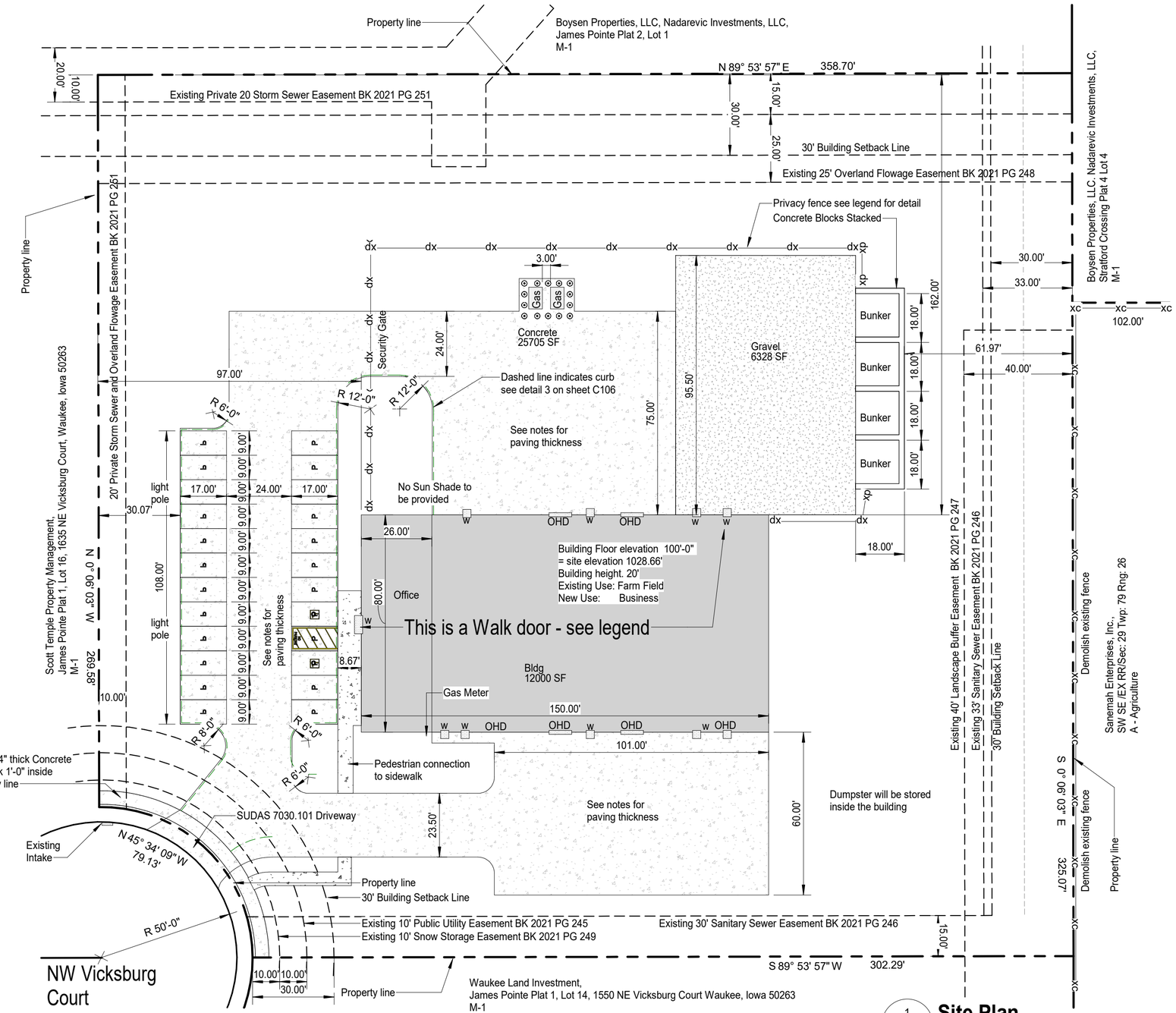
Paving Notes

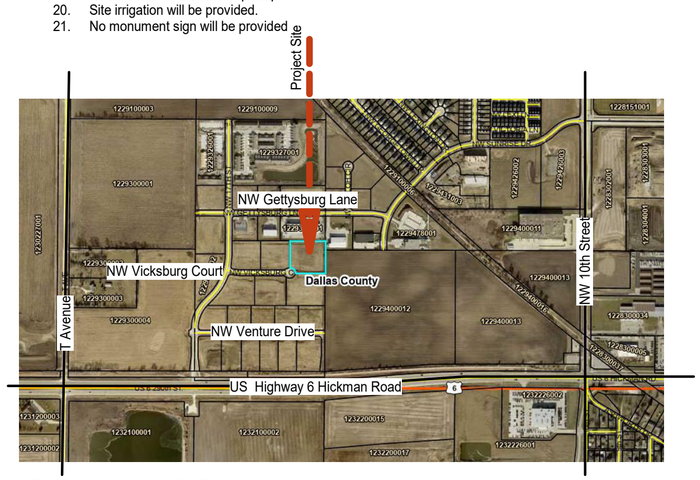
1. City Building Department shall inspect sidewalk and drive approach installations. Provide minimum 24-hour notice.
2. Parking lot pavement and drives shall be 6-inch thick non-reinforced PCC pavement. The truck lanes, shall be 7-inch wide non-reinforced PCC pavement.
3. Existing street pavement shall be sawed cut at the nearest longitudinal joint to construct the new driveway. If the closest joint is at the centerline, the current street shall be saw cut 18" from the back of the curb.
4. Replacement pavement shall match the thickness of the existing street out to the curb line.
5. The contractor shall be responsible for all pavement markings and directional signs, including any required stop signs. Directional signs shall not include any corporate logos.
6. All subgrade under the slab to be compacted to 95% standard proctor density for a minimum of 12".
7. Moisten subgrade before placing concrete.
8. Concrete shall have a minimum 28-day compressive strength of 4000 psi.
9. The aggregate shall be class 3.
10. Concrete surfaces shall be burlap finish. No deviation over 1/8" in 10'-0" is permitted. All concrete shall slope to drain.
11. All concrete shall be cured with an ASTM C309 Type 2. Water-based white pigmented curing compound per IDOT sec. 4105
12. Saw cut joints as soon as the concrete has set enough to prevent raveling and before any cracking.
13. The saw cuts to be 1/8" wide; Depth: longitudinal thickness/3, transverse thickness/4.
14. Longitudinal joint spacing shall not be greater than 12'-0". Transverse spacing shall not be greater than 15'-0".
15. Bars at longitudinal joints to be 1/2" x 30" deformed at 30" on center.
16. All joints shall be filled.
17. The contractor to barricade the slab for 14 days after placing.
18. Submit design mix as proposed by an independent testing laboratory before placing any concrete.
19. All work to comply with current ACI standards.
20. The contractor shall paint parking stalls and provide and install HC parking signs.
21. The contractor shall promptly remove all debris spilled on the city streets, or the adjacent property.

Site Notes

1. All work shall be done in accordance with 2023 SUDAS and the 2023 City of Waukee General Standard Specifications for public improvements effective at the time of plan approval.
2. All work in the city right-of-way requires a right-of-way permit.
3. The required landscaping new and existing shall be maintained for the life of the certificate of occupancy or certificate of zoning.
4. It is the responsibility of the owner and or the contractor to follow all applicable codes and ordinances whether or not contained on these documents.
5. All lighting shall consist of low glare cut-off type fixtures to reduce the glare of light pollution on surrounding properties.
6. All disturbed areas will be restored by sodding including including Right of way
7. Locations of elements traced from Dallas County, Iowa Assessor's website imagery accessed on June 30, 2023.
8. Curb to be restored at the location of the removed drive approach.
9. All new approaches to be 7" thick concrete from back of curb to the sidewalk
10. Please see the title block for the architects contact information.
11. This site shall be maintained in compliance with all city code applicable on the date of site plan approval.
12. All rooftop mechanical equipment must be screened on all sides with architectural screening equal to the height of the equipment.
13. Mechanical equipment shall not be located in the front yard or street side yard, and shall be screened from view from any public way with landscaping, fencing, or walls consistent with the building design, colors, and materials. Ideally
14. Any changes to the site plan shall be approved in writing from the Community Development Department. Contractor shall be responsible for any changes not approved by the Community Development Department.
15. Approved fire apparatus access roads shall be provided as soon as construction commences. If paving is not installed prior to building construction commencing after footing installed, an approved route around the exterior of the building to extend within 100 feet of all portions of the exterior walls shall be provided and comply with the requirements of section 503.2 of the IFC.
16. All debris spilled into the ROW shall be cleaned at the end of each work day and prior to a rain event.
17. All signage is to be reviewed under separate sign permit process.
18. All drivable paving to be 6" Portland Concrete Cement.
19. No exterior dumpster will be provided. Trash will be kept inside the building and placed outside for collection at the time of pickup.
20. Site irrigation will be provided.
21. No monument sign will be provided



1 / C101 **Site Plan**
1" = 30'-0"



Vicinity Map
NOT TO SCALE
Image courtesy of Google Earth Mapping Service

LICENSED PROFESSIONAL ARCHITECT
MATTHEW J. PALAN 06600
IOWA

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly-licensed architect under the laws of the State of Iowa.
Matthew J. Palan
August 24, 2023
Signature Date Issued:
Sheets covered by this seal: C101, C103, C104, C106, C202
Registration Expires: June 30, 2025

Civil Drawing Index

Sheet No.	Sheet Name
Civil	
C101	Site Plan
C103	Landscape plan
C104	Utility Plan
C106	Site Details
C202	Exterior Elevations

Legal Description:
James Pointe Plat 1 Lot 15, City of Waukee, Dallas County, Iowa

Property Address:
1585 NW Vicksburg Court
Waukee, Iowa 50263

Property Owner:
KLM Property Investment
PO Box 71368
Clive, Iowa 50325

Property Applicant:
KLM Property Investment
PO Box 71368
Clive, Iowa 50325
Leroy Mains : 515-664-6205

Parking Requirement:
3 Space per 1,000 office area
1 Space per 1,000 warehouse area
2,100 / 1,000 = 2.1 * 3 = 7 Spaces
12,320 / 1,000 = 12.3 * 1 = 13 Spaces

19 Total spaces required
21 Spaces provided
+2 accessible space provided.

Zoning:
M-1 - Light Industrial District

Zoning Setbacks:
30' Front setback
30' Rear setback
0' Side Yard
40' Max Height
3 Stories Max

Impervious Area:
27,790 sf Paving
14,560 sf Building
42,350 Total Impervious surface

Open Space:
114,135 Square Feet = 2.62 Acres

42,350 sf Impervious surface 37.10%

71,785 sf Open Space 62.89%

15% = 17,120 sf Minimum Open Space Required

City of Waukee Benchmarks:
survey and coordinate system:
State Plane Iowa South Zone (1402) NAD 83

Site Legend

- Indicates Existing utility line
- w — EX W — Water Line
- SA — EX SA — Sanitary Sewer Line
- Property Line
- Building Setback Line
- Easement Line
- Road Centerline
- Paving
- 100' — Topography
- xc — xc — Demo Existing Barbed wire fence
- xp — xp — New 6'-0" Tall privacy fence 80% opaque - see detail 4 on sheet C106
- Walk Door
- Tree

North

1" = 30'-0" Scale in Feet: 0, 15, 30, 60

Submittal Dates

#	Date	Description
4	09/29/23	Revision 3
3	09/18/23	Revision 2
2	08/24/23	Revision 1
1	08/16/23	Not for Construction

10/12/2023 1:59:42 PM

PROJECT NUMBER: 2306Q

TITLE: Site Plan

SHEET: C101

Creative Concepts Architecture, PLC
3013 NE 158th Avenue | Cambridge, Iowa 50046
515 230 1358 matt@creativeconceptsarch.com

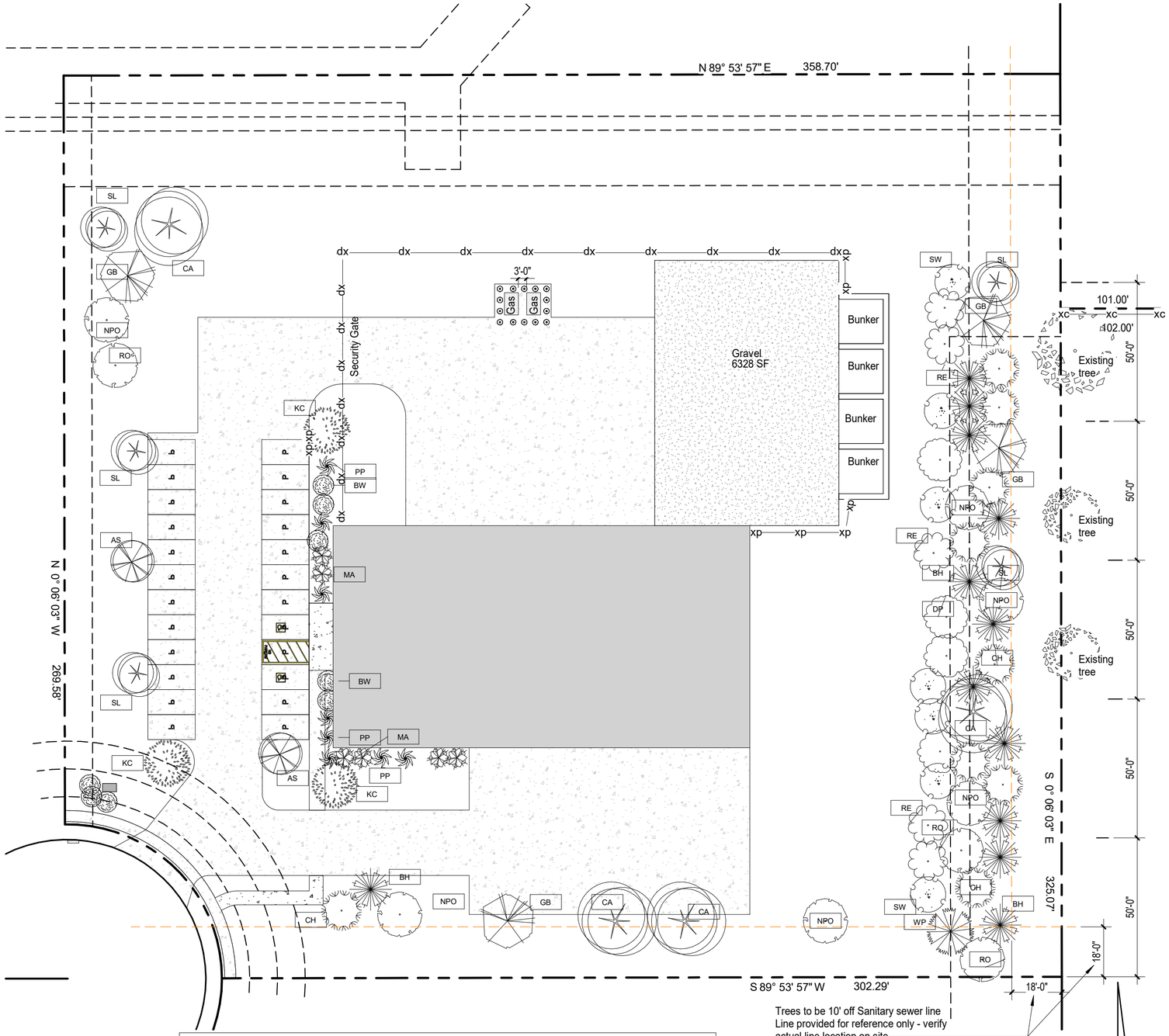
KLM Property Investments
New Facility
1585 NW Vicksburg Court | Waukee, Iowa 50263

Concrete Bunker:

- The concrete bunker dimensions at our current business are 20' deep x 21' wide x 6' tall.
- The concrete pieces to build the bunkers:
- large piece 2' wide x 2' tall and 6' long
- small cube piece 2' wide x 2' tall x 3' long

Planting Notes

1. Tree or shrub shall stand plumb
2. Plants shall be true to species, size and variety specified
3. Do not allow air pockets to form when backfilling – Soil should never be placed over the root ball.
4. Contractor shall guarantee all plant material for one year from date of project Completion.
5. Contractor to provide a 4" depth clean vertical cut edge to define mulch planting bed limits.
6. All trees to be planted a minimum distance of 5 feet from fire hydrants and pavements.
7. The contractor is responsible for plants awaiting installation and shall protect them from injury.
8. Trees should have their North side marked at the nursery and be planted at the site with the same orientation.
9. All plant material shall be handled by the balled and bur lapped (b&b) root ball, container or root mass.
10. Remove all twine, rope, and wire from the root ball. Remove wire basket completely, cut the bottom third prior to planting. Set the plant or tree in pit an backfill to stabilize root ball.
11. All plant material shall at least meet minimum requirements shown in the "American Standards for Nursery Stock" (ANSI Z60,1-latest edition).
12. Plant material shall be specimen quality, healthy, free of disease and insects and shall have healthy, well-developed root systems; plants shall also be free from physical damage or other conditions that would prevent vigorous growth.
13. Pruning of trees and shrubs at time of planting should be kept at a minimal; the contractor shall prune to remove broken, damaged or diseased branches, no pruning paint or sealer is allowed. All other pruning shall be approved by the landscape architect.
14. Provide 3-inch depth shredded hardwood mulch around all plantings to a min. 3-foot perimeter, provide continuous mulch beds in areas indicated on the plan do not place mulch within 2-inches of root collar or trunk.
15. Contractor to cover all areas disturbed by construction with sod, unless noted otherwise .
16. All plant material to be approved by owner before planting, substitutions of plant materials will not be permitted unless authorized in writing by the community development department.
17. All wire, twine and burlap shall be removed from the rootball of street trees prior to planting.
18. No staking of trees is allowed.
19. If areas beyond the property line are used for staging, they will need to be seeded back - mix information to be provided when applicable.



Landscaping Requirement:
Open space Trees:
17,120 sf / 1,000 = 18 trees required

18 trees * .5 = 9 overstory trees
18 trees * .25 = 5 Evergreen trees

Shrubs:
1 shrub Req / 1000sf openspace
17,120 sf / 1,000 = 18 shrubs required

Parking Buffer:
108lin feet / 40 = 2.7 = 3 shade tree required each side

Landscape Buffer:
250' / 50' = 5

5 * 2 overstory = 10
5 * 4 evergreen = 20
5 * 3 ornamental = 15
trees per 50-linear feet of buffer

Proposed Planting Schedule

Mark	Common Name	Latin Name	Size	Comments	Type	Count
BH	Black Hills Spruce	Picea glauca	2" - 2 1/2"		Evergreen	12
CH	Canadian Hemlock	Tsuga canadensis	2" - 2 1/2"		Evergreen	9
WP	Eastern White Pine	Pinus Strobus	2" - 2 1/2"		Evergreen	1
AS	American Sycamore	Platanus occidentalis	1 1/2" - 2"		Overstory	2
KC	Kentucky Coffee Tree	Gymnocladus Dioicus	1 1/2" - 2"		Overstory	3
NPO	Northern Pin Oak	Quercus Ellipsoidalis	2" - 2 1/2" Cal		Overstory	6
GB	Presidential Gold Ginkgo	Ginkgo biloba 'The President'	2" - 2 1/2" Cal		Overstory	4
RO	Red Oak	Quercus Rubra	1 1/2" - 2"		Overstory	3
SL	Shademaster Locust	Gleditsia triacanthos	1 1/2" - 2"		Overstory	5
BW	Bridal Wreath	Spiraea	60"-96"		Shrub	8
MA	Manzanita	Arctostaphylos	6"-18"		Shrub	6
PP	Paperbush Plant	Edgeworthia chrysantha	48"-72"		Shrub	8
CA	Crab Apple	Malus Rosaceae	2" - 2 1/2" Cal		Understory	4
DP	Dogwood, Pagoda	Cornus Alternifolia	24"-36"		Understory	4
SW	Oxydendrum Arboretum	Sourwood	36"-240"		Understory	7
RE	Redbud, Eastern	Cercis Canadensis	36"-48"		Understory	5

All disturbed areas, including the ROW, are required to be sodded
Overstory trees shall be a minimum of 8-feet and evergreen and ornamental trees shall be a minimum of 6-feet at time of planting
Note that if areas beyond the property are used for staging they will need to be seeded back and provide mix information

1 / C103 **Site - Landscape Plan**
1" = 30'-0"

North

1" = 30'-0" Scale in Feet
0 15 30 60

Creative Concepts Architecture, PLC
3013 NE 158th Avenue | Cambridge, Iowa 50046
515 230 1358 matt@creativeconceptsarch.com

KLM Property Investments
New Facility
1585 NW Vicksburg Court | Waukee, Iowa 50263

Submittal Dates

#	Date	Description
5	10/11/23	Revision 4
4	09/29/23	Revision 3
3	09/18/23	Revision 2
2	08/24/23	Revision 1
1	08/16/23	Not for Construction

10/12/2023 1:59:42 PM

PROJECT NUMBER:
2306Q

TITLE:
Landscape plan

SHEET:
C103

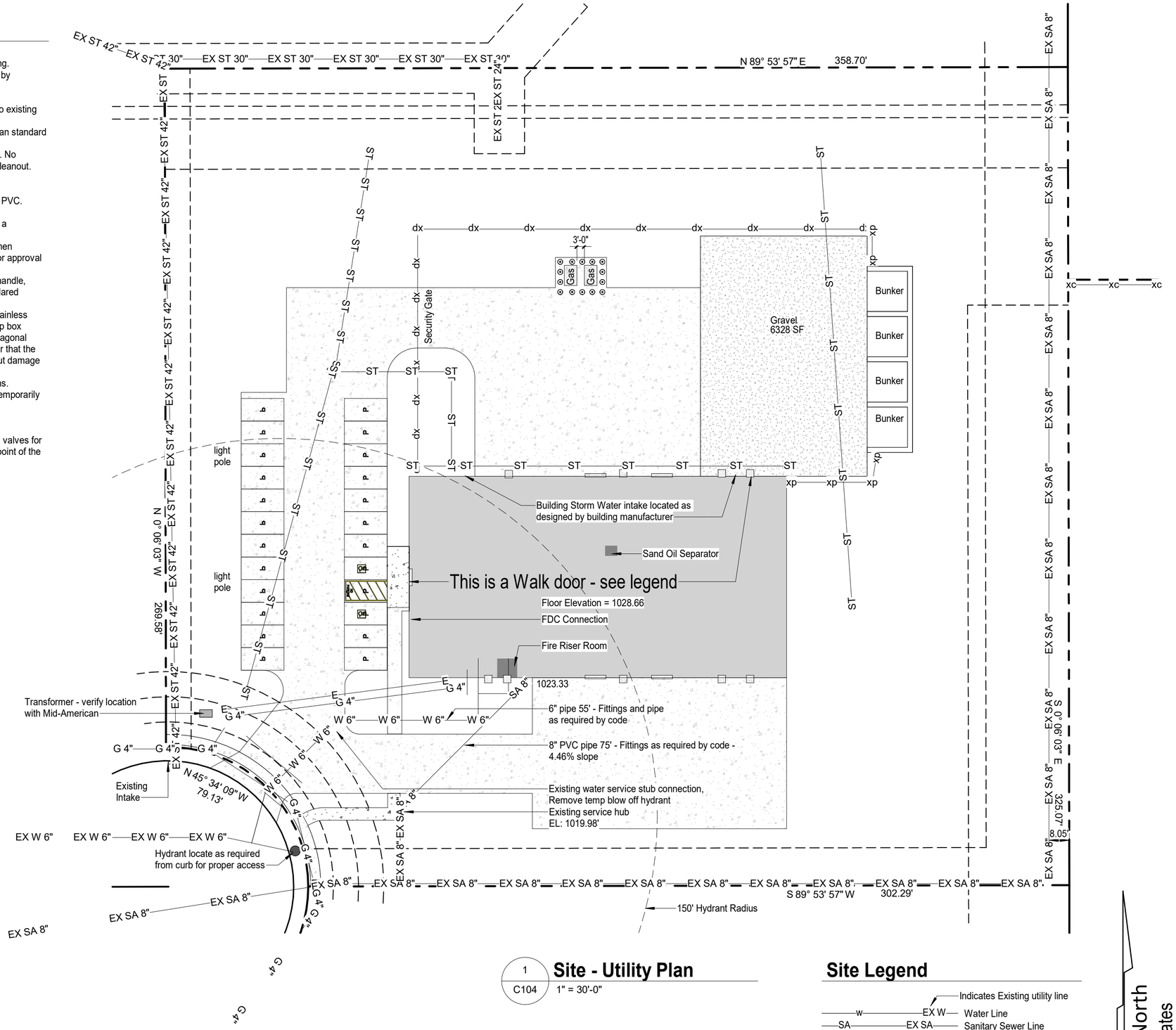
Utility Notes

Sanitary sewer General Notes

1. The site contractor to install pipe to within five (5) feet of the building.
2. The contractor shall install all fitting and appurtenance as required by plumbing code, whether shown or not.
3. All backfill shall be compacted to a 95% standard proctor.
4. All services connected to the sanitary sewer pipe. No connection to existing sanitary sewer manholes allowed.
5. The 8" sanitary sewer service line shall be SDR-23.5 following urban standard specifications
6. Sanitary sewer cleanouts shall be provided at all bends in the pipe. No sanitary sewer service line shall exceed 100 linear feet without a cleanout.

Water Service & Main General Notes

1. Pipe material for a 6" water main shall be AWWA C900 Class 150 PVC.
2. Pipe material for a 1" water service line shall be copper.
3. Provide riser rod on all curb stops. Water main tapping shall be by a contractor approved by the City for such purpose.
4. The contractor shall work with the City public works department when operating existing valves. Water shall not be turned on without prior approval of the City.
5. The shutoff for new 1" & 1 1/2" service lines shall consist of a" T" handle, quarter-turn curb stop ball valve, Mueller Oriseal Mark II 1/4 turn, flared copper nut (both ends), or approved equal.
6. Stoop boxes for 1" through 2" water service lines shall include a stainless steel self-centering rod with stainless steel cotter pin within the stop box housing with a 1%" extendable upper section and lid with one pentagonal plug. All stop box installations shall be completed in such a manner that the cap is allowed to raise with the frost and lower if driven over without damage to the curb valve.
7. Contractors shall arrange for and pay for any required taps to mains.
8. Site contractor to install pipe to within five (5) feet of building and temporarily cap the pipe.
9. The contractor shall comply with all city codes.
10. The water main shall be PVC C900 DR18.
11. The plumbing contractor shall install the required tees, fittings, and valves for the domestic service within 5' of the building from the termination point of the site contractor's work.
12. All backfill shall be compacted to a 95% standard proctor.



1 C104 **Site - Utility Plan**
1" = 30'-0"

Site Legend

- Indicates Existing utility line
- w — EX W — Water Line
- SA — EX SA — Sanitary Sewer Line
- Property Line
- Building Setback Line
- Easement Line
- Road Centerline
- Paving
- 100' — Topography
- xc — xc — Demo Existing Barbed wire fence
- xp — xp — New 6'-0" Tall privacy fence 80% opaque - see detail 4 on sheet C106
- Walk Door
- Tree

North

1" = 30'-0" Scale in Feet: 0, 15, 30, 60

Submittal Dates

#	Date	Description
4	10/11/23	Revision 4
3	09/18/23	Revision 2
2	08/24/23	Revision 1
1	08/16/23	Not for Construction

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PROJECT NUMBER: 2306Q

TITLE: Utility Plan

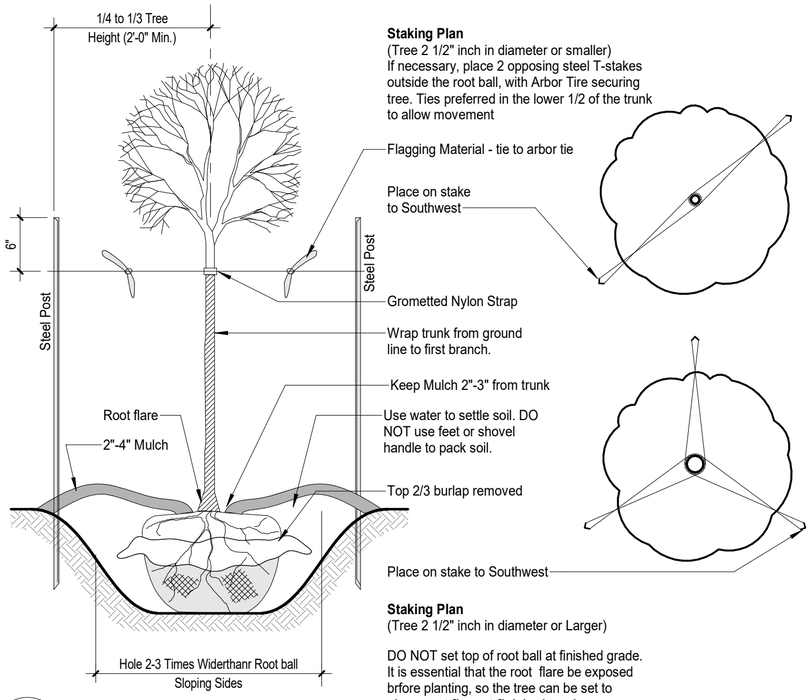
SHEET: C104

Creative Concepts Architecture, PLC
3013 NE 158th Avenue | Cambridge, Iowa 50046
515 230 1358 matt@creativeconceptsarch.com

KLM Property Investments
New Facility

1585 NW Vicksburg Court | Waukee, Iowa 50263

Step 1 - peel back rope/burlap/cage and remove sufficient soil to expose root flare.
Step 2 - measure from root flare to bottom of root ball.
Step 3 - dig hole to depth where topmost roots are buried 1-2 inches and the root flare sits slightly above ground level. Dig a hole 2-3 times wider than the diameter of the root ball with sloping sides to allow for proper root growth.
Step 4 - remove lower third of wire cage.
Step 5 - set tree in hole. Support with some soil. Ensure that it's straight, then remove entire wire cage and top Two-thirds of burlap.
Step 6 - backfill with two-thirds of loose native soil (unless it's all clay) and use water to settle. Do not tamp
Or step on soil.
Step 7 - backfill balance and water again. Excess soil may be used to create a berm/saucer outside of root ball.
Step 8 - add 2-4 inches of wood mulch, leaving a 1- to 2-inch clearance between the mulch and the trunk.
Step 9 - water a final time.
Step 10 - if necessary, place two opposing steel t-stakes outside the root ball with arbor tie securing tree. Ties preferred on lower half of trunk to allow movement.

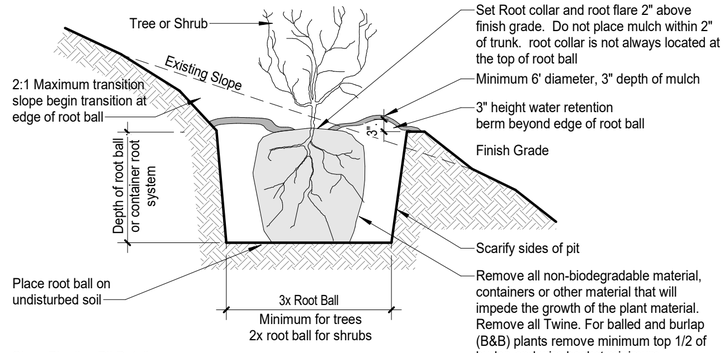


Staking Plan
(Tree 2 1/2" inch in diameter or smaller)
If necessary, place 2 opposing steel T-stakes outside the root ball, with Arbor Tire securing tree. Ties preferred in the lower 1/2 of the trunk to allow movement

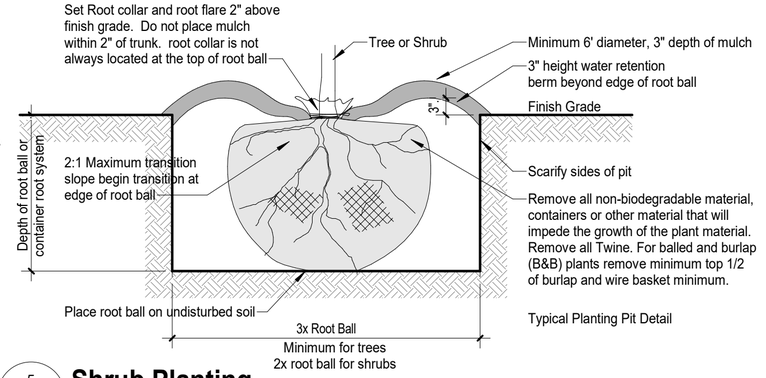
Staking Plan
(Tree 2 1/2" inch in diameter or Larger)

DO NOT set top of root ball at finished grade. It is essential that the root flare be exposed brfore planting, so the tree can be set to **show root flare at finished grade**

7 / C106 Tree Planting
1" = 1'-0"

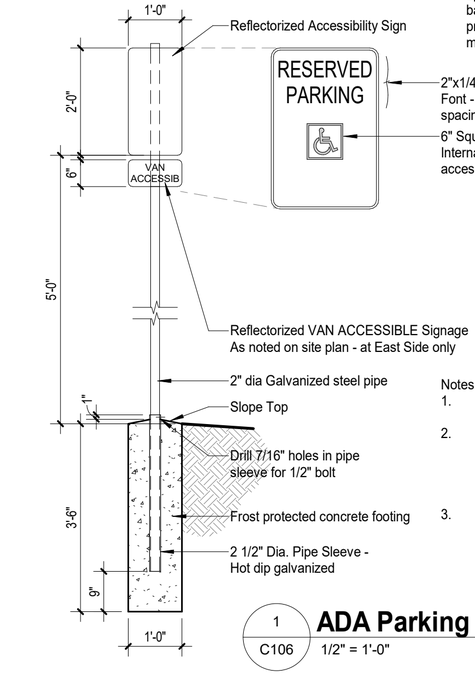


Slope Planting Pit Detail



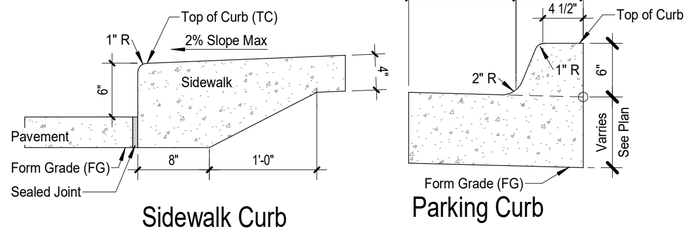
Typical Planting Pit Detail

5 / C106 Shrub Planting
1 1/2" = 1'-0"

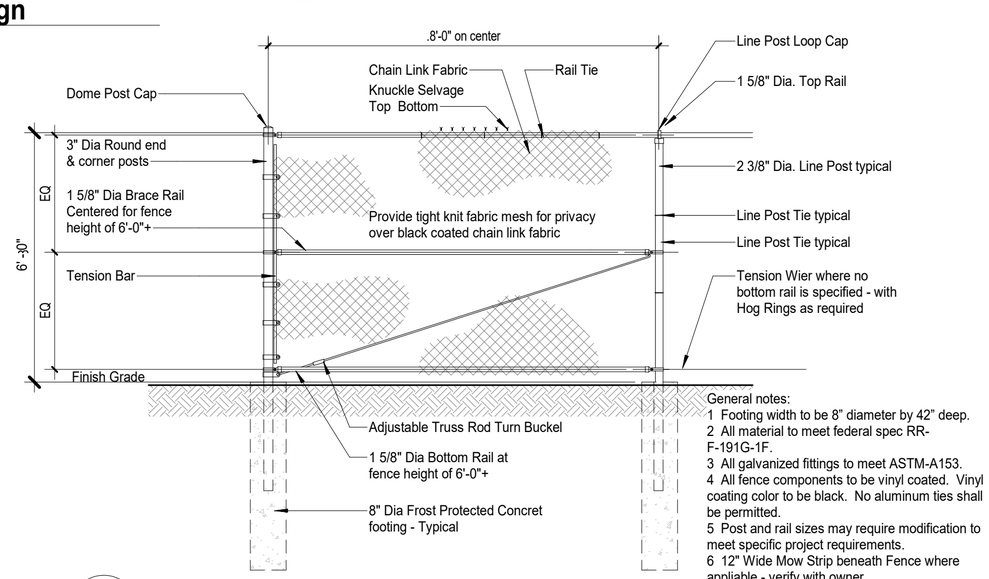


Notes:
1. Sign shall be constructed of 0.062" thick aluminum Minimum.
2. Lettering, Symbol and Border shall be reflective white, on blue background. with standard 3M Scotchlite sign face #R7-32. or equivalent
3. Place in front of each Accessible parking stall within clear view, but not to obstruct passsage from parking stall or any walkway.

1 / C106 ADA Parking Sign
1/2" = 1'-0"

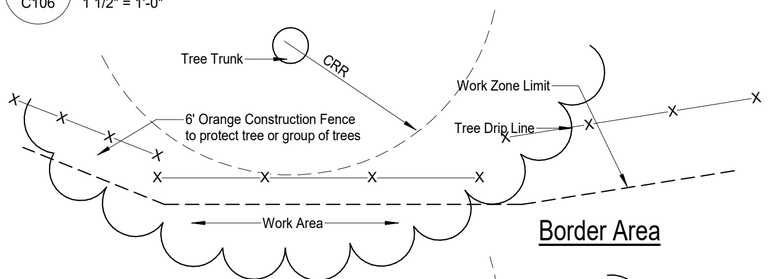


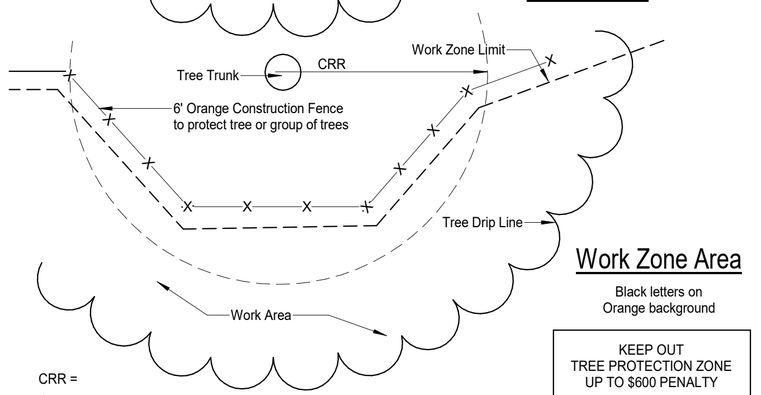
3 / C106 Curb Detail
1" = 1'-0"



General notes:
1 Footing width to be 8" diameter by 42" deep.
2 All material to meet federal spec RR-F-191G-1F.
3 All galvanized fittings to meet ASTM-A153.
4 All fence components to be vinyl coated. Vinyl coating color to be black. No aluminum ties shall be permitted.
5 Post and rail sizes may require modification to meet specific project requirements.
6 12" Wide Mow Strip beneath Fence where appliable - verify with owner.

2 / C106 Chain Link Fence
1/2" = 1'-0"





Black letters on Orange background

KEEP OUT
TREE PROTECTION ZONE
UP TO $600 PENALTY

Sign Detail

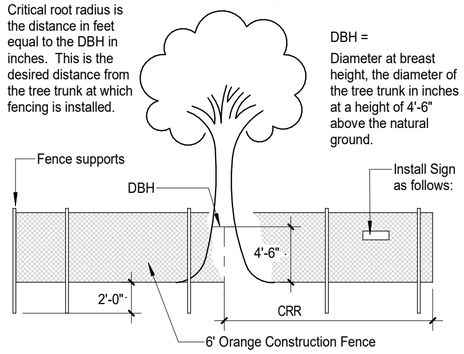
Minimum sign dimensions:
Laminated cardboard - 11"x17"
Metal - 12"x18"

For individual tree protection : Install at least 2 signs at each location and at a maximum spacing of 16' on center

For linear tree protection: Install a sign at each end of the tree protection fence and at a maximum spacing of 50' on center

CRR =
Critical root radius is the distance in feet equal to the DBH in inches. This is the desired distance from the tree trunk at which fencing is installed.

DBH =
Diameter at breast height, the diameter of the tree trunk in inches at a height of 4'-6" above the natural ground.



Note 1: Spacing as required to prevent sagging, 8' maximum.

6 / C106 Planting Protection
1" = 1'-0"

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515 230 1358 matt@creativeconceptsarch.com

KLM Property Investments
New Facility
1585 NW Vicksburg Court | Waukee, Iowa 50263

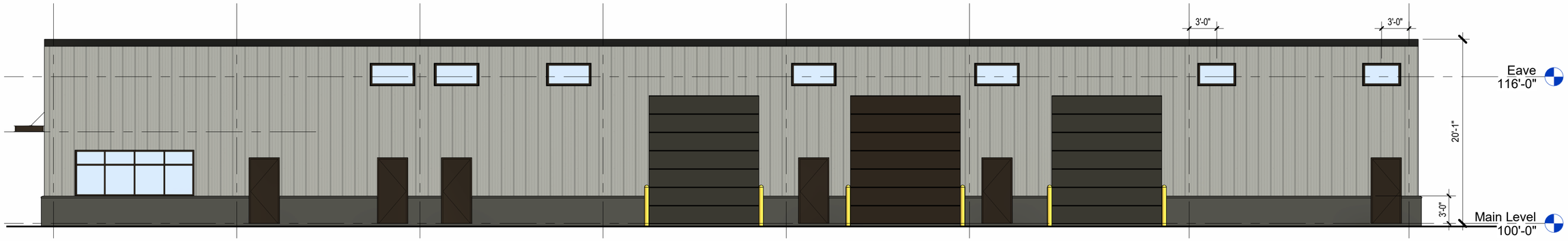
#	Date	Description
3	09/18/23	Revision 2
2	08/24/23	Revision 1
1	08/16/23	Not for Construction

10/12/2023 1:59:43 PM

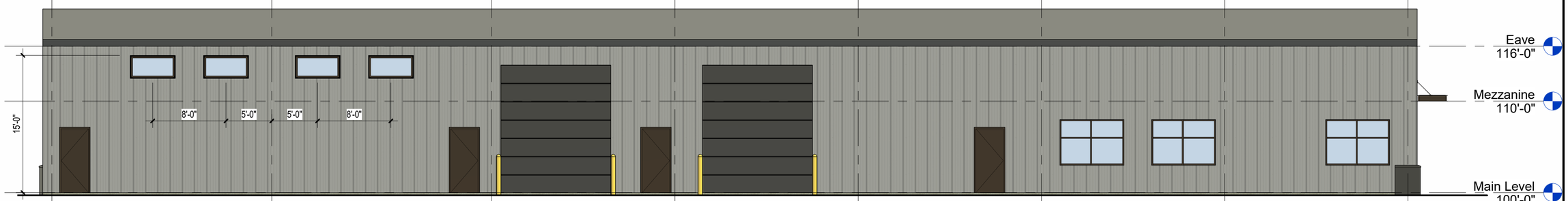
PROJECT NUMBER: 2306Q

TITLE: Site Details

SHEET: C106



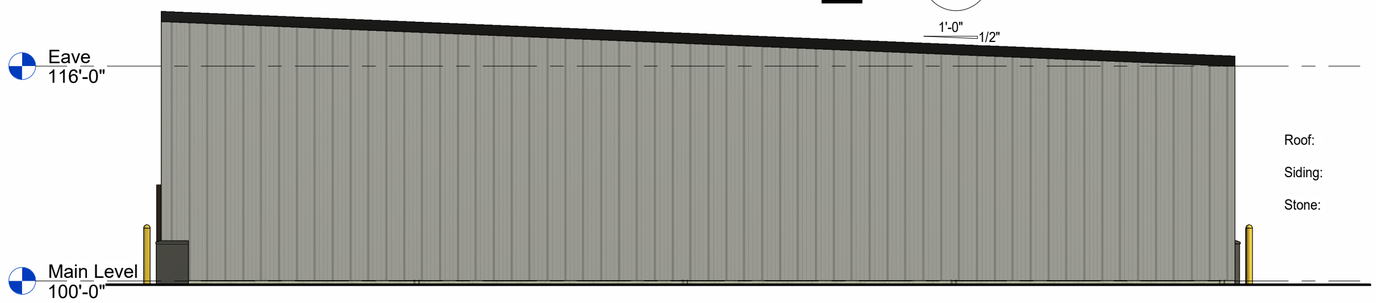
4 C202 **South Elevation**
1/8" = 1'-0"



3 C202 **North Elevation**
1/8" = 1'-0"

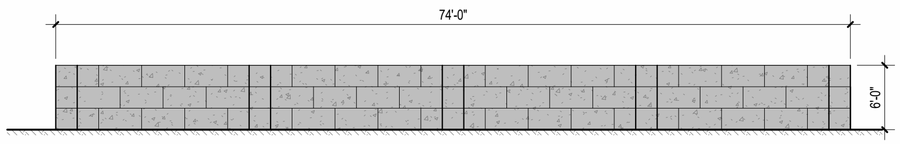
1 A108

2 C202 **West Elevation**
1/8" = 1'-0"



Roof: Metal
Black
Siding: Composite siding
Slate Gray
Stone: Dry Stack, Cut Stone
Gray / Black

1 C202 **East Elevation**
1/8" = 1'-0"



5 C202 **Bunker Elevation**
1" = 10'-0"

Wall Material - Overall		
Material	Area	Percent
East		
Composite Siding	1399 SF	16%
Cut Stone - Gray	8 SF	0%
North		
Composite Siding	1801 SF	21%
Cut Stone - Gray	10 SF	0%
South		
Composite Siding	3801 SF	44%
Cut Stone - Gray	359 SF	4%
West		
Composite Siding	1114 SF	13%
Cut Stone - Gray	237 SF	3%
Grand total: 17	8729 SF	

Wall Material - South		
Material	Area	Percent
South		
Composite Siding	3801 SF	91%
Cut Stone - Gray	359 SF	9%
Grand total: 11	4159 SF	
South Windows	148 SF	2.9%
Grand total: 8	148 SF	
Total Wall Area	4,810 SF	100%

Wall Material - North		
Material	Area	Percent
North		
Composite Siding	1801 SF	99%
Cut Stone - Gray	10 SF	1%
Grand total: 2	1811 SF	
North Windows	110 SF	4.5%
Grand total: 3	110 SF	
Total Wall Area	2,414 SF	100%

Wall Material - West		
Material	Area	Percent
West		
Composite Siding	1114 SF	82%
Cut Stone - Gray	237 SF	18%
Grand total: 2	1351 SF	
West Windows	331 SF	23.3%
Grand total: 5	331 SF	
Total Wall Area	1,421 SF	100%

Wall Material - East		
Material	Area	Percent
East		
Composite Siding	1399 SF	99%
Cut Stone - Gray	8 SF	1%
Grand total: 2	1407 SF	

Creative Concepts Architecture, PLC
3013 NE 158th Avenue | Cambridge, Iowa 50046
515 230 1358 matt@creativeconceptsarch.com

KLM Property Investments
New Facility
1585 NW Vicksburg Court | Waukee, Iowa 50263

Submittal Dates

#	Date	Description
3	09/18/23	Revision 2
2	08/24/23	Revision 1
1	08/16/23	Not for Construction

10/12/2023 1:59:52 PM

PROJECT NUMBER:
2306Q

TITLE:
Exterior Elevations

SHEET:
C202

Brilliant Borders (Grading & Storm Sewer Design)

GENERAL NOTES
A. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT O.S.H.A. CODES AND STANDARDS. NOTHING INDICATED ON THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE APPROPRIATE SAFETY REGULATIONS.
B. ALL CONSTRUCTION PROCEDURES AND MATERIALS TO MEET OR EXCEED MINIMUM REQUIREMENTS AS PER 2023 SUDAS AND 2023 WAUKEE SUPPLEMENTAL SPECIFICATIONS AND THE URBAN DESIGN STANDARDS FOR PUBLIC IMPROVEMENTS SHALL APPLY TO GRADING, EROSION CONTROL AND ASSOCIATED WORK FOR THE PROJECT.
C. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL REQUIRED PERMITS FOR PERFORMING THE WORK.
D. THE OWNER/DEVELOPER IS RESPONSIBLE FOR MEETING ALL STATE OF IOWA DEPARTMENT OF NATURAL RESOURCES, APPLICABLE COUNTY, URBAN DESIGN STANDARDS FOR PUBLIC IMPROVEMENTS, OR ANY OTHER CODES, REGULATIONS, OR RESTRICTIONS SET FORTH BY ANY AND ALL GOVERNING AGENCIES.
E. NOTIFY OWNER, ENGINEER, AND COUNTY AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
F. ALL PROPOSED CONTOURS AND SPOT ELEVATION SHOWN ARE FINISHED GRADES AND/OR TOP OF PAVING SLAB, UNLESS OTHERWISE NOTED.
G. THE CONTRACTOR SHALL FURNISH AND PLACE ALL NECESSARY SIGNS AND BARRICADES DURING CONSTRUCTION IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
H. POST DEVELOPMENT RUNOFF SHALL NOT ADVERSELY AFFECT DOWNSTREAM DRAINAGE FACILITIES OR PROPERTY OWNERS.
I. ANY DAMAGE DONE TO THE EXISTING FENCES, YARDS OR OTHER STRUCTURES OUTSIDE THE CONSTRUCTION LIMITS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
J. GRADING
   1. OWNER/DEVELOPER IS RESPONSIBLE FOR ALL COMPACTION, DENSITY OR ANY OTHER TEST.
   2. ALL DEBRIS SPILLED ON THE STREETS OR ADJACENT PROPERTY SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
   3. ALL PROPOSED CONTOURS AND SPOT ELEVATION SHOWN ARE FINISHED GRADES AND/OR TOP OF PAVING SLAB, UNLESS OTHERWISE NOTED.
K. PRIOR TO COMMENCEMENT OF ANY BUILDING CONSTRUCTION ACTIVITY THE SITE PLAN MUST BE APPROVED BY COUNCIL AND IN FINAL FORM. ADDITIONALLY, A BUILDING PERMIT SHALL HAVE BEEN ISSUED. PLEASE ALLOW A MINIMUM OF 10 BUSINESS DAYS FOR THE BUILDING PERMIT TO BE PROCESSED.
L. RETAINING WALLS AS SHOWN WILL NEED TO BE FIELD ADJUSTED FOR HEIGHT AND LENGTH AT TIME OF CONSTRUCTION.

DEMOLITION NOTES
A. CONTRACTOR SHALL CALL IOWA ONE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
C. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.
D. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.
E. INSTALL ALL INTAKE PROTECTION AND PERIMETER SILT FENCE PRIOR TO DEMOLITION.

SITE UTILITIES
A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY.
B. ALL PROPOSED SANITARY PIPE SHALL BE SDR-35 PVC.
C. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY SERVICE AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONIST OF A 6" VERTICAL PVC PIPE WITH A WATER TIGHT REMOVEABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS REQUIREMENTS.
D. ALL PROPOSED WATER SERVICES 2-INCHES OR LESS SAHLL BE COPPER AND ALL WATER SERVICES GREATER THAN 2-INCHS SHALL BE PVC. 6 FOOT MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE NOTED.
E. ALL PROPOSED HDPE STORM PIPE SHALL BE IN ACCORDANCE WITH ASTM F405 AND F667. ALL CONCRETE STORM PIPING SHALL BE IN ACCORDANCE WITH ASTM C76. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED.
F. SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10 OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS.
G. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MINIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFICED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.
H. ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE) PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.
I. THE CITY OF WAUKEE SHALL BE NOTIFIED 24 HOURS PRIOR TO CONNECTING TO PUBLIC UTILITIES.
J. VALVE OPERATION SHALL BE COORDINATED WITH WAUKEE PUBLIC WORKS.
K. SITE UTILITIES THAT STATES WATER MAIN SHALL MAINTAIN 18 INCHES OF VERTICAL SEPARATION FROM ALL STORM SEWER PIPES. STORM SEWER LOCATED ABOVE THE WATER MAIN AND STORM SEWER 6-18 INCHES BELOW THE WATER MAIN SHALL BE GASKETED.
L. ALL PROPOSED STORM SEWER SHALL BE PRIVATE.

UTILITY WARNING
ANY UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

Inspection and Maintenance Procedures
The contractor is required to maintain all temporary erosion control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. The following inspection and maintenance practices will be used to maintain erosion and sediment controls and stabilization measures.

a. All control measures will be inspected at least once every seven (7) calendar days.
b. All measures will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of the report and completed within 7 days of the event.
c. A maintenance inspection report will be made after each inspection and recorded in the project diary. The report must be signed by a qualified inspector in accordance with General Permit #2. The report shall include the inspector s findings related to the condition of any existing erosion control devices or newly seeded areas, the condition of the construction exit and review of any offsite tracking, and the inspection of any equipment storage and maintenance areas for any fuel, oil or other pollutant leaks. The inspector shall also review the discharge points from the site to ensure there is no evidence of pollutants leaving the site.
d. The contractor/owner will be responsible for selecting a qualified inspector to conduct the inspections. Qualified is defined as a person knowledgeable in the principles and practices of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity. The inspector shall also possess knowledge in the appropriate governmental agency s storm water pollution prevention and/or environmental ordinances and be able to provide the agency with any information or data requested within the time frame required by that agency. SWPPP inspectors shall also have a basic knowledge of hydrology, soil mechanics and comprehension of construction drawings and specifications. A general understanding of the equipment and materials used in managing erosion and sediment on a project site will also be required.
e. The contractor/owner will be responsible for maintaining records for 3 years from the date the site is finally stabilized.
f. Corrections not made in first 72 hrs after being documented in the weekly inspection report will be documented in the plan why it is not possible and an estimated time for completion.

Intended Sequence of Controls
a. Install perimeter silt fence and inlet protections as required.
b. Construct temporary construction exits/entrances and designate staging/materials storage area.
c. Designate areas for temporary sanitary facilities, employee parking and dumpster location.
d. Begin clearing and grubbing operations. These operations should only take place in those areas where earthwork is expected to take place within 14 days after completion.
e. Begin topsoil stripping and designate area for stockpile. Topsoil shall be preserved on site.
f. Site grading shall begin. Contractor will be responsible for temporarily stabilized any area that will not be disturbed for at least 0 days no later than 14 days from the last construction activity.
g. Site Construction estimate 180 days.
h. Monitor SWPPP
i. Remove all silt fence and other temporary erosion controls
   1. DO NOT REMOVE PERIMETER CONTROLS UNTIL UPSTREAM AREAS ARE STABILIZED.
j. Sod entire site
k. File Notice of Discontinuation

Perimeter Silt Fence
Silt fence will be installed around the perimeter before construction begins. Silt fence will be installed around the stockpile once it is established. Other areas will require silt fence during construction and post construction. Break silt fence into 200 foot segments with j-hooks on the ends.

Temporary Vegetative Cover
Contractor will be responsible for temporarily stabilizing any area that will not be disturbed for at least 0 days no later than 14 days from the last construction activity.

Any area that will not be disturbed for at least 0 days no later than 14 days from the last construction activity will need to have temporary seeding. Temporary seeding is typically done for areas that will be undisturbed for less than one year and should only be done certain times of the year. Installation, seed specifications and fertilizer specifications will be according to Section 9010 of SUDAS. The typical seeding season is from March 1st to May 31st and from August 10th to September 30th. Any area requiring seeding outside of these dates may need to be mulched until such time seeding may take place. The seedbed area requiring seeding shall be tilled to a minimum of 5 inches in depth with a disk, harrow or field cultivator. Appropriate seeding equipment shall be used to apply the area with seed. The seed shall then be covered by lightly tilling the seeded areas with a disk, rigid harrow, spring tooth harrow or field cultivator. Mulch all seeded areas with straw, wood excelsior or prairie hay the same day the seed is sown. Care should be taken to minimize the displacement of the soil. Conventional or Hydromulching shall be utilized in areas that cannot be stabilized by seeding due to season or ground conditions. Installation and materials will be according to Section 9010 of SUDAS. Conventional mulching shall be applied uniformly at a rate of 2 tons/acre for dry cereal straw or 2.5 tons/acre for prairie hay. The mulch needs to be worked into the soil with a mulch tucker or similar device designed to anchor the mulch into soil using dull blades or disks. Hydromulching shall be applied in multiple layers from opposing directions where possible. A homogeneous slurry needs to be mixed per manufacturer s recommendations. If the soil is dry, the contractor shall dampen the soil prior to application to avoid clumping of the material. The slurry shall be applied evenly over the area at the following rates: wood cellulose mulch at 2600 lb/acre dry weight and tackifier at 50 lb/acre; bonded fiber matrix at 3600 lb/acre dry weight; and mechanically bonded fiber matrix at 3600 lb/acre dry weight.

Construction Entrance
Temporary stabilized exits will be installed at any areas leaving the site that have potential of construction traffic tracking sediment on to existing paved areas. The exit area will be installed at a minimum of 150 feet in length and consist of a 3 crushed rock a minimum depth of 6 inches. A layer of geotextile filter fabric may need to be installed prior to the rock in order to reduce the displacement of soil underneath the crushed rock. The exit shall be flared at the end closest to the paved areas to provide greater protection. The exit should be graded to prevent runoff from flowing onto the existing paved areas. The construction exit will be installed according to Section 9 of SUDAS and at locations shown on the Erosion and Sediment Control Plan.

Dust Control
Dust control shall be used in areas that are susceptible to wind erosion. Installation will be according to Section 9 of SUDAS and shall be used as needed based on weather and site conditions. The most common dust control agent is water. It should be applied frequently to any ground surface that has problems with dirt particles becoming airborne which could result in low visibility, hazards or offsite damage to surrounding properties. Chemical agents such as Calcium Chloride, Lignosulfonate or Soapstock can also be used.

Trash and Construction Debris Disposal
All trash materials will be collected and disposed of into designated trash receptacles or dumpsters located in the staging area. All trash containers will have a secured lid, be placed in an area away from storm water conveyances and drains, and meet all local and state solid waste management regulations. No construction debris will be allowed to be buried onsite. Trash placed in the receptacles will only be trash related to construction on the construction site. The site superintendant is responsible for training all personnel on the correct procedure for the disposal of trash and construction debris.

Dumpsters and/or trash receptacles will be installed once the staging area is constructed.

Concrete Washout Area
Concrete trucks will be allowed to washout or discharge excess concrete in specifically designated areas. The washout will be installed as shown on the detail provided in Section 4 of the SWPPP. The washout area should be constructed at a minimum length and width of 10 feet and will be lined with a 10 mils thick plastic lining. Filter sock will be installed surrounding the washout area to prevent the spillage of concrete. The site superintendant is responsible for posting signs at the washout locations to ensure concrete operators use the proper facility.

Non-Storm Water Discharges
The following is a list of non-storm water discharges allowed by the Environmental Protection Agency and the Iowa Department of Natural Resources and may occur at the job site under the condition that no pollutants will Be allowed to come into contact with the water prior to or after its discharged from the site:

1. Water from fire fighting activities and fire hydrant flushing excluding the presence of dry residual chlorine
2. Water used to wash vehicles when detergents are not used
3. Potable water sources including waterline flushing, irrigation drainage and routine building wash downs excluding detergents.
4. Uncontaminated air conditioning condensate
5. Uncontaminated springs or ground water
6. Foundation or footing drains where flows have not been exposed to solvents
7. Pavement wash waters where spills or leaks of hazardous material has not occurred and no detergents are present
8. Water used to control dust
9. Uncontaminated excavation dewatering

Prohibited Discharges
The following discharges are prohibited under the permit, and are considered a violation should any occur.

1. Wastewater from washout of concrete, and from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.
2. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
3. Soaps, solvents, or detergents used in vehicle and equipment washing
4. Toxic or hazardous substances from a spill or other release.
5. The following shall NOT discharge directly to the storm drain or to surface water
   a. Saw cutting and Grinding
   b. Vehicle Wash
6. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil or hazardous materials;

SITE ADDRESS
1585 NW VICKSBURG COURT
WAUKEE, IOWA 50263

LEGAL DESCRIPTION
Lot 15 in JAMES POINTE PLAT 1, an Official Plat all now included in and forming a part of the City of Waukee, Dallas County, Iowa. Containing 2.62 acres, more or less. Subject to all easements and restrictions of record.

TITLE HOLDER
WAUKEE LAND INVESTMENT, LLC.
9235 SWANSON BLVD
CLIVE, IOWA 50325

GENERAL PERMIT #2 & COSESCO PERMITS: BOTH ARE REQUIRED

DISTURBED AREA: 2.62 ACRES (TOTAL SITE AREA=2.62 ACRES)

HORIZONTAL/VERTICAL CONTROL
HORIZONATAL CONTROL: IOWA SOUTH, NAD 83 DATUM
VERTICAL: NAVD88

EROSION CONTROL

DESCRIPTION	QUANTITY
PERIMETER SILT FENCE	980 L.F.
INTERIOR SILT FENCE	1000 L.F.
INTAKE PROTECTION (FILTER SOCKS)	8 EACH
OUTLET PROTECTION (EROSION STONE)	63 TONS
SOD	68,913 SF
SQR (8" AMENDED SOIL TO %SOM=5.5%)	
SQR	5,770 SF
COMPOST REQUIRED (3-inches deep)	1,923 CF

● MONUMENT FOUND AS NOTED	▽ FIREHYDRANT AS NOTED	——— EXISTING CONTOUR	
○ SET 5/8" RE-ROD W/CAP 5228	⋈ EXISTING WATER VALVE	——100——— PROPOSED CONTOUR	
▲ SECTION CORNER FOUND AS NOTED	PROPOSED WATER VALVE	———X——— FENCE LINE AS NOTED	
△ SECTION CORNER SET AS NOTED	□ CURB INTAKE AS NOTED	———TVC——— BURIED TELEVISION AS NOTED	
◎ SANITARY MANHOLE AS NOTED	● AREA INTAKE AS NOTED	———UE——— BURIED ELECTRIC AS NOTED	
◎ STORM MANHOLE AS NOTED	♿ HANDICAPT PARKING AS NOTED	———E——— OVER-HEAD ELECTRIC & UTILITIES	
◎ TRAFFIC MANHOLE AS NOTED	▣ ELECTRIC TRANSFORMER BOX AS NOTED	———G——— GAS MAIN AS NOTED	
◎ UTILITY MANHOLE AS NOTED	⊠ UTILITY BOX AS NOTED	———W——— WATER MAIN AS NOTED	
◎ PHONE MANHOLE AS NOTED	◆ PERK TEST SITE AS NOTED	———S——— STORM SEWER AS NOTED	
◎ ELECTRIC MANHOLE AS NOTED	Eg= EXISTING SPOT ELEVATION	———SS——— SANITARY SEWER AS NOTED	
⧓ GAS METER AS NOTED	Fg= PROPOSED SPOT ELEVATION	———UT——— BURIED TELEPHONE	
⧓ GAS VALVE AS NOTED	M= MEASURED DISTANCE OR BEARING	———UC——— BURIED CABLE/UTILITIES AS NOTED	
● UTILITY POLE AS NOTED	P= RECORDED DISTANCE OF BEARING		
◍ WELL AS NOTED			

ENGINEERING CERTIFICATON
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNED: _____ DATE: _____
NICHOLAUS COFFELT PE# 18973
MY LICENSE RENEWAL DATE IS DEC. 31, 2024
PAGES COVERED BY THIS SEAL: 1, SWMP-2, SWMP-3

NICHOLAUS JAMES COFFELT 18973 P.E. REGISTERED IOWA

REVISIONS
01-31-2024 CITY COMMENTS

ASSOCIATED ENGINEERING COMPANY OF IOWA
1830 SE Princeton Drive, Suite M, Grimes, Iowa 50111
Phone: (515) 255-3156 Fax: (515) 255-3157

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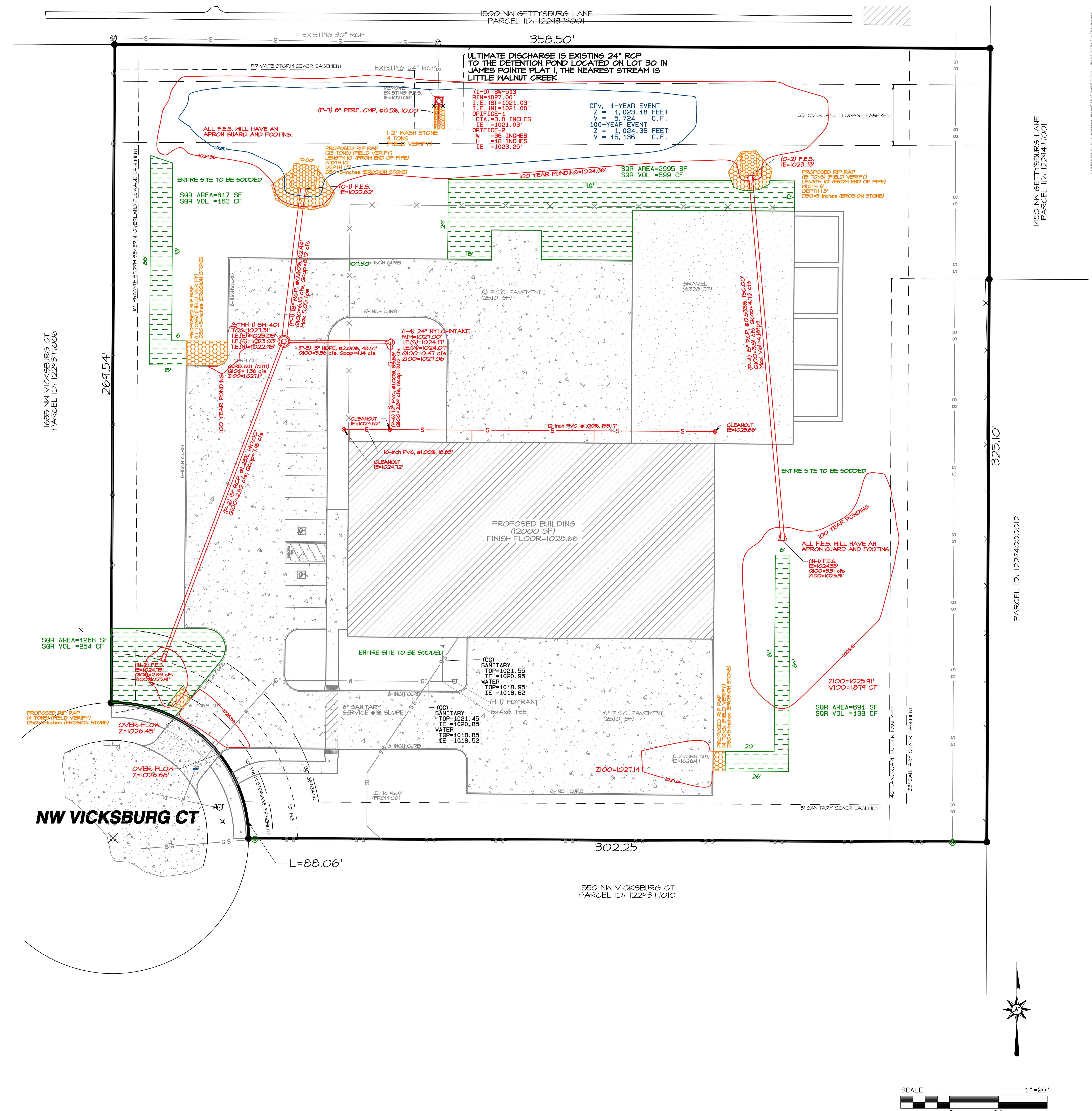
Brilliant Borders
GRADING & STORM SEWER DESIGN

DATE PRINTED
Thu Oct 12, 2023
AEC #: 212377
SWMP-1

STORM SEWER LAYOUT PLAN



REVISIONS

AEC ASSOCIATED ENGINEERING COMPANY OF IOWA
PO Box 13075 Des Moines, IA 50310
Phone: (515) 255-3156 Fax: (515) 255-3157

Brilliant Borders

STORM SEWER LAYOUT PLAN

DATE APPROVED

DATE PRINTED Thu Oct 12, 2023

AEC #: 212377

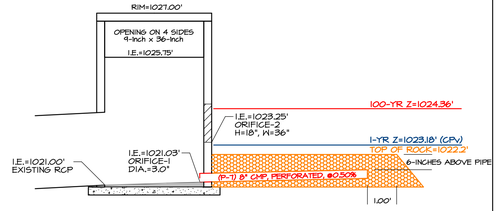
SWMP-3

GRADING PLAN

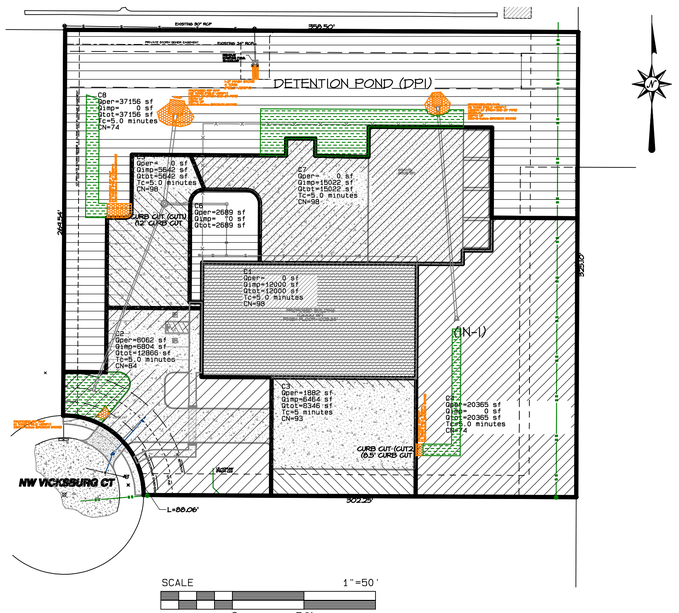
SQR NOTES

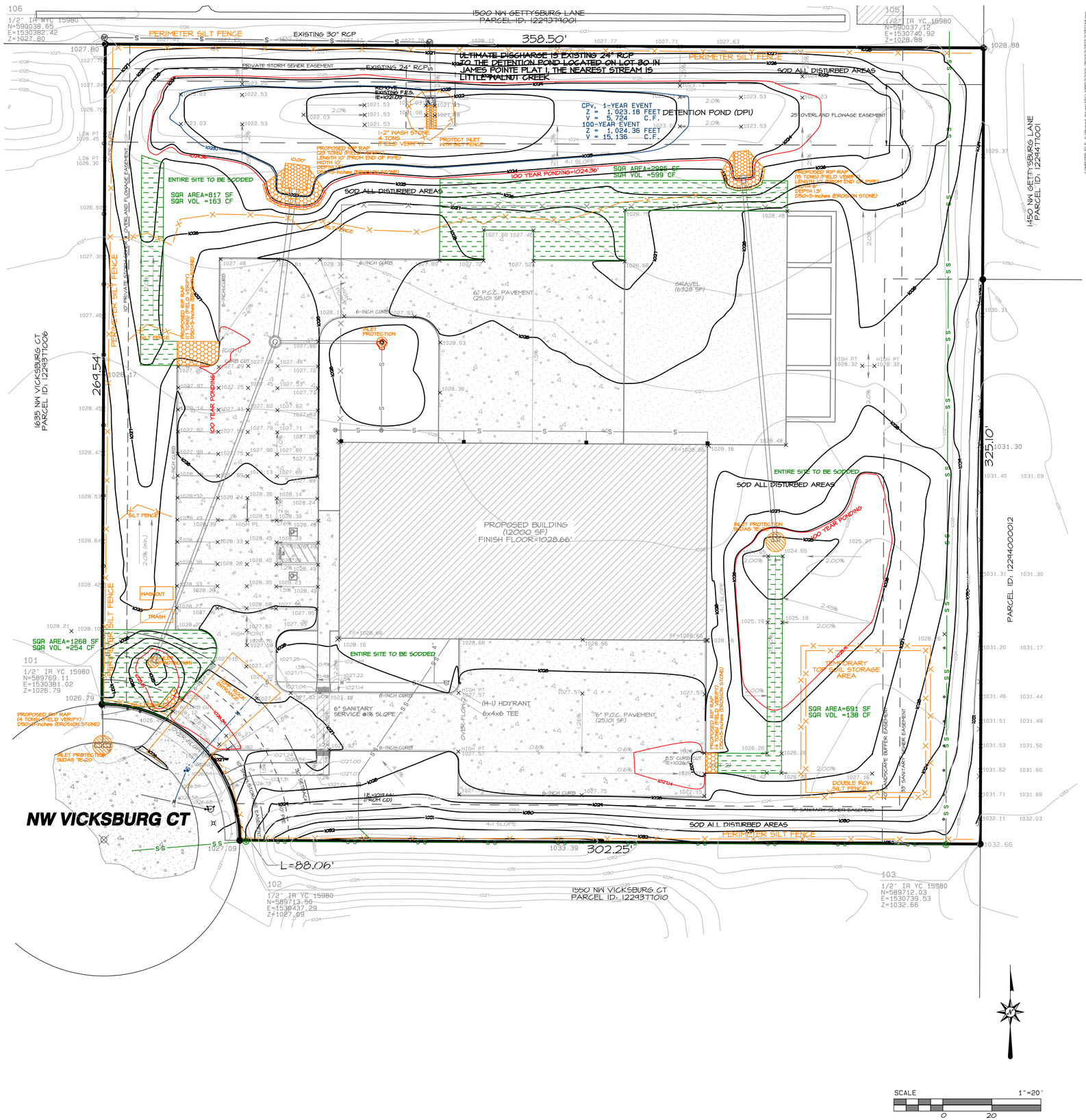
1. AMENDED SOIL TO HAVE A %SOM=5.5%
2. TILL TOP 8 INCHES OF SOIL, PLACE 3 INCHES OF COMPOST FROM MNA OR AN APPROVED SOURCE OVER AREA AND TILL INTO THE TOP 5 INCHES OF SOIL.
3. THE CONTRACTOR SHALL WORK WITH THE GEO-TECHNICAL COMPANY ON-SITE TO TEST THE TOPSOIL / AMENDED SOIL FOLLOWING MASS GRADING OPERATIONS TO ENSURE PROPOSED NOV IS MET. PROVIDE TEST REPORTS TO THE CITY OF WAUKEE STORMWATER DEPARTMENT.
4. MINIMUM TOPSOIL RESPREAD REQUIREMENT OF GP#2 TO BE MET WITH SUDAS SPEC 2010 FOR ON-SITE TOPSOI

(I-9) SW-513



DRAINAGE MAP





AEC
ASSOCIATED ENGINEERING COMPANY OF IOWA
PO Box: 13073 Des Moines, IA 50310
Phone: (515) 255-3156 Fax: (515) 255-3157

REVISIONS

PROJECT MANAGER: Victor Properetti

Brilliant Borders

GRADING PLAN, EROSION & SEDIMENT CONTROL PLAN

DATE APPROVED
DATE PRINTED
Thu Oct 12, 2023
AEC #: 212377
SWMP-2