL REPRESENTS A TYPICAL INFILTRATION BASIN BOTTOM EXCAVATION TECHNIQUE. EACH INFILTRATION BASIN VARIES WITH GEOMETRY AND OTHER VARIOUS PHYSICAL FEATURES. THE CONTRACTOR MUST DEVELOP A INFILTRATION BASIN BOTTOM EXCAVATION PLAN AND CONSULT WITH THE SITE ENGINEER PRIOR TO COMMENCING THE INFILTRATION BASIN BOTTOM EXCAVATION.

NOTES:

1. ALL EQUIPMENT MOBILIZATION AND MANEUVERS MUST BE LIMITED TO THE TRAVEL PATH LOCATIONS. THE CONTRACTOR SHALL LOCATE AND CLEARLY POST ALL TRAVEL PATHS IN THE FIELD.
2. TRAVEL PATH LOCATIONS SHALL BE SELECTED BASED UPON EQUIPMENT REACH CAPABILITY AND INFILTRATION BASIN GEOMETRY. TRAVEL PATH LOCATIONS SHOULD BE SELECTED SUCH THAT THEY PARALLEL THE LONGEST SIDE OF THE INFILTRATION BASIN.
3. TRAVEL PATH SPACING SHALL VARY WITH EQUIPMENT REACH CAPABILITY. REACH CAPABILITY SHOULD BE A MINIMUM OF 20 FEET.
4. MATERIAL SHALL BE REMOVED FROM THE TRAVEL PATH LOCATIONS WORKING TOWARD THE INFILTRATION BASIN ACCESS POINTS. ONCE MATERIAL IS REMOVED FROM EACH TRAVEL PATH LOCATION AND FINAL GRADE IS ACHIEVED, ALL EQUIPMENT SHALL BE PROHIBITED FROM THESE LOCATIONS.

TYPICAL INFILTRATION BASIN BOTTOM EXCAVATION
NOT TO SCALE



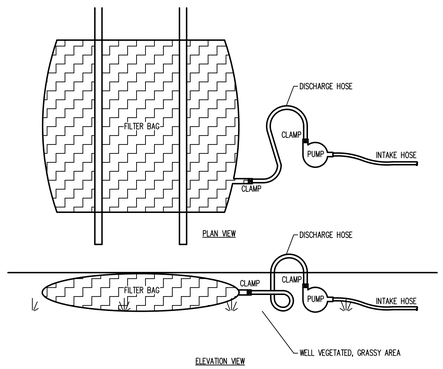
RIPRAP APRON AT PIPE OUTLET WITHOUT FLARED ENDWALL
NOT TO SCALE

OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE (R-_)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Alw (FT)	APRON TERMINAL WIDTH Atw (FT)
OUT-1	15"	R-3	9"	8.00'	3.75'	11.75'
OUT-2	15"	R-3	9"	8.00'	3.75'	11.75'

NOTES:
1. All aprons shall be constructed to the dimensions shown. Terminal widths shall be adjusted as necessary to match receiving channels.

2. All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately.

3. Extend riprap on back side of apron to at least ½ depth of pipe on both sides to prevent scour around the pipe.



Low volume filter bags shall be made from non-woven geotextile material sewn with high strength, double stitched "J" type seams.
They shall be capable of trapping particles larger than 150 microns. High volume filter bags shall be made from woven geotextiles that meet the following standards

Property	Test Method	Minimum Standard
Avg. Wide Width Strength	ASTM D-4884	60 lb/in
Grab Tensile	ASTM D-4632	205 lb
Puncture	ASTM D-4833	110 lb
Mullen Burst	ASTM D-3786	350 psi
UV Resistance	ASTM D-4355	70%
AOS % Retained	ASTM D-4751	80 Sieve

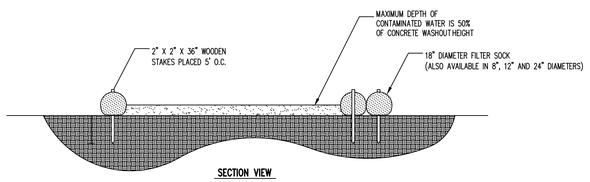
Notes:

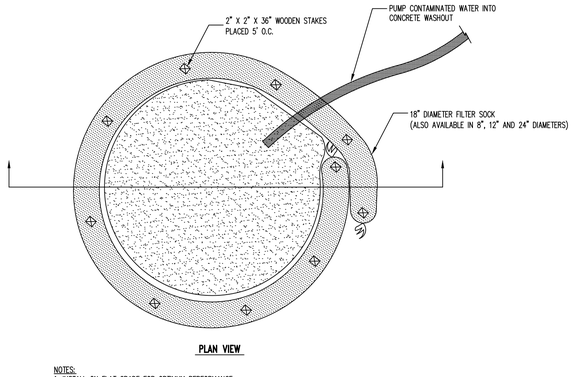
1. A suitable means of accessing the bag with machinery required for disposal purposes shall be provided. Filter bags shall be replaced when they become ½ full of sediment. Spare bags shall be kept available for replacement of those that have failed or are filled. Bags shall be placed on straps to facilitate removal unless bags come with lifting straps already attached.

2. Bags shall be located in well-vegetated (grassy) area, and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile underlayment and flow path shall be provided. Bags may be placed on filter stone to increase discharge capacity. Bags shall not be placed on slopes greater than 5%. For slopes exceeding 5%, clean rock or other non-erodible and non-polluting material may be placed under the bag to reduce slope steepness.

3. No downslope sediment barrier is required for most installations. Compost berm or compost filter sock shall be installed below bags located in HQ or EV watersheds, within 50 feet of any receiving surface water or where grassy area is not available.

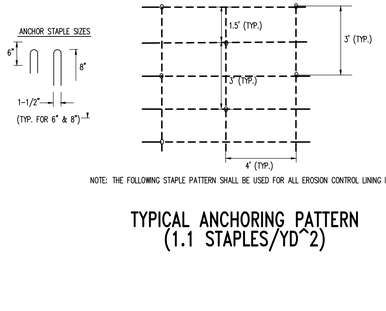
PUMPED WATER FILTER BAG DETAIL
NOTE: THIS DETAIL SHALL BE USED FOR PUMPING OF WATER FROM THE SITE
NOT TO SCALE





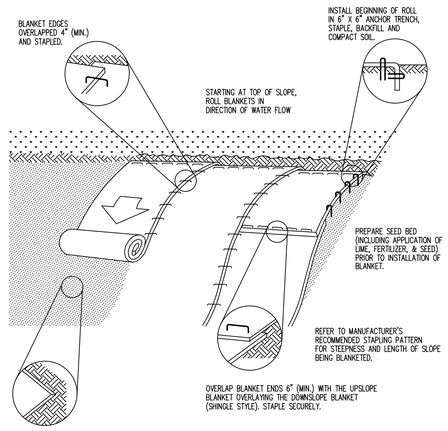
NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY.
3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
4. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE FILTER SOCKS.

CONCRETE WASHOUT AREA
NOT TO SCALE



NOTE: THE FOLLOWING STAPLE PATTERN SHALL BE USED FOR ALL EROSION CONTROL LINING INSTALLATION.

TYPICAL ANCHORING PATTERN (1.1 STAPLES/YD^2)



NOTES:
1. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

2. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

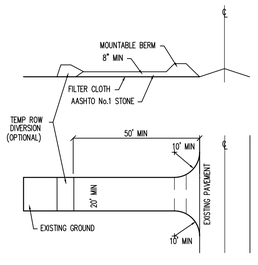
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

4. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

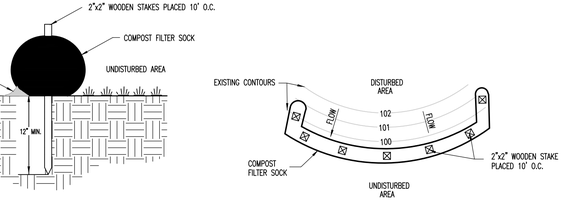
5. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE



CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:
1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.
2. SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
3. SILT SOCKS DEPICTED ARE FOR USE ON MINIMAL SLOPES. GREATER SLOPES MAY REQUIRE LARGER SILT SOCKS PER THE ENGINEER.
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
5. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
6. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
7. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
8. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
9. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

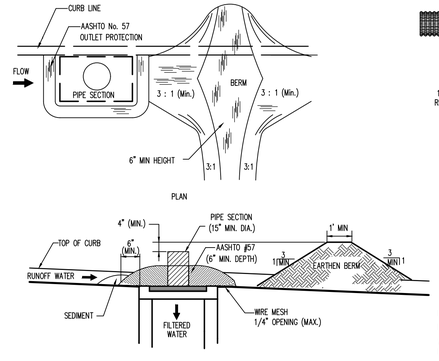
TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropelene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-Ply Systems					
Inner Containment Netting				HDPE biaxial net	
				Continuously wound	
				Fusion-welded junctures	
				3/4"x3/4" Max. aperture size	
Outer Filtration Mesh				Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)	
				3/16" Max. aperture size	
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

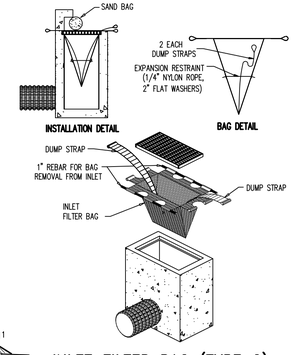
TABLE 4.2
Compost Standards

Organic Matter Content	25%-100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5-8.5
Moisture Content	30%-60%
Particle Size	30%-50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

COMPOST FILTER SOCK DETAIL
NOT TO SCALE



DROP INLET FILTER W/ EARTHEN BERM (TYPE C)
NOT TO SCALE



INLET FILTER BAG (TYPE C)
NOT TO SCALE

INLET FILTER BAG NOTES:

FILTER BAG SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.

WHEREVER FILTER BAGS ARE USED THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.

FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN BAG IS 1/2 FULL

DAMAGED FILTER BAGS SHOULD BE REPLACED.

NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION.

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3075 ENTERPRISE DRIVE
SUITE 100
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PATTON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL DETAILS

PROJECT NO. 22296
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