

1. Agenda

Documents:

[120319 PZ AGENDA.PDF](#)

2. Meeting Materials

Documents:

[120319 PZ PACKET.PDF](#)



Planning and Zoning Commission

December 03, 2019

Agenda

Grimes City Hall

5:30 P.M.

AGENDA

A GENERAL AGENDA ITEMS

1. Call to Order
2. Roll Call: Amy Montford, Craig Patterson, Scott Almeida, Danielle Smid, Courtney Strutt Todd
Council Liaison Jill Altringer
3. Approval of the Agenda
4. Approval of Previous Minutes

B. PUBLIC AGENDA ITEMS

1. Legacy Park Lot 1 – Site Plan
2. Legacy Park Lot 2 – Site Plan Amendment

D. REPORTS

1. Department Update
2. Council Liaison Update
3. Old Business
4. New Business

E. ADJOURNMENT



101 NE Harvey Street, Grimes, Iowa 50111 | P: 515.986.3036 | F: 515.986.3846

This meeting of the Grimes Planning and Zoning Commission was called to order Tuesday November 5, 2019 at 5:30 P.M. at Grimes City Hall.

Roll Call: Present: Craig Patterson, Courtney Strutt-Todd, Danielle Smid, Jill Altringer

Staff: Alex Pfaltzgraff, Rachel Greving

Absent: Scott Almeida, Amy Montford

A. GENERAL AGENDA ITEMS

1. APPROVAL OF THE AGENDA

Motion by Strutt-Todd, Second by Smid, to approve the agenda

Roll Call: Ayes-All; Nays-0 Motion passes: 3-0

2. APPROVAL OF THE MINUTES

Motion by Strutt-Todd, Second by Smid, to approve the minutes from the October 9, 2019 meeting

Roll call: Ayes-All: Nays-0 Motion passes: 3-0

B. PUBLIC AGENDA ITEMS

Beaverbrooke Pointe Plat 3 – Final Plat

Pfaltzgraff pointed out the only change made being that the space behind lots 43-51 was planned to be a park in the beginning. This space is now planned as outlots to be purchased with lots 43-51. Pfaltzgraff recommended approval.

Motion by Strutt-Todd, Second by Smid to approve Beaverbrooke Pointe Plat 3 – Final Plat

Roll Call: Aye-All Nay-0 **Motion Passes 3-0**

Dallas Center Grimes Middle School – Final Plat

Joel Jackson of Bishop Engineering spoke on behalf of the plat. There are two lots being planned. One is meant for the school itself, and another lot is for future use whatever that may be. The school is estimated to open in August 2021 for the 2021-2022 school year.

Motion by Smid, Second by Strutt-Todd to approve Dallas Center Grimes Middle School – Final Plat

Roll Call: Aye-All Nay-0 **Motion Passes 3-0**

Golden Rule – Site Plan

Mark McMurphy of Abaci and the owner of Golden Rule, Mark Paup, appeared to answer any questions about the site plan. Pfaltzgraff explained that the lot for the proposed project is next to the current Golden Rule building. Landscaping will screen the current trail and residential area from any headlights behind the building. There are no current plans for lighting in the parking lot. The plans met the current architectural requirements.

Motion by Strutt-Todd, Second by Smid to approve Golden Rule – Site Plan pursuant to staff comments

Roll Call: Aye-All Nay-0 **Motion Passes 3-0**

C. PUBLIC FORUM – None

D. REPORTS

- 1. Department Update – Northeast Gateway Drive has started moving forward with McAnich as the contractor. The department has eight to ten new commercial projects beginning soon. The new senior engineering technician will be starting on the eighteenth, and interviews will begin soon for the city planner position.**
- 2. Council Liaison Update**
- 3. Old Business**
- 4. New Business**
- 5. Next meeting December 3, 2019**

Meeting is adjourned at 6:14 p.m.

Signature

Planning & Zoning Staff Report



TO: Planning and Zoning Commission
FROM: Alex Pfaltzgraff, Development Services Director
DATE: December 3, 2019
RE: Legacy Park Lot 1 – Site Plan

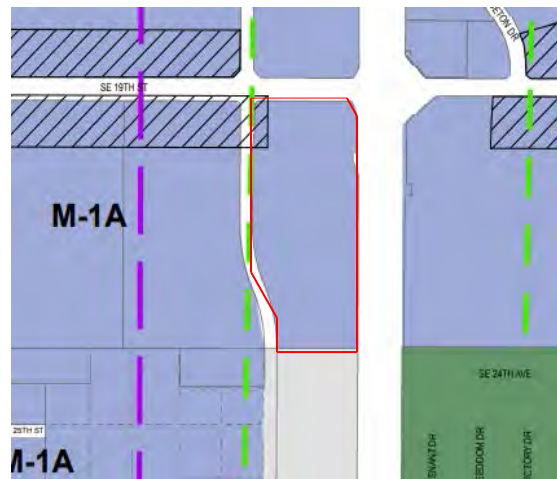
GENERAL INFORMATION:

Applicant:	Anderson Companies
Requested Action	Site Plan Approval
Location	2105 SE 19 th St

SUPPORTING INFORMATION:



Location Map



Zoning Map

LAND USES & ZONING:

Location	Existing Land Use	Land Use Plan Designation	Current Zoning
Subject Site	Vacant	Mixed Use 2/Open Space	M-1A (Zone 1)
North	Light Industrial	Mixed Use 2/Open Space	M-1A (Zone 1)
South	Agricultural	Mixed Use 2	A-1 (Zone 1)
East	Agricultural	Mixed Use 2/Open Space	M-1A (Zone 1)
West	Light Industrial	Light Industrial	M-1A (Zone 2)

BACKGROUND:

The applicant, Anderson Companies, is requesting approval of a site plan that would allow for the construction of 4 warehouse/flex spaces at the intersection of SE 19th St and HWY 141. The plans indicate the project will be broken into 2 phases, with the 1st phase proposed to include 2 of the 4 buildings, and the associated paving/utilities.

The project is located within the M-1A Zoning District, and the HWY 141 Zone 1 Corridor.

ANALYSIS:

Building/Elevations:

The first two buildings proposed within the development are to be constructed out of pre-cast concrete, similar to the previously constructed buildings within the Legacy Park development. Due to the location within the Zone 1 Corridor, the glazing along the elevations that face the public ROW has been increased to 30% of the wall area.

The 5 factors are being met with the utilization of roof height variations, arched treatments, awnings, color changes and reveals.

As required by the Zone 1 Corridor, architectural up-lighting is being provided for the facades that face the public ROW.

The eastern building is proposed at 50,000 square feet, while the western building is proposed at 10,000 square feet.

Site Layout:

The site is accessed from 2 points along SE Gateway Drive. Both of these access points correspond to the existing access points to Legacy Park Lot 2. No additional points of access to SE 19th or HWY 141 have been proposed.

A central drive, dividing the two phases is proposed from SE Gateway Drive, heading east towards HWY 141. Off of the central drive, access to the motor court between the buildings is provided, as well as access to the front of the buildings.

Pedestrian connections from SE Gateway are provided in two locations, as well as internal sidewalks to each of the buildings and parking spaces.

Site lighting is provided via a combination of pole mounted and building mounted lighting fixtures. Staff has reviewed the lighting proposal, and finds no issue with the placement and spacing.

No dumpster enclosures are provided, and notes on the plan indicate that all waste/recycling must be kept inside each tenant space.

Parking:

The Zoning Ordinance requires that a minimum of 1 stall per 2,000 square feet of warehouse space be provided. Based upon the phase 1 square footage of 60,000 square feet, a total of 30 parking spaces is required.

Due to the typical tenant demand, 166 parking spaces are being provided. This is a rate of 2.67 spaces per 1,000 square feet. The increased parking will allow for the tenant spaces to be utilized in a retail/office fashion if desired by the tenant.

The phase 1 site also provided for the possibility of 24 future stalls along the central drive.

Landscaping/Streetscape:

The site is required to provide a minimum of 10% open space. The proposed site provides a total of 37.7% open space over both phases.

The site requires plantings per open space requirements, street frontage and parking buffer.

Based upon the open space requirements, a total of 134 trees and 134 shrubs are to be provided on the site. The plan indicates that 134 trees and 134 shrubs have been provided over both phases.

Based upon the street frontage, a total of 58 trees are to be provided. The plan indicates that the 58 trees have been provided over both phases.

Based upon the proposed parking areas, a total of 780 feet of parking buffer is required to be provided along these areas. The plans indicate this is being satisfied with the planting of shrubs and trees along the parking edges that face the public streets.

In addition to the above plantings, a berm and landscape buffer have been provided at the SE corner of the site. The intent of the berm/buffer is to further screen the motor court within phase 1. The berm has a proposed height of 4 feet, and has 10 black hills spruce trees planted

upon the top. In addition to the spruce trees, there are 5 overstory trees planted along the street edge, that will provide a second layer of screening.

Utilities:

Storm water management is being provided in 2 locations within the site; along SE Gateway south of the main entrance and along SE 19th Street.

Storm sewer is proposed along all parking areas and within the motor court.

Water main is provided from two stubs west of SE Gateway, and loops the entire site. Appropriate hydrant coverage/routing is provided throughout the site. Hydrants are positioned to be within 100-feet of the FDC as required by the fire code.

Sanitary sewer is being provided from a connection along SE 19th St.

STAFF RECOMMENDATION:

Staff would recommend approval of the Site Plan for Legacy Park Lot 1, subject to any remaining staff comments.

CITY OF GRIMES

A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff". The signature is fluid and cursive, with the first name "Alex" written in a larger, more prominent script than the last name "Pfaltzgraff".

Alex Pfaltzgraff
Development Services Director



November 5, 2019

Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

Bishop Engineering

Attn: Brad Kuehl

3501 104th Street

Urbandale, IA 50322

RE: Legacy Park Lot 1 Site Plan

Dear Mr. Kuehl:

The Development Services Department is in receipt of a proposed Site Plan for the Legacy Park Lot 1 Site Plan. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

- ~~1. Please include all proposed building addresses under the principal lot address. Note that the address is not off of SE 19th, but SE Gateway.~~
- ~~2. Please provide the parking requirement calculations on the plans.~~
- ~~3. Please identify a project schedule for Phase 1 as well as Phase 2.~~
- ~~4. Note that a KNOX box is required for each building. This may be purchased directly from KNOX.~~
- ~~5. Staff questions if any sight lighting is proposed. If so, please provide a photometric plan and fixture cut sheets. Staff know sees that this was submitted. Please see below for comments.~~
 - Please provide architectural up lighting, along all elevations that face public ROW (Hwy 1414, SE 19th and SE Gateway) **Please provide cut sheets and locations on architectural sheets.**

Sheet C.02

- ~~6. The existing contours are from how it should have been graded at the completion of Plat 1, however, the drainage swale along the south and east sides of the property was not graded. Please revise. Please provide prior to P&Z~~

- ~~7. Please revise to show the Hwy 141 lane/shoulder widening and box culvert extension. We are concerned about the changes in the existing grades and suggest a new topographic survey for existing conditions. Please provide prior to P&Z~~

Sheet C2.1

- ~~8. Please include the proposed sidewalk along SE 19th ST.~~
- ~~9. Staff questions if the linework coming across SE Gateway is existing water service lines. If they are not needed (see fire comments on hydrant layout), please note that the service lines need to be removed to the main, and the main repaired.~~
- ~~10. The phase 2, east building appears to have the incorrect square footage. Please review and revise.~~
- ~~11. Please extend the sidewalk north of the buildings in Phase 2, across the common driveway.~~
- ~~12. Please provide a corresponding ramp across from the ramp to the south of phase 2, into phase 1 (west side of site along central drive between two phases)~~
- ~~13. Please extend the sidewalk along the south side of Phase 1 across the common drive and out to the public ROW along SE Gateway.~~
- ~~14. Please add corresponding ramps for the sidewalk between the central drive along the east side of Phase 1.~~
- ~~15. Please add a pedestrian connection from the SE Gateway public ROW to the west phase 2 building.~~
- ~~16. Staff questions how garbage/recycling is handled on site. If dumpster enclosures are proposed, please provide locations and details.~~

Sheet C2.2

- ~~17. Please modify the radii along the central drive out to SE Gateway from 15 feet to 25 feet.~~
- ~~18. Please modify the radii SE of Building 3 from 9 feet to 15 feet.~~

- ~~19. Please note on the plans that within Zone 1, no outdoor storage is permitted. As such, please remove the trailer parking area and undescribed storage area to the north of the trailer parking area.~~

Sheet C3.1

- ~~20. Staff would ask that additional berm height be provided along the SW corner of the site, where the back of Building 3 is visible from SE Gateway.~~

21. Please provide an enlarged detail for each sidewalk ramp and accessible stall ramp. Please identify the proposed slope of the ramp areas. **Please provide prior to P&Z**

- ~~22. The original contours appear to be wrong. Please provide prior to P&Z~~

- 23. Staff questions if there should be an emergency overflow spillway for the south detention basin. Staff does not see the spillway elevation and treatment called out.**

- ~~24. Staff questions if existing sanitary manholes between parking lot and Hwy 141 will need to be adjusted due to grade change.~~

- 25. Would suggest extending the PCC flume south from the NE corner of the site to the box culvert beneath Hwy 141. Reason is because grade is very flat and easy backed up with debris/vegetation in the existing flow path. There is significant standing water in the NE corner of the site.**

Sheet C4.1

- ~~26. Staff questions if a rain guardian or similar would be better option than the scour stop mat for the two curb openings on the western basin.~~

- ~~27. The hydrant layout does not meet the minimum requirements per Section 507.5.1 and 507.51.1.1 of the City of Grimes Fire Code. The code requires all portions of the building to be within 150 feet of a fire hydrant along an approve route. Staff is reviewing.~~

- ~~28. Please ensure the FDC is within 100 feet of a fire hydrant.~~

- ~~29. Proposed plantings appear to be located in a manner that would impact the 5-foot clear space requirement for the hydrants within the parking islands. The FD would like to see the trees shifted 1-2 feet further south to allow for tree growth.~~

~~30. Please provide details for new storm structure #1. Please provide prior to P&Z~~

Sheet C4.2

~~31. Please provide details for new storm structures #31 and 32. because they are final stormwater release point there should be a temporary structure to release "surface water". Silt fence will not meet the requirement. Please update the detail of structure #32 to match the outlet control listed in the SWMP and modeled in Hydraflow. The detail does not correspond to the model.~~

Sheet C4.3

~~32. The hydrant layout does not meet the minimum requirements per Section 507.5.1 and 507.51.1.1 of the City of Grimes Fire Code. The code requires all portions of the building to be within 150 feet of a fire hydrant along an approve route. Staff is reviewing.~~

~~33. Please ensure the FDC is within 100 feet of a fire hydrant~~

Sheet C5.1

~~34. Please consider replacing the evergreens (BH) with an overstory to allow for a less obstructed view when exiting the common driveway ways.~~

~~35. Please add landscaping to the top of berm (reference comment 16) to provide more screening.~~

~~36. Please relocate shrubs as noted in comment 21.~~

Sheet C5.2

~~37. Please consider additional plants south of the basin, near the central portion, to provide additional screening to into the rear of the buildings.~~

~~38. As part of grading the north detention basin and installing landscaping the area between the north detention basin and SE 19th Street will get disturbed, please state type of seeding to restore the area.~~

Sheet C5.3

- ~~39. Please label seed type and sod areas.~~
- ~~40. Please consider replacing the evergreens (BH) with an overstory to allow for a less obstructed view when exiting the common driveway ways.~~
- ~~41. Please relocate shrubs as noted in comment 21.~~
- ~~42. North detention basin is intended to be planted to "wetland seed mixture". With a seeding window of April 1 to June 30 it is anticipated there will need to be cover vegetation until the seeding window arrives. Please state what seed mixture will be utilized until wetland seed can be seeded/established.~~

Sheet C7.1

- ~~43. Erosion Control Note 11. Please revise note to include sod. Please reference there are seed types in landscaping plans.~~

Sheet C7.3-7.4

- ~~44. There is an area intake, in middle of sheet, future pavement, that needs control.~~
- ~~45. The detention basin should have a temporary detention structure, need details.~~

SWMP

- ~~46. Please provide your Tc calculation for the total basin as routed. Staff is reviewing.~~
- ~~47. Please provided additional drainage maps that correspond to the model. Staff is reviewing.~~
- ~~48. Please provide pipe sizing information. Staff is reviewing.~~
- ~~49. Please provide the pond report in the Hydraflow model. Staff is reviewing.~~

Architecture

- ~~50. Please provide the required 5 architectural factors as required in 165A. Please note the 5 required factors on the architectural sheets.~~

~~51. Please revise the elevations to meet the minimum glazing requirements. Chapter 165A requires that 30% of the elevations facing the Public ROW to be glass. The architect has instead calculated the horizontal length. Based upon staff calculations, additional glazing is needed. If the area above each existing window is replaced with glazing, the minimums would likely be met.~~

~~52. Please provide the roof deck height as it relates to the parapet. Note that all roof top mechanical units must be screened from view if above the parapet height.~~

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: November 11th, 2019
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: December 3rd at 5:30 at the Grimes City Hall

COUNCIL MEETING: December 10th at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,



Alex Pfaltzgraff
Development Services Director

LOT 1 LEGACY PARK SITE DEVELOPMENT PLAN

SHEET INDEX:

- C0.1 COVER SHEET
- C0.2 EXISTING CONDITIONS
- C2.1 OVERALL LAYOUT PLAN
- C2.2 LAYOUT PLAN - PHASE 1
- C2.3 LAYOUT PLAN - PHASE 2
- C3.1 OVERALL GRADING PLAN
- C3.2 GRADING PLAN - PHASE 1
- C3.3 GRADING PLAN - PHASE 1
- C3.4 GRADING PLAN - PHASE 2
- C4.1 UTILITY PLAN - PHASE 1
- C4.2 UTILITY PLAN - PHASE 1
- C4.3 UTILITY PLAN - PHASE 2
- C5.1 LANDSCAPE PLAN - PHASE 1
- C5.2 LANDSCAPE PLAN - PHASE 1
- C5.3 LANDSCAPE PLAN - PHASE 2
- C6.1 DETAILS SHEET
- C7.1 SWPPP
- C7.2 SWPPP
- C7.3 SWPPP
- C7.4 SWPPP

BUILDING ELEVATIONS (BY OTHERS)

PROPERTY DESCRIPTION:

LOT 1, LEGACY PARK, AN OFFICIAL PLAT IN THE CITY OF GRIMES, POLK COUNTY, IOWA.

SAID PARCEL CONTAINS 15.33 ACRES (667,782 SF).

PROPERTY SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

ADDRESS:

BUILDING 1 - 2105 SE GATEWAY DRIVE (SUITES 100-170)
BUILDING 2 - 2105 SE GATEWAY DRIVE (SUITES 200-270)
BUILDING 3 - 2105 SE GATEWAY DRIVE (SUITES 300-370)
BUILDING 4 - 2105 SE GATEWAY DRIVE (SUITES 400-403)
GRIMES, IOWA 50111

OWNER:

ANDERSON FOUR LLC
CONTACT: W. MARK ANDERSON
3041 JUSTIN DRIVE
URBANDALE, IA 50322
PH: (515)-270-6104

ZONING:

M1-A: COMMERCIAL & LIMITED LIGHT INDUSTRIAL DISTRICT
SETBACKS:
FRONT-25 FEET
SIDE-NONE, EXCEPT ADJACENT TO R DISTRICT THEN 25 FEET
REAR-25 FEET
MAX. BUILDING HEIGHT=50 FEET

LAND USE:

WAREHOUSE, TRUCKING & DISTRIBUTION FACILITY
TRASH AND RECYCLING WILL BE HANDLED INTERNALLY

OVERLAY DISTRICT:

HIGHWAY 141 MIXED USE CORRIDOR ZONE 1
NO OUTDOOR STORAGE IS PERMITTED WITHIN ZONE 1

PARKING REQUIREMENTS:

REQUIRED: 1 STALL PER 2,000 SF WAREHOUSE
PHASE 1 (60,000 SF): = 30 STALLS
PHASE 2 (90,000 SF): = 45 STALLS

PROVIDED:

PHASE 1: = 166 STALLS (INC. 6 HANDICAP)
= 24 FUTURE STALLS
PHASE 2: = 230 STALLS (INC. 8 HANDICAP)
= 30 FUTURE STALLS

OPEN SPACE REQUIREMENTS:

TOTAL SITE AREA = 667,782 SF (15.33 AC)
OPEN SPACE REQUIRED (10%) = 66,778 SF
OPEN SPACE PROVIDED (37.7%) = 251,641 SF (PHASE 1 AND 2)

IMPERVIOUS SURFACE:

PHASE 1 TOTAL: = 192,009 SF
BUILDING = 60,000 SF
PAVEMENT = 124,085 SF
SIDEWALK = 7,924 SF

PHASE 2 TOTAL: = 224,132 SF
BUILDING = 90,000 SF
PAVEMENT = 121,490 SF
SIDEWALK = 7,642 SF

PROJECT SCHEDULE:

BEGIN CONSTRUCTION
PHASE 1 - SPRING/SUMMER 2020
PHASE 2 - SPRING/SUMMER 2022

END CONSTRUCTION

PHASE 1 - 9 MONTHS AFTER BEGINNING
PHASE 2 - 9 MONTHS AFTER BEGINNING

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH SUDAS STANDARD SPECIFICATIONS AND ANY AND ALL CITY/COUNTY SUPPLEMENTAL SPECIFICATIONS. THE CITY OF GRIMES MUST BE NOTIFIED BY ALL CONTRACTORS 48 HOURS PRIOR TO COMMENCING WORK.
- IN EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES. ANY DAMAGE TO SAID UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
- 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.
- ALL NECESSARY CONSTRUCTION SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES REQUIRED DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- BISHOP ENGINEERING SHALL NOT BE LIABLE FOR ANY INJURIES THAT HAPPEN ON SITE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCH COLLAPSES FROM VARYING SOIL CONDITIONS OR INJURIES CAUSED BY UNDERGROUND UTILITIES INCLUDING UTILITIES THAT ARE NOT SHOWN ON PLAN.
- THE CONTRACTOR IS LIABLE FOR ALL DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY THEIR ACTION OR INACTION IN PROVIDING FOR STORM WATER FLOW DURING CONSTRUCTION. DO NOT RESTRICT FLOWS IN EXISTING DRAINAGE CHANNELS, STORM SEWER, OR FACILITIES.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCHEDULE FOR PERFORMANCE OF WORK ITEMS. THIS SCHEDULE SHALL BE PROVIDED BY THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. NO WORK SHALL BEGIN UNTIL A SCHEDULE HAS BEEN SUBMITTED AND ACCEPTED. THE CONTRACTOR SHALL THEN PERFORM WORK TO CONFORM TO THE ACCEPTED SCHEDULE.
- LABORATORY TESTS SHALL BE PERFORMED BY THE OWNER UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE SAMPLES OF MATERIAL REQUIRED FOR LABORATORY TESTS AND TESTING IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- SOIL IMPORT OR EXPORT ON THIS PROJECT SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
- THE CONTRACTOR SHALL PROTECT ALL STRUCTURES NOT SHOWN AS REMOVALS ON THE PLANS.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL WORK WITH OWNER OR OWNERS REPRESENTATIVE ON ALL REQUIRED STORM WATER DISCHARGE PERMITS FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE CITY OF GRIMES.
- GRADING AND EROSION CONTROL SHALL BE DONE IN ACCORDANCE WITH THE APPROVED GRADING PLAN, SWPPP, NPDES DOCUMENTS, AND IOWA DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.
- THE CONTRACTOR SHALL PICK UP ANY DEBRIS SPILLED ONTO THE ADJACENT RIGHT OF WAY OR ABUTTING PROPERTIES AS THE RESULT OF CONSTRUCTION, AT THE END OF EACH WORK DAY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REMOVAL OF ALL MUD THAT HAS BEEN TRACKED OR WASHED UNTO ADJACENT PROPERTY OR RIGHT OF WAY UNTIL SUCH TIME THAT PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- DISPOSE OF ALL EXCESS MATERIALS AND TRASH IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIALS NOT DESIRABLE FOR INCORPORATION INTO THE PROJECT.

PAVING NOTES:

- THE PAVING/ GRADING CONTRACTOR SHALL BACKFILL THE PAVING SLAB AND FINE GRADE THE RIGHT OF WAY AS SOON AFTER THE PAVING AS POSSIBLE. ALL AREAS SHALL BE SEEDED IN ACCORDANCE WITH CITY OF GRIMES STANDARD SPECIFICATIONS AND THE CURRENT VERSION OF SUDAS.
- SUBGRADE PREPARATION AND PAVEMENTS WILL BE CONSTRUCTED FOLLOWING RECOMMENDATIONS IN THE SOILS REPORT. APPROVED SOILS ENGINEER MUST SIGN OFF ON SUBASE PRIOR TO ANY PAVEMENT BEING PLACED.
- SEE DETAILS FOR ALL PAVEMENT THICKNESS.
- ALL PEDESTRIAN WALKWAYS THAT UNLOAD INTO A VEHICLES TRAVELED PATH MUST HAVE A.D.A. DETECTABLE WARNING PANEL(S) AS PER A.D.A. REGULATIONS. PANEL TYPE & COLOR SHALL BE PER CITY STANDARD.
- ALL WALKS, PARKING LOTS, HANDICAP PARKING, RAMPs, ETC. SHALL COMPLY WITH ALL A.D.A. AND CITY CODES. HANDICAP PARKING SIGNAGE IS REQUIRED FOR ALL HANDICAP STALLS AND SHALL BE CONSIDERED INCIDENTAL. IN EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE A.D.A./CITY CODES THE A.D.A./CITY CODES SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING A.D.A. CODES ARE MET.

UTILITY NOTES:

- QUANTITY CALLOUTS ON PIPE LENGTHS ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.
- THE CONTRACTOR SHALL PROVIDE AS-BUILTS OF ALL UTILITIES, INCLUDING DEPTH AND LOCATION OF ALL SERVICES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND ALL COSTS ASSOCIATED WITH AS-BUILT TOPO OF DETENTION POND & DETENTION POND STORM SEWER. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING BISHOP ENGINEERING (DAVID BENTZ AT 515-276-0467) TO PERFORM SAID AS-BUILT SURVEY. IF DETENTION PONDS HAVE BEEN GRADED INCORRECTLY, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSEQUENT AS-BUILT TOPO SURVEYS UNTIL ISSUES HAVE BEEN RECTIFIED.
- THE CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY AND ALL EXISTING AND PROPOSED UTILITIES TO PROPOSED GRADES. EXISTING UTILITIES SHALL BE RAISED OR LOWERED IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS. ANY NECESSARY ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- ACTIVE EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED, REROUTED, OR CONNECTED TO PUBLIC OR PRIVATE STORM SEWER TO REMAIN IN SERVICE.
- ALL PROPOSED RCP STORM SEWER PIPE JOINTS SHALL BE FABRIC WRAPPED AND THE LAST 3 PIPE SECTIONS ON THE APRON SHALL BE TIED WITH RF-14 TYPE II CONNECTORS. ALL APRONS SHALL HAVE A STANDARD FOOTING AND TRASH GUARD.
- ALL RIP RAP CALLED OUT ON PLANS SHALL BE UNDERLAIN WITH ENGINEERING FABRIC.
- SANITARY SEWER SERVICE CONNECTIONS SHALL BE PLACED AT A SLOPE OF NO LESS THAN 2%. SERVICES SHALL MAINTAIN 18" OF VERTICAL SEPARATION FROM THE WATERMAIN WITH 18" OF COMPACTED LOW PERMEABILITY SOIL BETWEEN THE UTILITIES WITHIN 10' OF THE CROSSING.
- MANDREL AND PRESSURE TESTS SHALL BE REQUIRED FOR ALL PROPOSED SANITARY LINES. TELEVISION OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED PRIOR TO PAVING UNLESS OTHERWISE APPROVED BY JURISDICTION.
- WATERMAINS SHALL BE C900 OR C905. SIZE OF WATERMAIN AS SHOWN ON PLANS.
- THRUST BLOCKS & RESTRAIN JOINT PIPE SHALL BE INSTALLED AS REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO WATERMAIN CONSTRUCTION.
- PROPOSED WATERMAIN SHALL BE PRESSURE TESTED, BACTERIA TESTED AND CHLORINATED. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF GRIMES.
- TRACER WIRE SHALL BE ADDED TO ALL WATER MAIN, AND BROUGHT TO THE SURFACE AT EVERY HYDRANT.
- ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF GRIMES WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
- THE MINIMUM HYDRANT LEAD SHALL BE 3.5 FEET.
- A KNOX BOX IS REQUIRED FOR EACH BUILDING AND MAY BE PURCHASED DIRECTLY FROM KNOX



UTILITY NOTE:

THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS HAVE BEEN TAKEN FROM THE FIELD SURVEY, EXISTING PUBLIC RECORDS, AND PLANS PROVIDED BY OTHERS. SURFACE UTILITY LOCATIONS HAVE BEEN FIELD LOCATED BY BISHOP ENGINEERING, UNLESS OTHERWISE NOTED. ALL UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE LOCATIONS ONLY. BISHOP ENGINEERING DOES NOT GUARANTEE THE UNDERGROUND LOCATION OF ANY UTILITIES SHOWN. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE THE LOCATION AND DEPTH OF ANY UNDERGROUND UTILITIES SHOWN AND IF ANY ADDITIONAL UTILITIES, OTHER THAN THOSE SHOWN ON THE PLANS, MAY BE PRESENT. A REQUEST WAS MADE TO IOWA ONE CALL FOR UTILITY PROVIDERS TO VERIFY, LOCATE, AND MARK THEIR UTILITIES IN THE FIELD.

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UTILITY CONFLICT NOTES:

- UTILITY CONFLICTS MAY EXIST ACROSS THE SITE WITH NEW UTILITIES, GRADING, PAVING ETC. MOST UTILITY CONFLICTS HAVE BEEN CALLED OUT FOR CONTRACTOR CONVENIENCE.
- CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONFLICTS THAT ARE EITHER CALLED OUT ON THE PLANS OR THAT CAN BE SEEN ON THE PLANS BETWEEN AND EXISTING UTILITY AND PROPOSED CONSTRUCTION

WETLAND NOTES:

- BISHOP ENGINEERING DOES NOT PERFORM WETLAND STUDIES OR WETLAND MITIGATION. IT IS THE OWNER'S RESPONSIBILITY TO DETERMINE IF ANY WETLANDS ARE LOCATED ON THE PROJECT SITE AND PERFORM ANY NECESSARY MITIGATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

SWPPP NOTE:

- SWPPP NARRATIVE HAS BEEN PREPARED BY BISHOP ENGINEERING. CONTACT CHUCK BISHOP (515-276-0467) FOR A COPY OF THE SWPPP NARRATIVE.

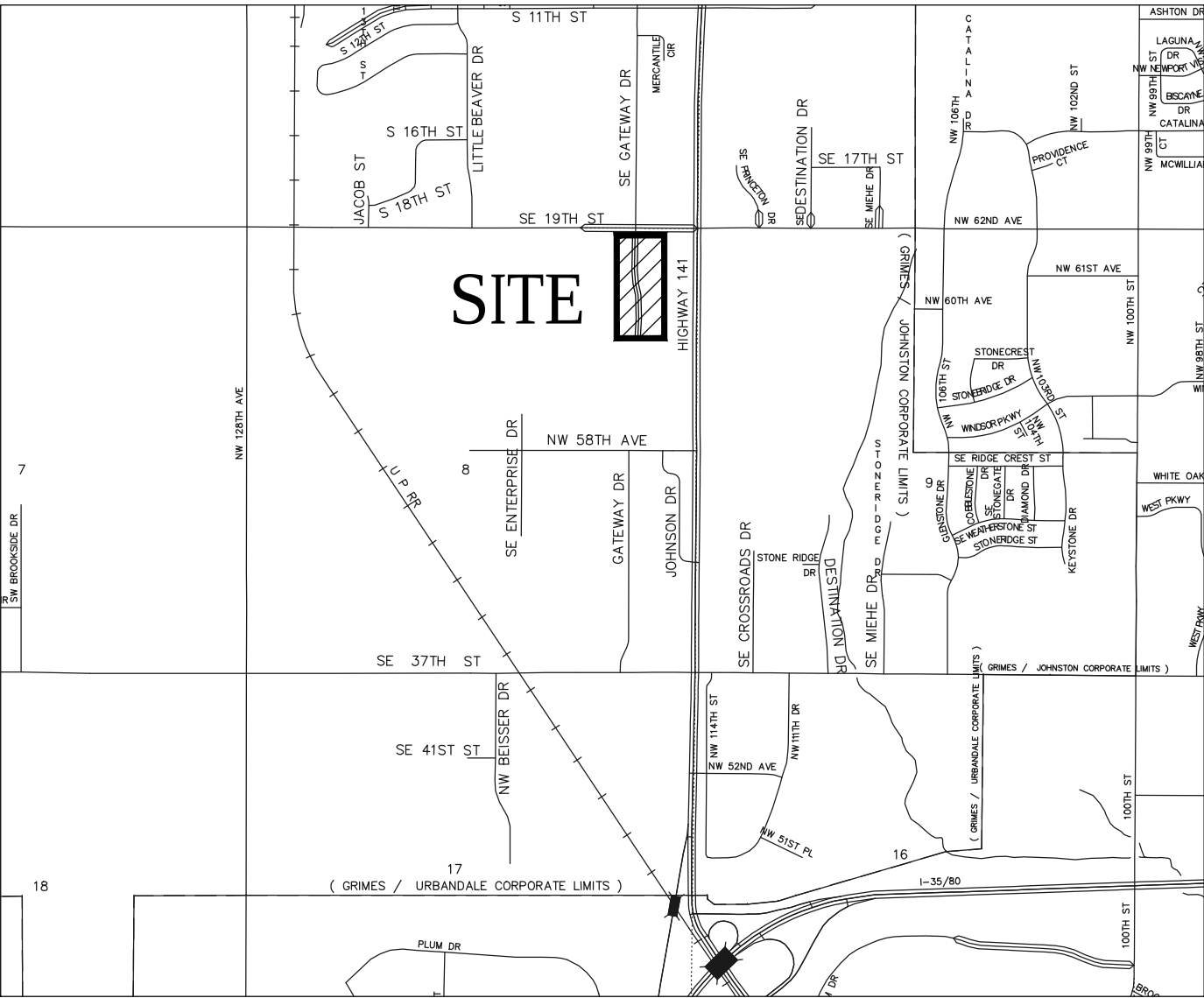
CITY OF GRIMES STANDARD NOTES:

- GENERAL NOTES:**
 - ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT VERSION OF THE URBAN STANDARDS SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS) ON THE DATE OF APPROVAL AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS AS STATED HEREIN.
 - A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING. CONTACT BRANDT WILLIAMSON WITH FOX ENGINEERING (515.233.0000).
 - ALL PERMITS (DNR, IDOT, ARMY CORP., ETC.) SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
 - THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE CITY OF GRIMES WITH RECORD DRAWINGS OF ALL IMPROVEMENTS AS PER CITY STANDARD PROCEDURES.
 - ALL SERVICES SHOULD BE MARKED WITH A PAINTED POST. (WATER-BLUE, STORM-WHITE, SANITARY-GREEN). POSTS SHOULD BE A 6-FOOT POST WITH FOUR-FEET EXPOSED ABOVE GROUND.
 - ALL SERVICE LOCATIONS ARE TO BE STAMPED INTO THE CURB (TOP & FACE) AND INTO THE GUTTER WITH LETTER IRONS AS PER CITY STANDARD PROCEDURES.
- SANITARY SEWER NOTES:**
 - THE CONTRACTOR IS REQUIRED TO PLACE A TEMPORARY PLUG IN THE EXISTING DOWNSTREAM SANITARY SEWER MANHOLE PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL BE REMOVED FOLLOWING APPROVAL OF CONSTRUCTION BY THE CITY OF GRIMES.
 - SANITARY GRAVITY PIPE MATERIAL SHALL BE PVC SDR 26 OR TRUSS (8" TO 15").
 - SANITARY GRAVITY SERVICE PIPE MATERIAL SHALL BE PVC SDR 23.5 (4" TO 6").
 - ALL SANITARY SEWER MANHOLES SHALL HAVE STEPS.
 - ALL SANITARY SEWER MANHOLES CASTINGS SHALL BE SEALED WITH INTERIOR CHIMNEY SEALS.
 - ALL MANHOLES SHALL BE EXTERIOR COATED WITH BITUMINOUS WATERPROOFING.
 - ALL SANITARY SEWER MANHOLE CASTINGS LOCATED WITHIN PAVEMENT SHALL BE BOXED OUT.
 - TELEVISION OF THE SANITARY SEWER SYSTEM SHALL BE COMPLETED PRIOR TO PAVING. THE SEWER SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO TELEVISION.
- STORM MAIN NOTES:**
 - ALL FIRE HYDRANTS SHALL BE AMERICAN FLOW CONTROL-WATEROUS PACER WB-67-250, MUELLER SUPER CENTURION 250 (3-WAY A-423), OR CLOW MEDALLION F-3545. ALL HYDRANTS SHALL HAVE THE FOLLOWING: 6" MJ SHOE, 2-1/2" HOSE NOZZLE, 4-1/2" STEAMER NOZZLE, NST THREADS, PENTAGON OPERATING NUT, CHAIN ON CAP, OPEN LEFT, 5-1/2" BURY, AND FACTORY PAINTED RED. THE MINIMUM SPOOL PIPE LENGTH FROM AUXILIARY VALVE TO HYDRANT SHOE SHALL BE 2.0'.
 - ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF GRIMES WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
 - A TRACER WIRE RECEPTACLE SHALL BE INSTALLED AT EACH HYDRANT.
 - ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
 - WATER SERVICE SHALL BE 1-INCH MINIMUM TYPE K COPPER.
 - PROPOSED WATER MAIN SHALL BE PRESSURE TESTED AND CHLORINATED BY THE DEVELOPER. THE FILLING OF THE WATER MAIN SHALL BE DONE BY THE CITY OF GRIMES. THE BACTERIA TEST AND SUBMITTAL OF TEST TO LAB SHALL BE DONE BY THE DEVELOPER AND RESULTS PROVIDED BY FAX TO US WATER AT 515-986-7300. IF THE TEST DOES NOT PASS, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ALL THE WATER USED TO REPEAT THE TEST.
- STORM SEWER NOTES:**
 - ALL STORM SEWER IN THE ROW SHALL BE RCP, UNLESS OTHERWISE APPROVED BY THE CITY.
 - ALL FLARED END SECTIONS SHALL HAVE FOOTINGS AND APRON GRATES. THE LAST 3 PIPE SECTIONS AND THE FLARED END SECTION ON ALL CULVERTS SHALL BE TIED. ALL STORM SEWER JOINTS SHALL BE WRAPPED WITH ENGINEERING FABRIC.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY FIELD TILE DAMAGED DURING CONSTRUCTION. THE TILE SHOULD BE DIRECTED TO PUBLIC STORM SEWER IF POSSIBLE. THE CONTRACTOR SHALL RECORD THE ELEVATION AND LOCATION OF ALL TILES.
 - ALL SUMP SERVICE LINES SHALL HAVE TRACER WIRE.
 - TELEVISION OF STORM SEWER IS REQUIRED AS PER SUDAS.
- SIGNAGE NOTES:**
 - ALL SIGNAGE SHALL BE SUPPLIED AND INSTALLED BY THE CITY OF GRIMES. THE CITY WILL BILL THE DEVELOPER FOR THE COSTS ASSOCIATED WITH THE SIGNAGE.
 - THE HEIGHT OF SIGNS SHALL BE 7- FEET FROM THE BASE OF THE SIGN TO THE GROUND.
 - ALL SIGNS SHALL BE NOT LESS THAN 1.5' FROM EDGE OF SIGN TO BACK OF CURB.
 - STOP SIGNS SHALL BE AS PER MUTCD R1-1 TYPE, 30"X30".
 - NO PARKING SIGNS SHALL BE AS PER MUTCD R8-3 TYPE, 12"X12". IF POSSIBLE, PLEASE MOUNT THE NO PARKING SIGNS TO LIGHT POLES (1ST PREFERENCE).
 - ALL SPEED LIMIT SIGNS SHALL BE AS PER MUTCD R2-1 (25 MPH), 24"X30".
 - ALL STREET NAME SIGNS SHALL BE WHITE ON BLACK ON A 6" BLANK WITH 4" LETTERS (LOCALS) OR 8" BLANK WITH 6" LETTERS (COLLECTORS/ARTERIALS) AND SHALL BE DIRECTLY FASTENED TO SQUARE TUBE POSTS. EACH SIGN POST SHALL HAVE FOUR (4) STREET SIGNS THAT SHALL BE CONNECTED TO POST BY RIVETING THE SIGNS BACK TO BACK ON OPPOSITE SIDES OF THE SQUARE TUBE POST. THE BACK TO BACK ENDS OF STREET NAME SIGNS SHALL BE CONNECTED WITH CIRCULAR STABILIZERS.
 - ALL SIGN POSTS SHALL BE TELESAR 2'X2" SQUARE TUBE POWDER COATED BLACK GALVANIZED STEEL (14 GAUGE MIN.) WITH 7/16" KNOCK-OUT STYLE PERFORATIONS THAT ARE PRE-PUNCHED.
 - ROAD CLOSED SIGNS SHALL BE AS PER IDOT ROAD STANDARD SH-182.
 - ALL SIGNS SHALL BE HIGH INTENSITY PRISMATIC.

BENCHMARK:

BM1: NORTHEAST BURY BOLT ON HYDRANT ON EAST SIDE OF SE LITTLE BEAVER DRIVE NORTH OF SE 19TH STREET. ELEVATION=962.83 (NAVD 88 DATUM)

BM2: NORTHWEST BURY BOLT ON HYDRANT AT NORTHWEST QUADRANT OF SE 19TH STREET & SE GATEWAY DRIVE. ELEVATION=955.14 (NAVD 88 DATUM)



VICINITY MAP
NOT TO SCALE

LEGEND:

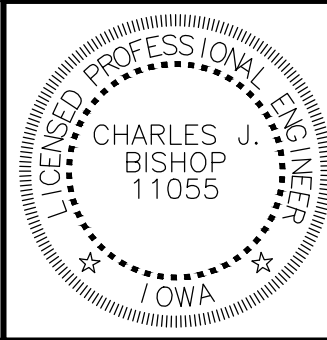
- SAN — SANITARY SEWER
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE
- U/E — UNDERGROUND ELECTRIC
- O/E — OVERHEAD ELECTRIC
- TELE — TELEPHONE LINE
- FO — FIBER OPTIC
- CATV — CABLE TV
- Ⓢ — STORM MANHOLE
- Ⓜ — CURB INTAKE
- — SURFACE INTAKE
- Ⓜ — FLARED END SECTION
- Ⓢ — SANITARY MANHOLE
- Ⓢ — CLEANOUT
- Ⓢ — FIRE HYDRANT
- Ⓢ — SPRINKLER
- Ⓢ — IRRIGATION CONTROL VALVE
- Ⓢ — WATER MANHOLE
- Ⓢ — WELL
- Ⓢ — WATER VALVE
- Ⓢ — WATER SHUT OFF
- Ⓢ — YARD HYDRANT
- Ⓢ — ELECTRIC MANHOLE
- Ⓢ — ELECTRIC METER
- Ⓢ — ELECTRIC RISER
- Ⓢ — ELECTRIC VAULT
- Ⓢ — POWER POLE
- Ⓢ — TRANSFORMER POLE
- Ⓢ — LIGHT POLE
- Ⓢ — ELECTRIC JUNCTION BOX
- Ⓢ — ELECTRIC PANEL
- Ⓢ — TRANSFORMER
- Ⓢ — GROUND LIGHT
- Ⓢ — GUY WIRE
- Ⓢ — ELECTRIC HANDHOLE
- Ⓢ — GAS METER
- Ⓢ — GAS VALVE
- Ⓢ — AIR CONDITIONING UNIT
- Ⓢ — TELEPHONE RISER
- Ⓢ — TELEPHONE VAULT
- Ⓢ — TELEPHONE MANHOLE
- Ⓢ — TRAFFIC SIGNAL MANHOLE
- Ⓢ — FIBER OPTIC RISER
- Ⓢ — FIBER OPTIC FAULT
- Ⓢ — CABLE TV RISER
- Ⓢ — SIGN
- Ⓢ — DENOTES NUMBER OF PARKING STALLS
- — PROPERTY CORNER - FOUND AS NOTED
- — PROPERTY CORNER- PLACED 3/4" IRON PIPE WITH YELLOW PLASTIC CAP ID #1475
- Ⓢ — SECTION CORNER - FOUND AS NOTED

ABBREVIATIONS:

AC ACRES
ASPH ASPHALT
BK BOOK
CONC CONCRETE
D DEEDED DISTANCE
EX EXISTING
ENCL ENCLOSURE
FF FINISHED FLOOR
FL FLOW LINE
FRAC FRACTIONAL
M MEASURED DISTANCE
MH MANHOLE
OPC ORANGE PLASTIC CAP
P PLATTED DISTANCE
PG PAGE
POB POINT OF BEGINNING
POC POINT OF COMMENCEMENT
PRA PREVIOUSLY RECORDED AS
PUE PUBLIC UTILITY EASEMENT
ROW RIGHT OF WAY
RPC RED PLASTIC CAP
SF SQUARE FEET
SAN SANITARY
TYP TYPICAL
NPC YELLOW PLASTIC CAP
N NORTH
S SOUTH
E EAST
W WEST

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

SIGNED: PRELIMINARY DATE: _____
CHARLES J. BISHOP, P.E. 11055
LICENSE RENEWAL DATE: DEC. 31, 2020
PAGES OR SHEETS COVERED BY THIS SEAL: C0.1-C4.3 AND C6.1-C7.3



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LOT 1 LEGACY PARK

GRIMES, IOWA

COVER SHEET

REFERENCE NUMBER:

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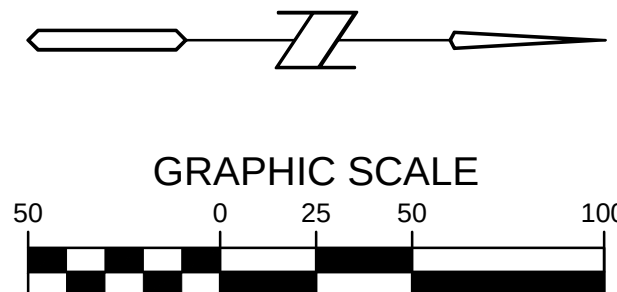
CHECKED BY:
CJB

REVISION DATE:
10/10/19 CITY #1
11/11/19 CITY #2
11/25/19 CITY #3

PROJECT NUMBER:
160387-1

SHEET NUMBER:

C0.1



EXISTING LOT 2
OFFICE/WAREHOUSE
135,000 S.F.
FF=960.00

SE GATEWAY DRIVE
(PUBLIC STREET - CONCRETE SURFACE)

STREET LOT 'B'
2.00 ACRES
87,003 S.F.

SE GATEWAY DR

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GRIMES, IOWA

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SHEET NUMBER:

C0.2

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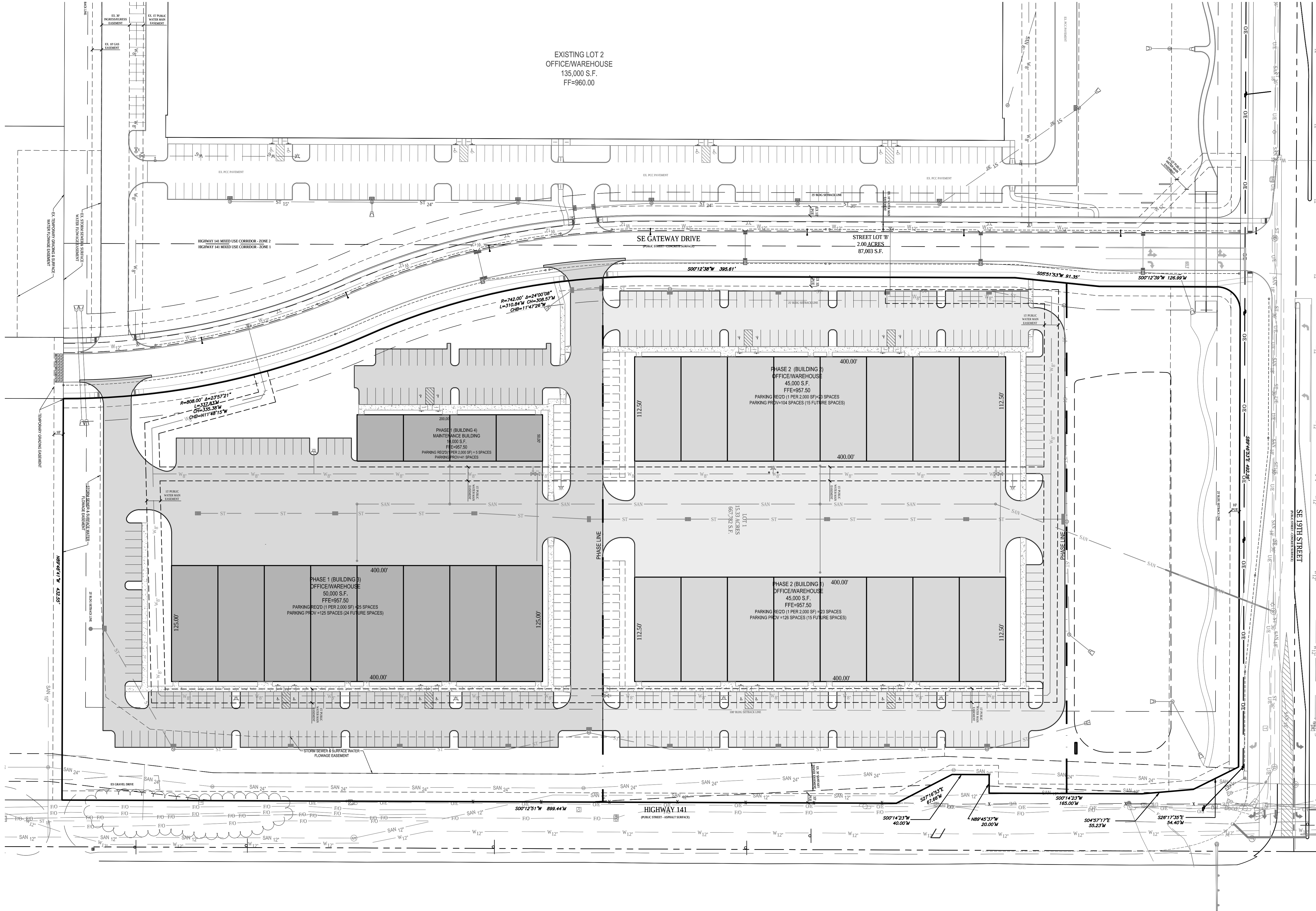
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GENERAL NOTES:
1. REFER TO SHEET C0.1



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OVERALL LAYOUT PLAN

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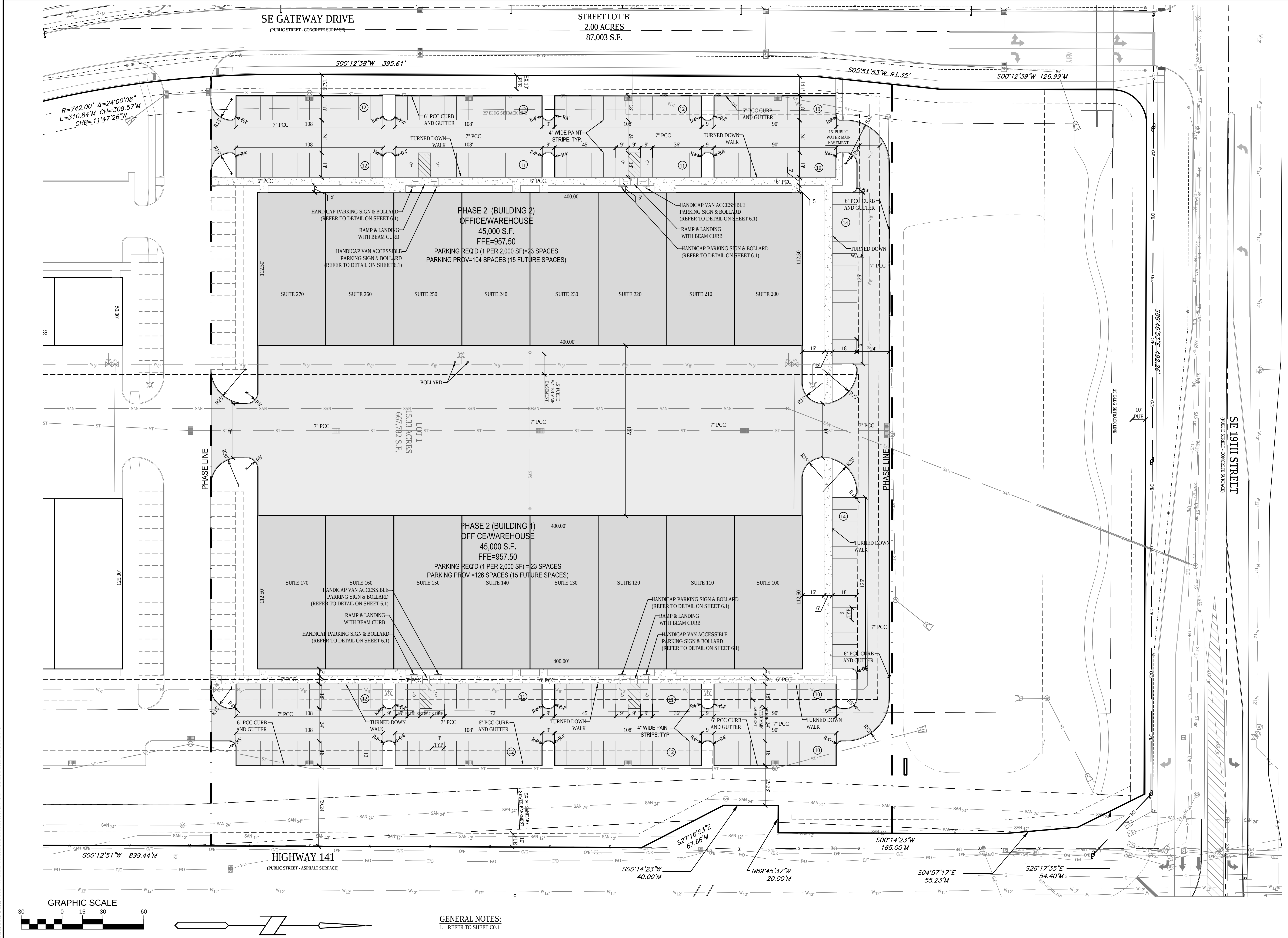
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11/11/19 CITY #2
11/25/19 CITY #3

PROJECT NUMBER:
160387-1

SHEET NUMBER:

C2.1

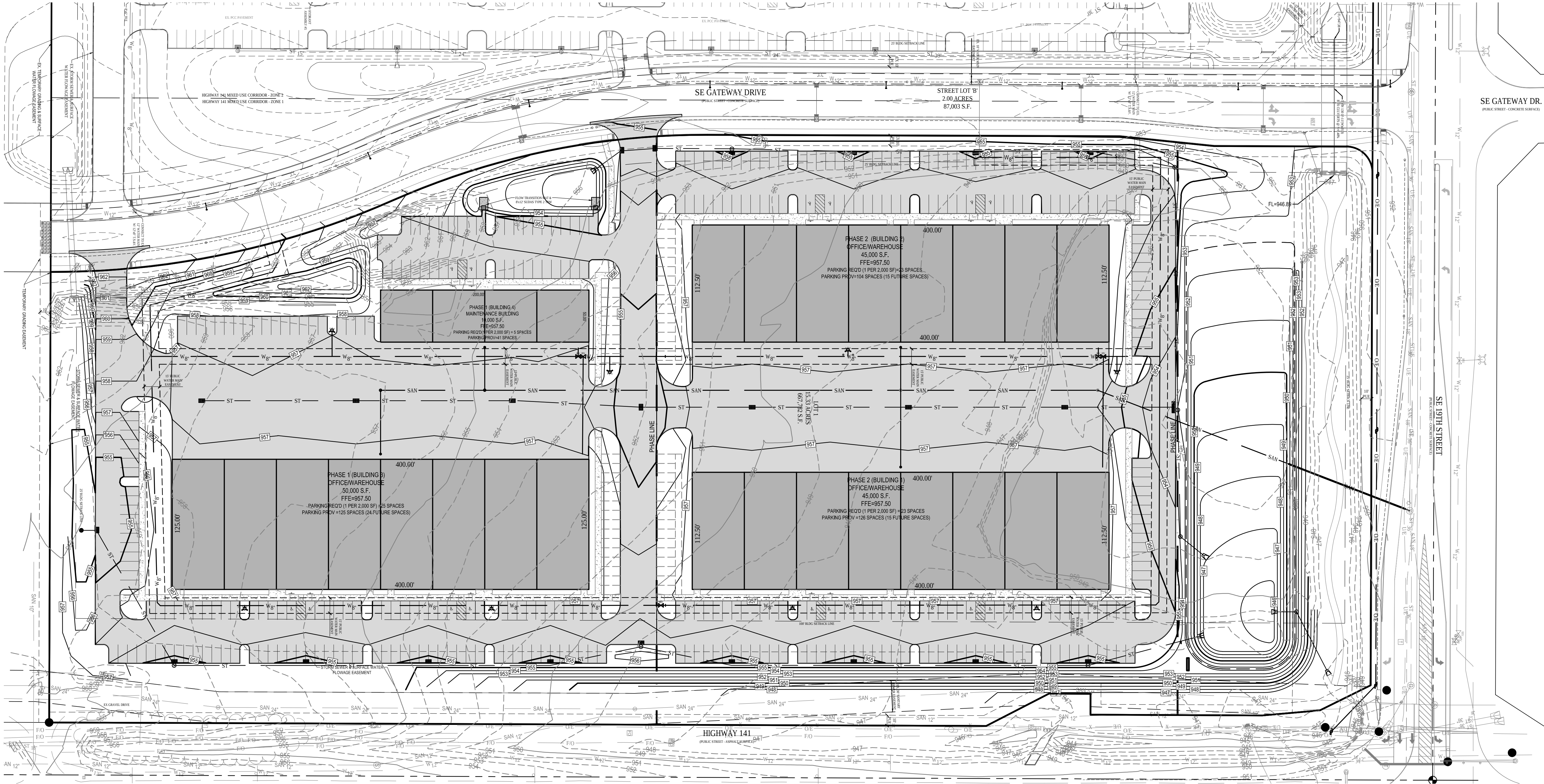




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PROJECT NUMBER:	160387-1
SHEET NUMBER:	C2.3
LAYOUT PLAN - PHASE 2	

TOPSOIL NOTES:

1. STRIP AND STOCKPILE THE TOP 8" OF SOIL ON ALL DISTURBED AREAS.
2. RESPREAD TOPSOIL TO A MINIMUM DEPTH OF 8" ON ALL GREEN (NON PAVED) AREAS. IMPORT TOPSOIL AS NECESSARY TO ACHIEVE A MINIMUM DEPTH OF 6".
3. TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
4. TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 20 PERCENT ORGANIC MATTER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.



GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- FINISHED GROUND ELEVATION
- TOP OF CURB ELEVATION
- GUTTER ELEVATION
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
- EDGE OF WALK ELEVATION
- TOP OF STAIR ELEVATION
- BOTTOM OF STAIR ELEVATION

NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL.

LOT 1 LEGACY PARK
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OVERALL GRADING PLAN

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PROJECT NUMBER:
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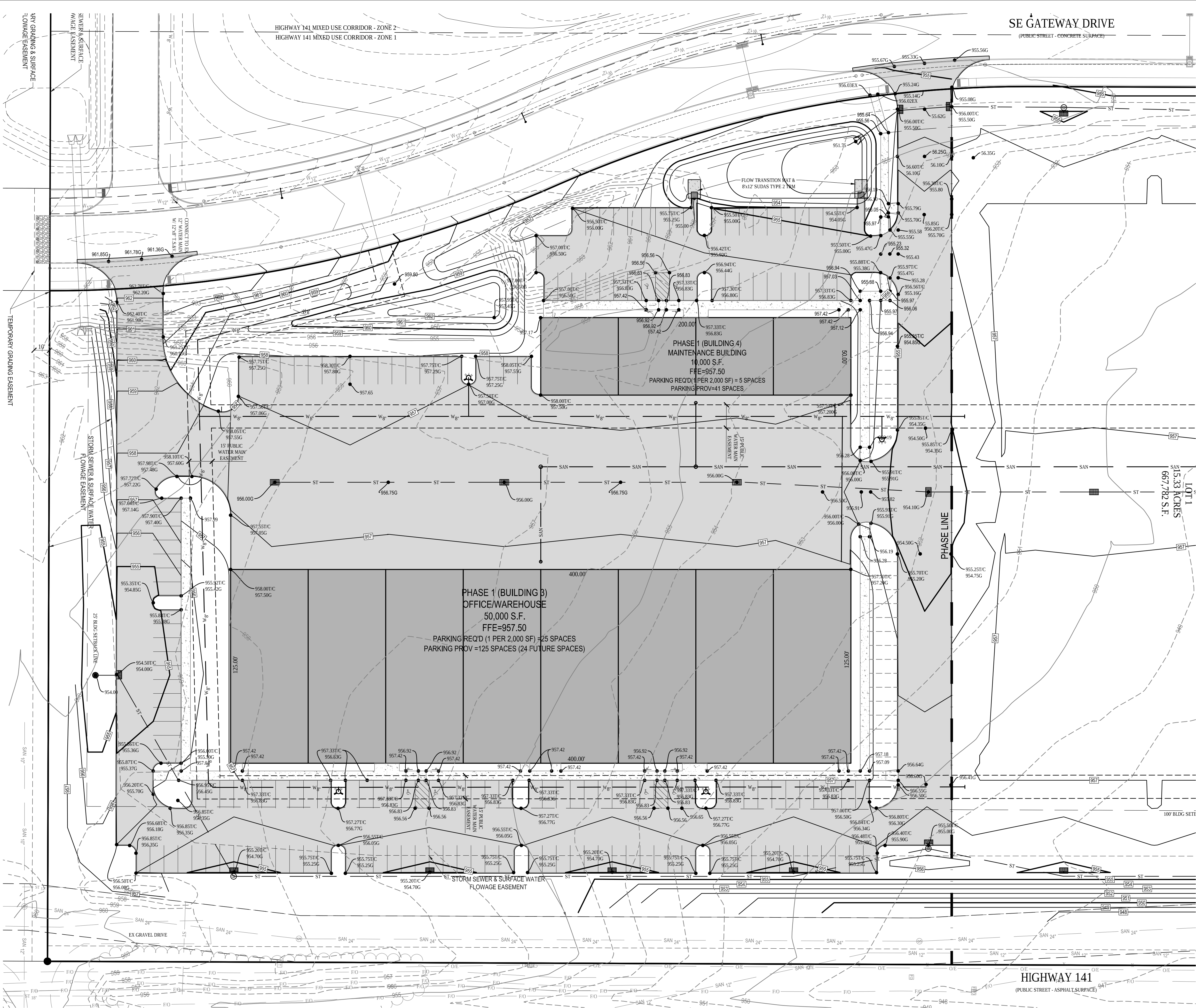
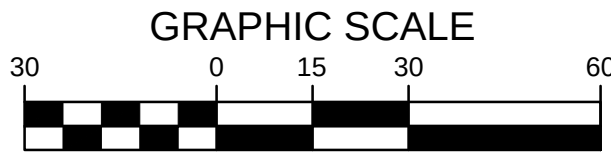
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C3.1

11/25/2019 3:36:01 PM M:\LAND PROJECTS 2016\160387\DWG\DWGS LOT 1\C3 GRADING.DWG

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- FINISHED GROUND ELEVATION
- TOP OF CURB ELEVATION
- GUTTER ELEVATION
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
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GRIMES, IOWA

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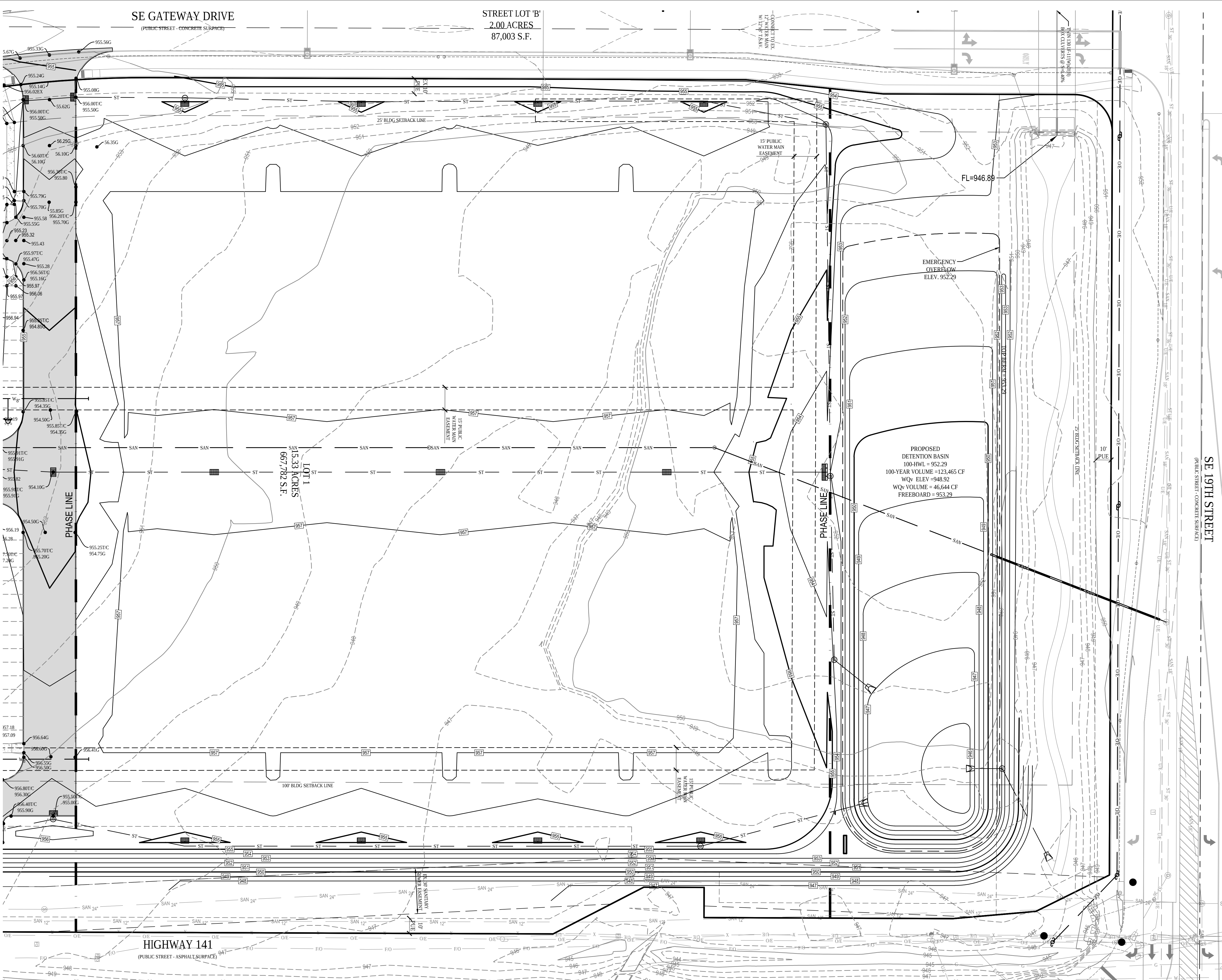
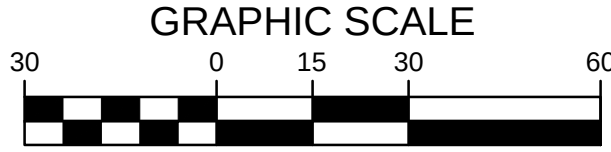
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GRADING PLAN - PHASE 1

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- FINISHED GROUND ELEVATION
- TOP OF CURB ELEVATION
- GUTTER ELEVATION
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
- EDGE OF WALK ELEVATION
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NOTE: WALL ELEVATIONS SHOWN ON PLAN ARE FINISHED GROUND GRADES AT THE TOP AND BOTTOM OF THE WALL.



LOT 1 LEGACY PARK
GRIMES, IOWA

GRADING PLAN - PHASE 1

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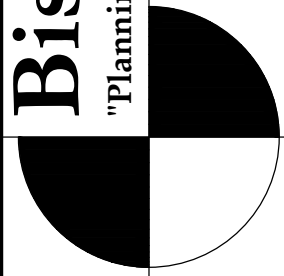
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11/25/19 CITY#3

PROJECT NUMBER:
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SHEET NUMBER:

C3.3

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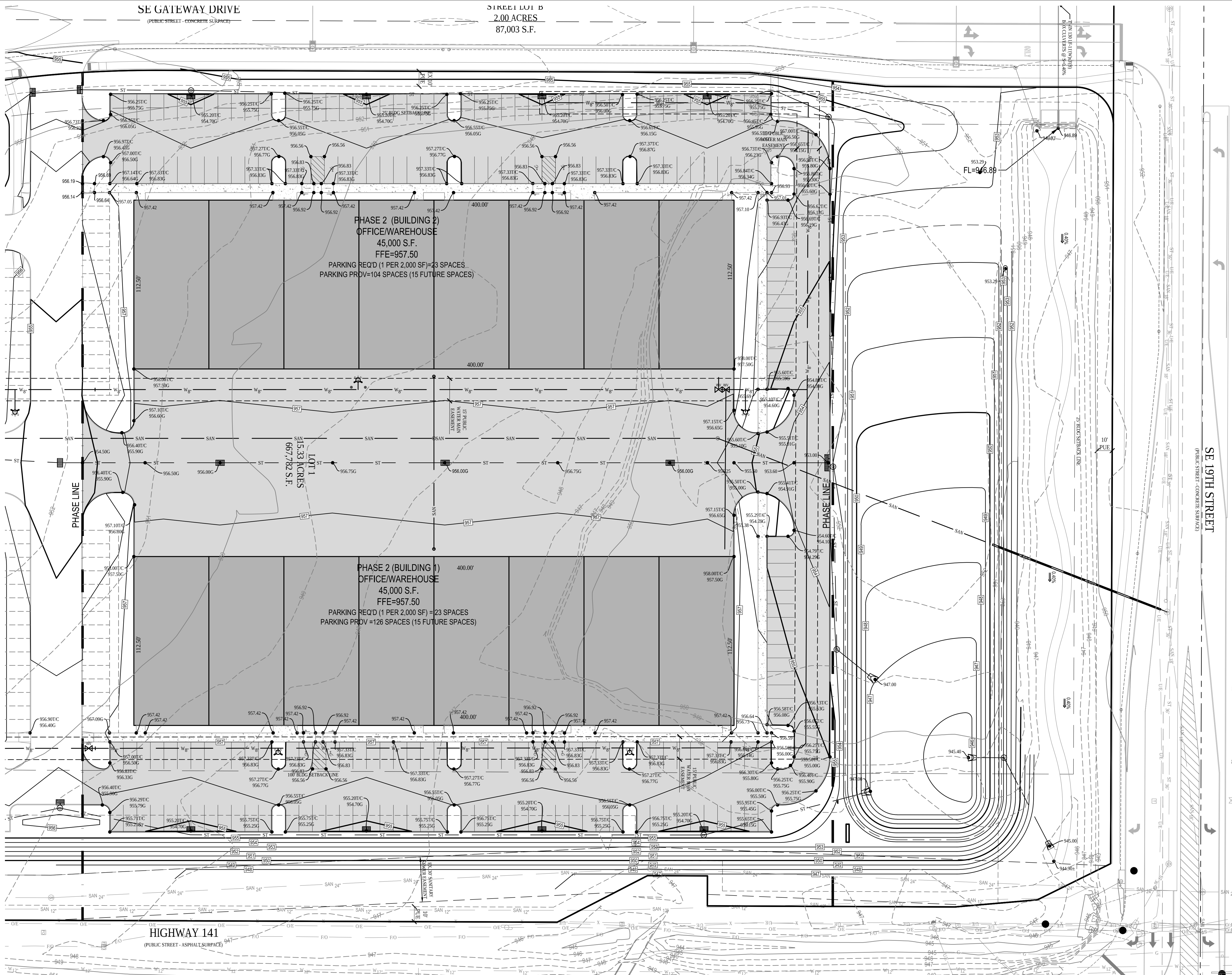
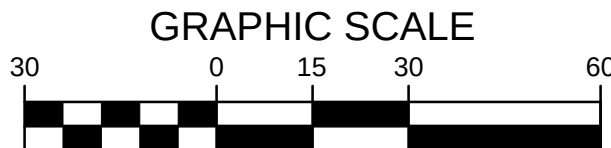
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GRADING LEGEND:

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GRADING PLAN - PHASE 2

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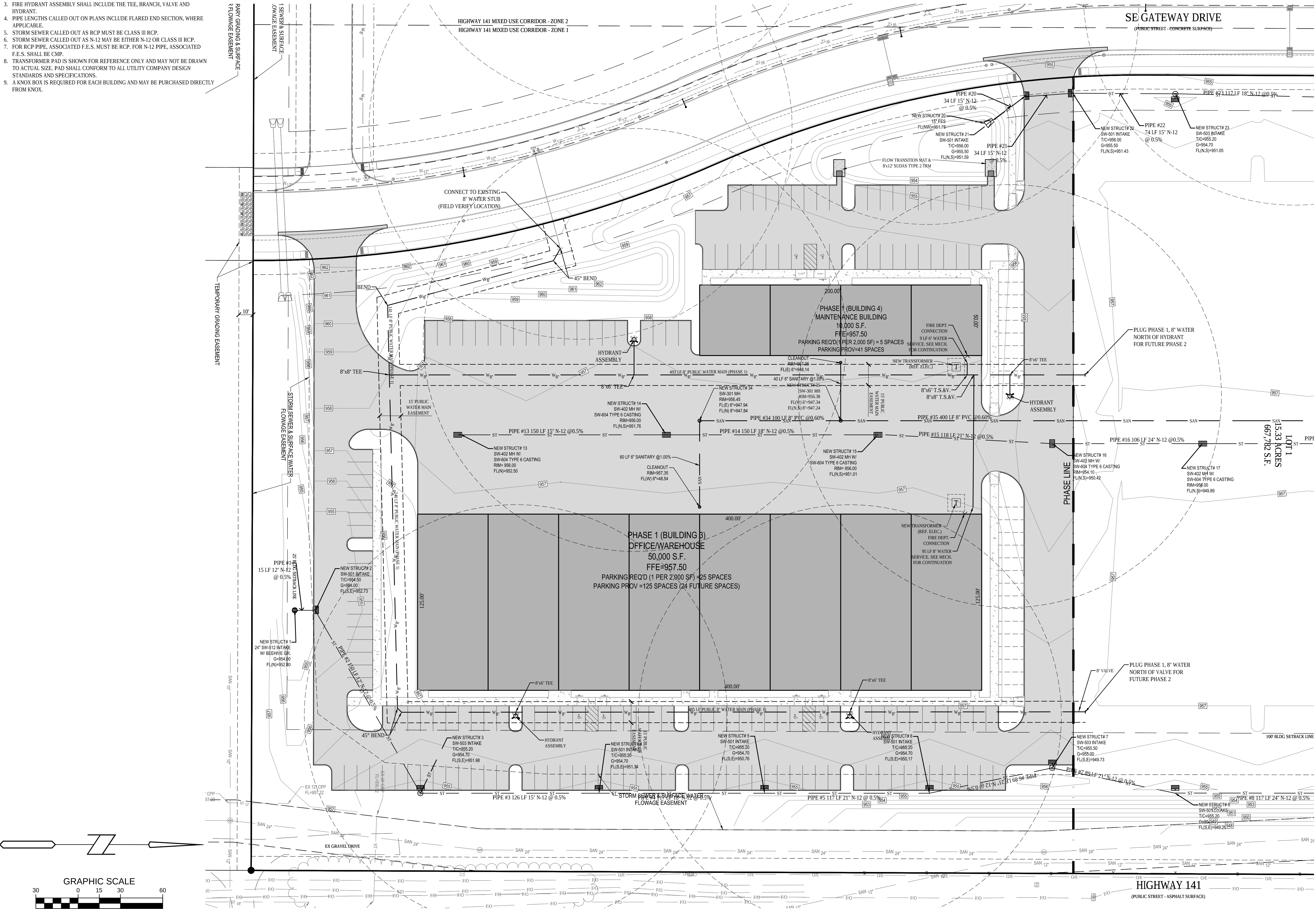
PROJECT NUMBER:

160387-1

SHEET NUMBER:

C3.4

- UTILITY NOTES:
1. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
 2. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5' OF COVER UNLESS NOTED OTHERWISE.
 3. FIRE HYDRANT ASSEMBLY SHALL INCLUDE THE TEE, BRANCH, VALVE AND HYDRANT.
 4. PIPE LENGTHS CALLED OUT ON PLANS INCLUDE FLARED END SECTION, WHERE APPLICABLE.
 5. STORM SEWER CALLED OUT AS RCP MUST BE CLASS III RCP.
 6. STORM SEWER CALLED OUT AS N-12 MAY BE EITHER N-12 OR CLASS III RCP.
 7. FOR RCP PIPE, ASSOCIATED F.E.S. MUST BE RCP. FOR N-12 PIPE, ASSOCIATED F.E.S. SHALL BE CMP.
 8. TRANSFORMER PAD IS SHOWN FOR REFERENCE ONLY AND MAY NOT BE DRAWN TO ACTUAL SIZE. PAD SHALL CONFORM TO ALL UTILITY COMPANY DESIGN STANDARDS AND SPECIFICATIONS.
 9. A KNOX BOX IS REQUIRED FOR EACH BUILDING AND MAY BE PURCHASED DIRECTLY FROM KNOX.



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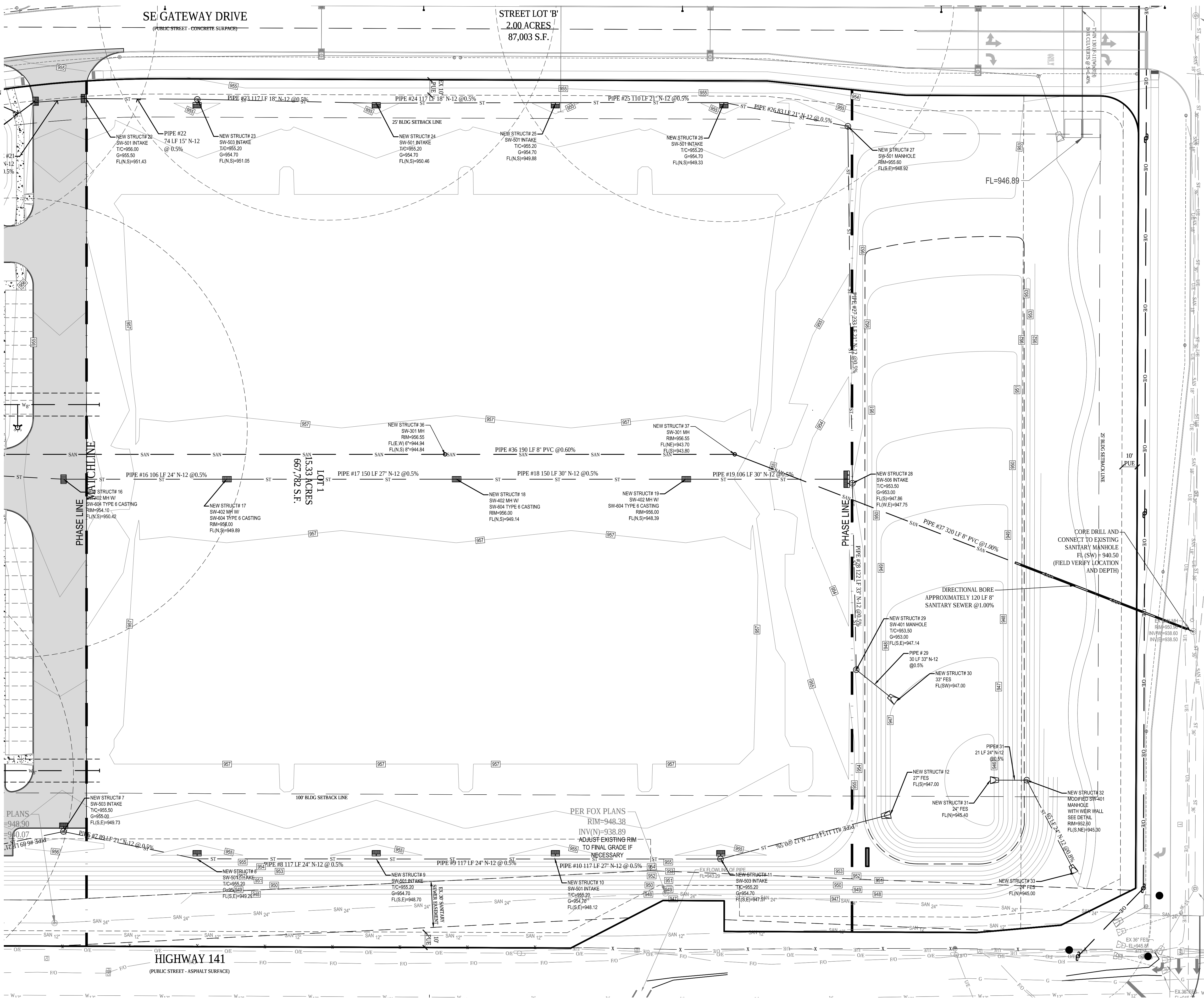
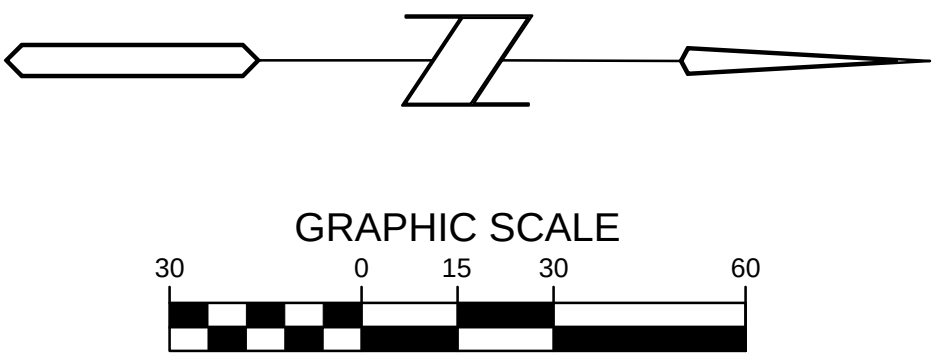
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GRIMES, IOWA

UTILITY PLAN - PHASE 1

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PROJECT NUMBER: 160387-1
SHEET NUMBER: C4.1

1. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
2. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5' OF COVER UNLESS NOTED OTHERWISE.
3. FIRE HYDRANT SHALL INCLUDE THE TEE, BRANCH, VALVE AND REARST.
4. PIPE LENGTHS CALLED OUT ON PLANS INCLUDE FLARED END SECTION, WHERE APPLICABLE.
5. STORM SEWER CALLED OUT AS N-12 MUST BE CLASS II RCP.
6. STORM SEWER CALLED OUT AS N-12 MAY BE EITHER N-12 OR CLASS III RCP.
7. FOR RCP PIPE, ASSOCIATED F.E.S. MUST BE RCP. FOR N-12 PIPE, ASSOCIATED F.E.S. SHALL BE CSM.
8. TRANSFORMER PAD IS SHOWN FOR REFERENCE ONLY AND MAY NOT BE DRAWN TO ACTUAL SIZE. PAD SHALL CONFORM TO ALL UTILITY COMPANY DESIGN STANDARDS AND SPECIFICATIONS.



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Established 1959

LOT 1 LEGACY PARK
GRIMES, IOWA

UTILITY PLAN - PHASE 1

REFERENCE NUMBER:

DRAWN BY:
BK & CJ

CHECKED BY:
CJB

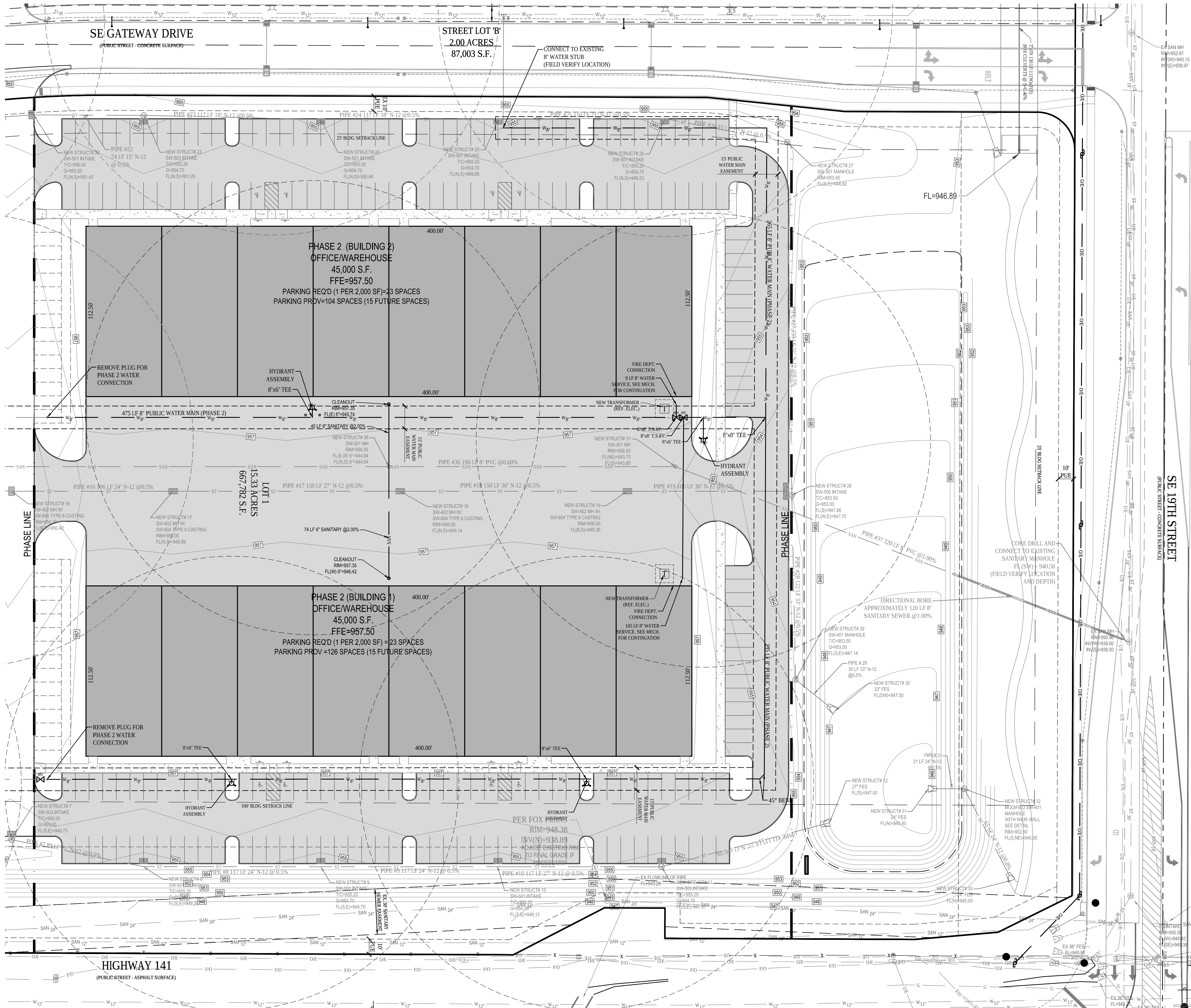
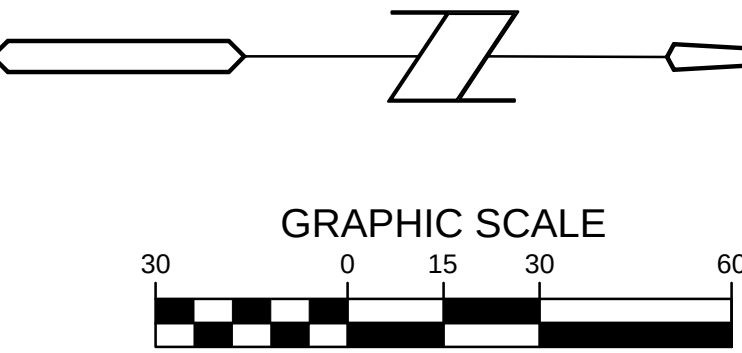
REVISION DATE:
10/10/19 CITY #1
11/11/19 CITY #2
11/25/19 CITY #3

PROJECT NUMBER:
160387-1

SHEET NUMBER:

C4.2

- UTILITY NOTES:
1. ALL PROPOSED UTILITIES SHALL BE PRIVATE, UNLESS NOTED OTHERWISE.
 2. ALL WATER LINES SHALL HAVE A MINIMUM OF 5.5' OF COVER UNLESS NOTED OTHERWISE.
 3. FIRE HYDRANT ASSEMBLY SHALL INCLUDE THE TEE, BRANCH, VALVE AND HYDRANT.
 4. PIPE LENGTHS CALLED OUT ON PLANS INCLUDE FLARED END SECTION, WHERE APPLICABLE.
 5. STORM SEWER CALLED OUT AS RCP MUST BE CLASS III RCP.
 6. STORM SEWER CALLED OUT AS N-12 MAY BE EITHER N-12 OR CLASS III RCP.
 7. FOR RCP PIPE, ASSOCIATED F.E.S. MUST BE RCP. FOR N-12 PIPE, ASSOCIATED F.E.S. SHALL BE CMP.
 8. TRANSFORMER PAD IS SHOWN FOR REFERENCE ONLY AND MAY NOT BE DRAWN TO ACTUAL SIZE. PAD SHALL CONFORM TO ALL UTILITY COMPANY DESIGN STANDARDS AND SPECIFICATIONS.
 9. A KNOX BOX IS REQUIRED FOR EACH BUILDING AND MAY BE PURCHASED DIRECTLY FROM KNOX.



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LOT 1 LEGACY PARK
GRIMES, IOWA

UTILITY PLAN - PHASE 2

REFERENCE NUMBER:

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REVISION DATE:
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11/11/19 CITY #2
11/25/19 CITY #3

PROJECT NUMBER:
160387-1

SHEET NUMBER:
C4.3

PLANTING SCHEDULE

CODE	QUAN-PHASE 1	QUAN-PHASE 2	COMMON NAME	LATIN NAME	SIZE	ROOT	NOTES
SW	6	NA	SWAMP WHITE OAK	QUERCUS BICOLOR	2.5" CAL	B&B	MATCHED SPECIMENS
WO	4	4	WHITE OAK	QUERCUS ALBA	2.5" CAL	B&B	MATCHED SPECIMENS
SL	9	5	SKYLINE HONEYLOCUST	GLADYSTIA TRIACANTHOS INERMIS 'SKYLINE'	2.5" CAL	B&B	MATCHED SPECIMENS
RO	15	10	RED OAK	QUERCUS RUBRA	2.5" CAL	B&B	MATCHED SPECIMENS
RB	4	NA	RIVER BIRCH	BETULA NIGRA	6" HT	B&B	MATCHED SPECIMENS
BH	5	14	BLACK HILLS SPRUCE	PICEA GLAUCA DENSATA	6" HT	B&B	MATCHED SPECIMENS
NS	11	4	NORWAY SPRUCE	PICEA ABIES	6" HT	B&B	MATCHED SPECIMENS
AP	10	NA	AUSTRIAN PINE	PINUS NIGRA	6" HT	B&B	MATCHED SPECIMENS
WP	4	NA	WHITE PINE	PINUS STROBUS	6" HT	B&B	MATCHED SPECIMENS
PC	6	10	PRAIRIE FIRE CRABAPPLE	MALUS PRAIRIE FIRE	1.5" CAL	B&B	MATCHED SPECIMENS
NP	5	3	NEWPORT PLUM	PRUNUS CERASIFERA 'NEWPORT'	1.5" CAL	B&B	MATCHED SPECIMENS
ER	2	1	EASTERN REDBUD	CERCIS CANADENSIS	1.5" CAL	B&B	MATCHED SPECIMENS
DB	79	128	DWARF BUSH HONEYSUCKLE	DIERVILLA LONICERA	#5	CONT	FULL FORM - MATCHED
AC	72	72	GREEN MOUND ALPINE CURRANT	RIBES ALPNUM 'GREEN MOUND'	#5	CONT	FULL FORM - MATCHED
KF	94	128	KARL FOERSTER GRASS	CALAMAGROSTIS ACUTIFOLIA	#1	CONT	FULLY ROOTED IN CONTAINER

LANDSCAPE NOTES:

- ALL SODDING & LANDSCAPE PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE URBAN STANDARD SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.
- SOD ALL DISTURBED AREAS WITHIN THE CONTRACT LIMITS, UNLESS NOTED OTHERWISE. SOD LIMITS SHOWN ON PLAN ARE FOR REFERENCE ONLY. FINAL LIMITS MAY CHANGE BASED ON CONSTRUCTION ACTIVITIES.
- STAKE SOD ON ALL SLOPES 3 : 1 OR GREATER.
- PLANT QUANTITIES ARE FOR CONTRACTORS CONVENIENCE, THE DRAWING SHALL PREVAIL IF A CONFLICT OCCURS.
- ALL PLANT MATERIAL SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE.
- IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE IDENTIFICATION TAGS AND CORDS ON ALL PLANT MATERIAL PRIOR TO THE COMPLETION OF THE CONTRACT. IDENTIFICATION TAGS MUST BE LEFT ON UNTIL AFTER ACCEPTANCE BY OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL PLACE SHREDDED HARDWOOD MULCH AROUND ALL TREES, SHRUBS AND GROUND COVER BEDS TO A DEPTH OF 4 INCHES, UNLESS NOTED.
- STAKE AND WRAP ALL DECIDUOUS TREES IMMEDIATELY AFTER PLANTING. STAKE ALL TREES ACCORDING TO THE STAKING DETAILS. CONTRACTOR SHALL ADJUST AND MAINTAIN GUYING TENSION THROUGHOUT THE PLANT ESTABLISHMENT PERIOD.
- THE LANDSCAPING CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BEFORE STARTING ANY SITE WORK OR PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
- NO LANDSCAPE MATERIAL SHALL BE SUBSTITUTED WITHOUT THE AUTHORIZATION OF THE LANDSCAPE ARCHITECT.
- ALL EDGING SHALL BE DURAEDED 1/8" STEEL EDGING - COLOR GREEN, OR APPROVED EQUAL.
- CONTRACTOR SHALL BE RESPONSIBLE MAINTAINING APPROPRIATE LEVEL OF WATERING FOR ALL NEW PLANTS FOR A PERIOD OF 30 DAYS.
- ALL SHRUB AND PERENNIAL PLANTING BEDS SHALL BE MULCHED WITH 4" THICK SHREDDED HARDWOOD MULCH.
- ALL BEDS TO RECEIVE GRANULAR PRE-EMERGENT WEED CONTROL BEFORE AND AFTER MULCH IS INSTALLED.

LANDSCAPE REQUIREMENTS:

TOTAL SIZE OF LOT 667,782 SF
- PHASE 1 = 387,765 SF
- PHASE 2 = 280,017 SF

TOTAL REQUIRED OPEN SPACE (10%) 66,779 SF
- PHASE 1 = 38,777 SF
- PHASE 2 = 28,002 SF

PER 165A - HWY 141 MIXED USE DISTRICT
TOTAL TREES REQUIRED (2 PER 1,000 SF OPEN SPACE) 134
- PHASE 1 = 78
- PHASE 2 = 56
TOTAL SHRUBS REQUIRED (1 PER 500 SF OPEN SPACE) 134
- PHASE 1 = 78
- PHASE 2 = 56

TOTAL LINEAR FEET OF PARKING BUFFER (SOLID SCREEN)
- PHASE 1 (340 LF)
- PHASE 2 (440 LF)

TOTAL LINEAR FEET OF STREET FRONTAGE - MINUS DRIVE AISLES (1 TREE/50 LF)
- PHASE 1 (680 LF, SE GATEWAY DRIVE) = 14
- PHASE 1 (700 LF, HIGHWAY 141) = 14
- PHASE 1 (405 LF, SE 19TH STREET) = 10
- PHASE 2 (500 LF, SE GATEWAY DRIVE) = 10
- PHASE 2 (500 LF, HIGHWAY 141) = 10

TOTAL TREES PROVIDED
- PHASE 1 = 83
- PHASE 2 = 56

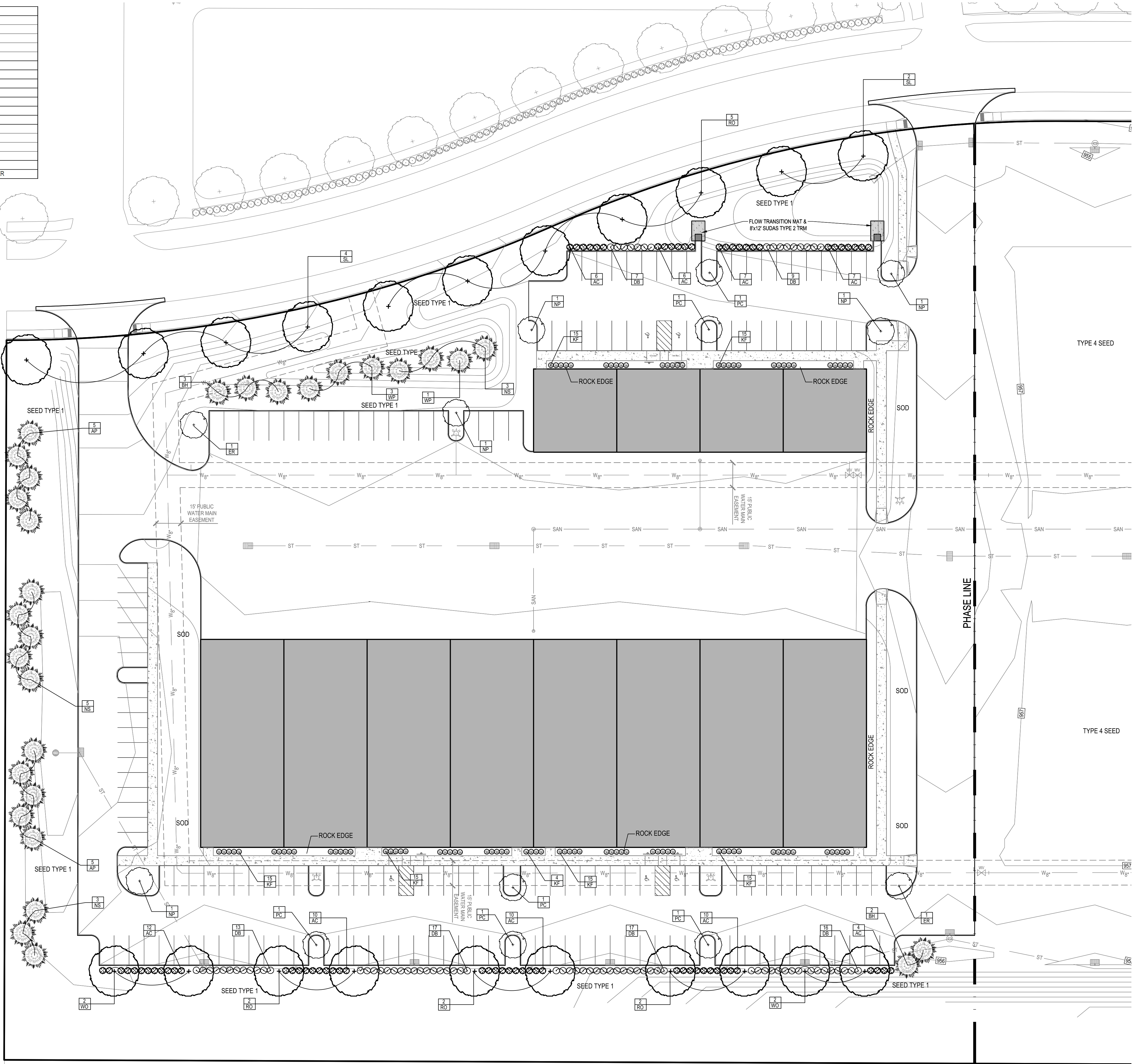
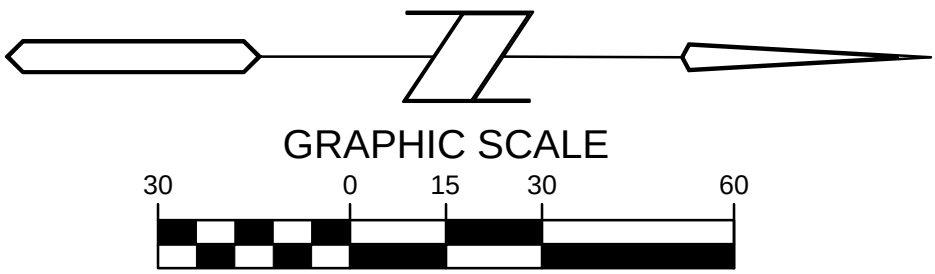
TOTAL SHRUBS PROVIDED
- PHASE 1 = 107
- PHASE 2 = 144

SEED - SUDAS TYPE 1; INSTALL PER SUDAS SPECIFICATIONS
SEE SHEETS C5.1, C5.2 & C5.3 FOR LOCATIONS

SEED - TYPE 2 (SUDAS WETLAND SEEDING); INSTALL PER SUDAS SPECIFICATIONS
SEE SHEET C5.2 FOR LOCATIONS
IF NOT SEEDED BETWEEN APRIL 1 AND JUNE 30, INSTALL SEED - SUDAS TYPE 4 UNTIL TYPE 2 CAN BE INSTALLED

SEED - SUDAS TYPE 4 (TEMP SEED); INSTALL PER SUDAS SPECIFICATIONS
SEE SHEETS C5.1 & C5.2 FOR LOCATIONS

SOD; INSTALL PER SUDAS SPECIFICATIONS
SEE SHEETS C5.1, C5.2 & C5.3 FOR LOCATIONS
PROVIDE AND INSTALL SOD FROM LOCAL SUPPLIERS. AREAS TO BE SODDED MUST BE FREE OF ALL CONSTRUCTION DEBRIS AND ANY DIRT CLUMPS OVER 1" IN DIAMETER. THOROUGHLY WATER SOD UPON INSTALLATION. CONTRACTOR TO MAINTAIN WATERING UNTIL SOD IS ESTABLISHED (ROOTS KNITTED INTO SUBSURFACE)



LOT 1 LEGACY PARK
GRIMES, IOWA

LANDSCAPE PLAN - PHASE 1

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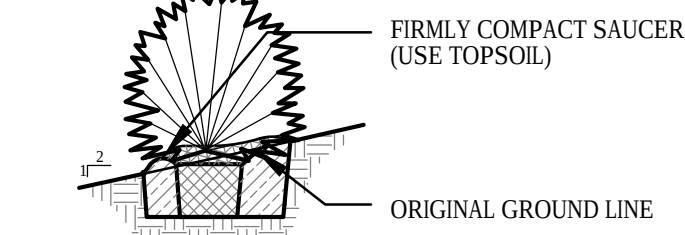
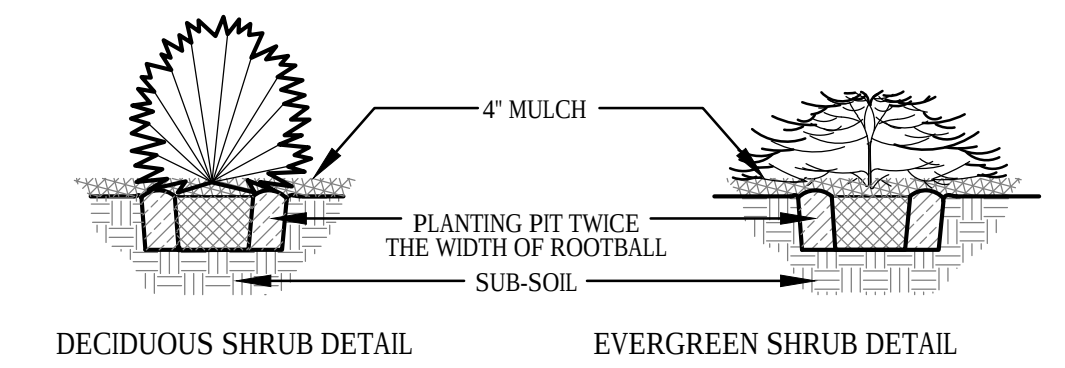
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SHEET NUMBER:
C5.1

LANDSCAPE NOTES:

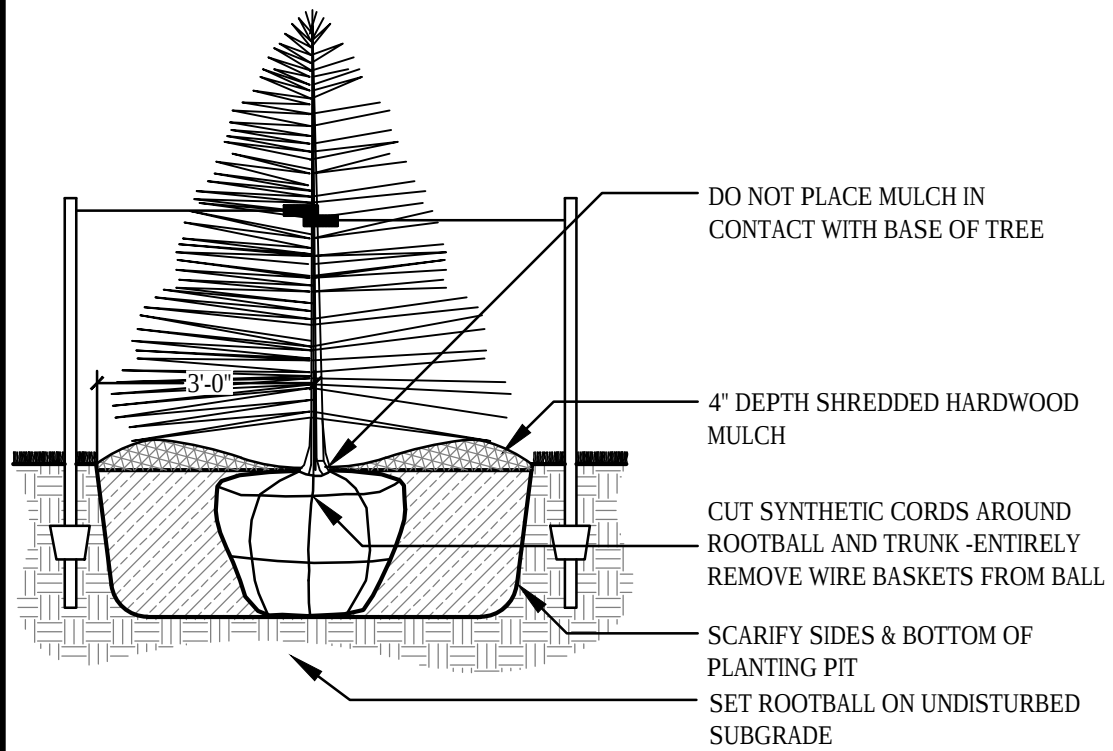
REFER TO SHEET C5.1



PLANTING ON SLOPES

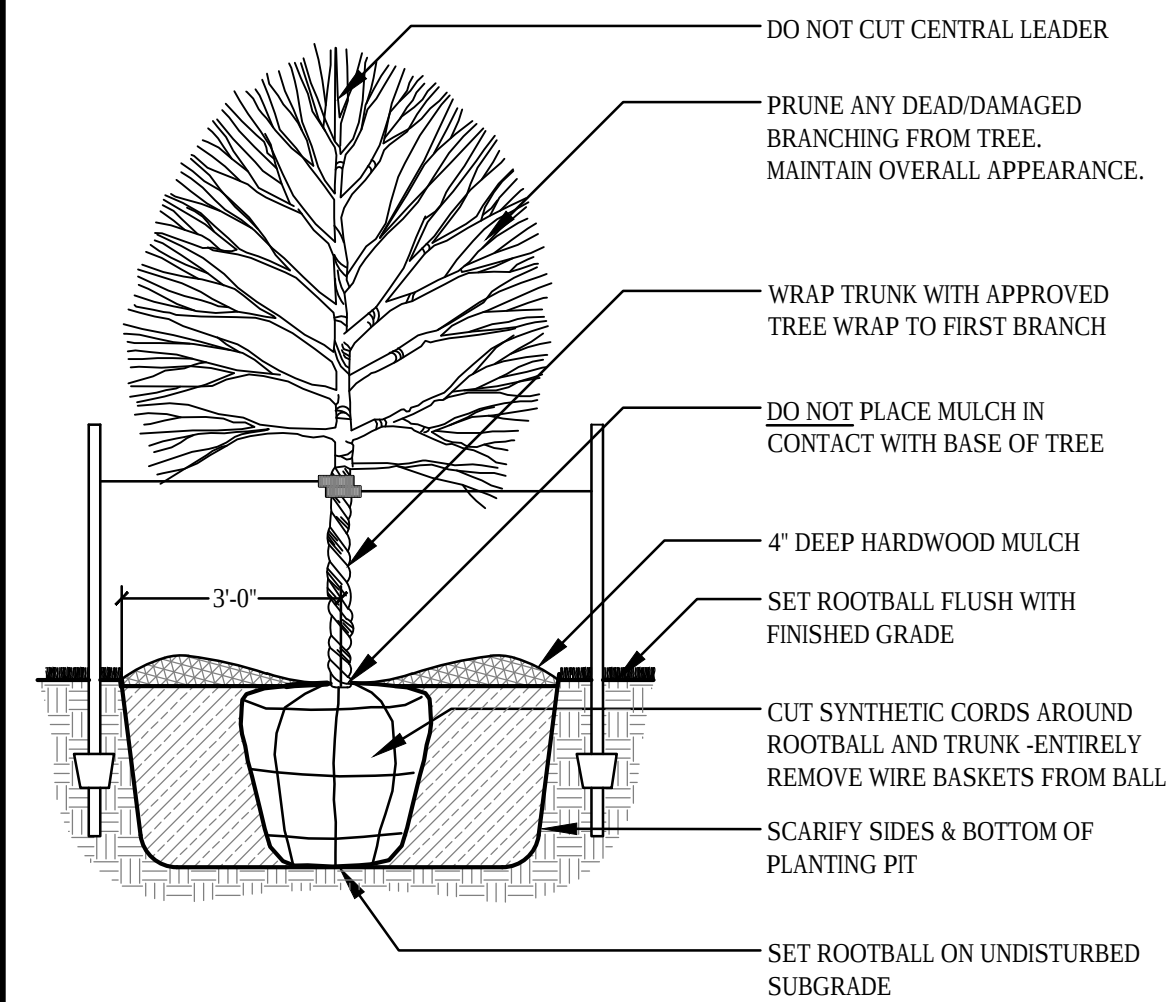
SHRUB PLANTING (TYP)

SCALE: NOT TO SCALE



EVERGREEN TREE PLANTING (B&B)

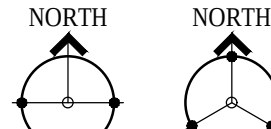
SCALE: NOT TO SCALE



DECIDUOUS TREE PLANTING (TYP.)

SCALE: NOT TO SCALE

STAKING ORIENTATION

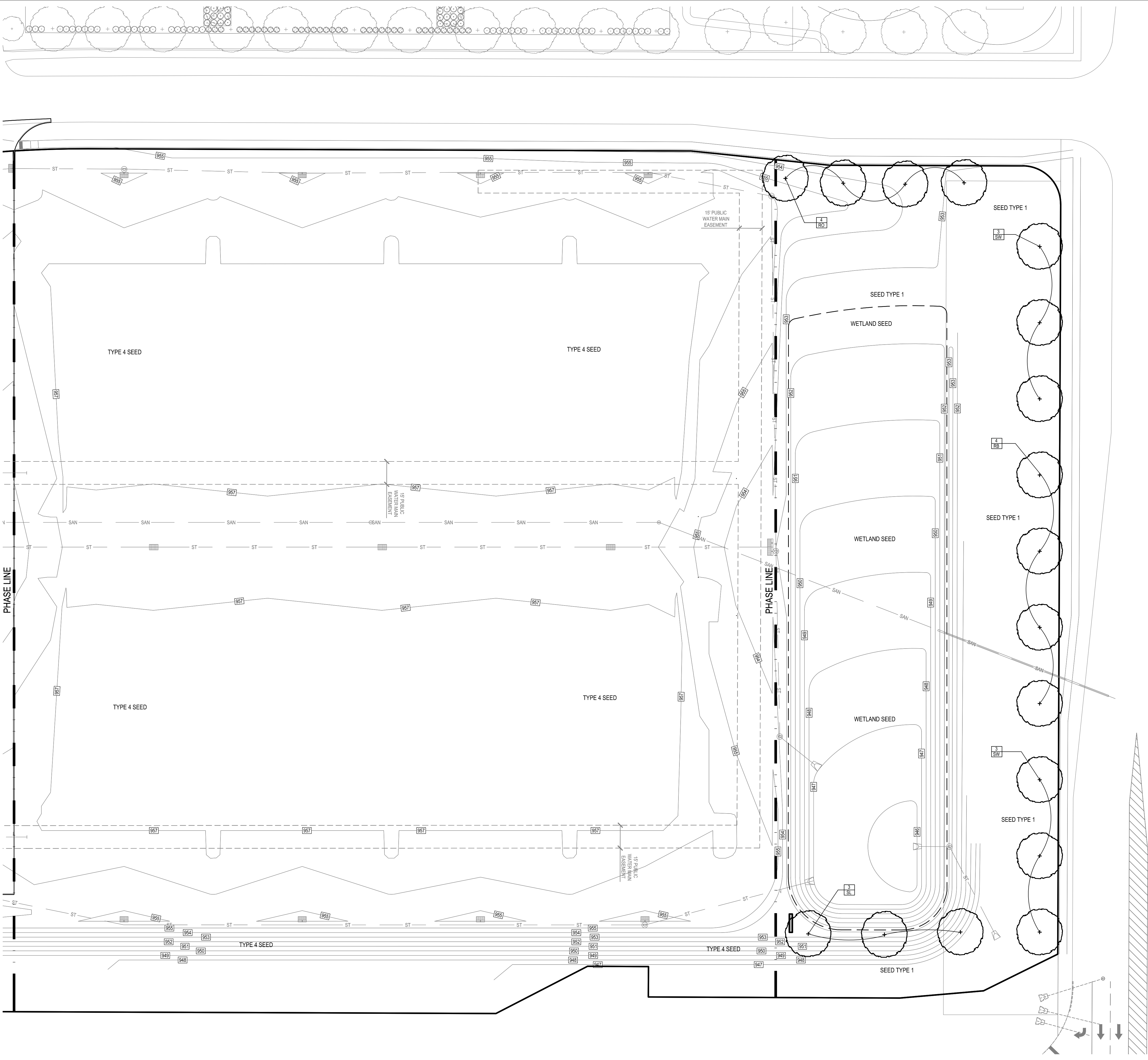
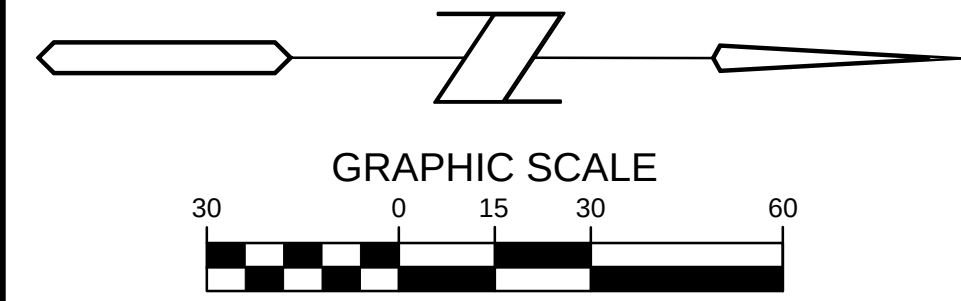


2 STAKES - 3" CAL. & LESS

3 STAKES - GREATER THAN 3" CAL.

USE HOSE GUARDS AROUND TRUNK ON STAKING WIRE. TIE WIRE TO STEEL POSTS PLACED OUTSIDE PLANT PIT..

LEAVE STAKES IN PLACE NO MORE THAN 1 YEAR FROM INSTALLATION. CONTRACTOR RESPONSIBLE FOR REMOVAL.



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LOT 1 LEGACY PARK
GRIMES, IOWA

LANDSCAPE PLAN - PHASE 1

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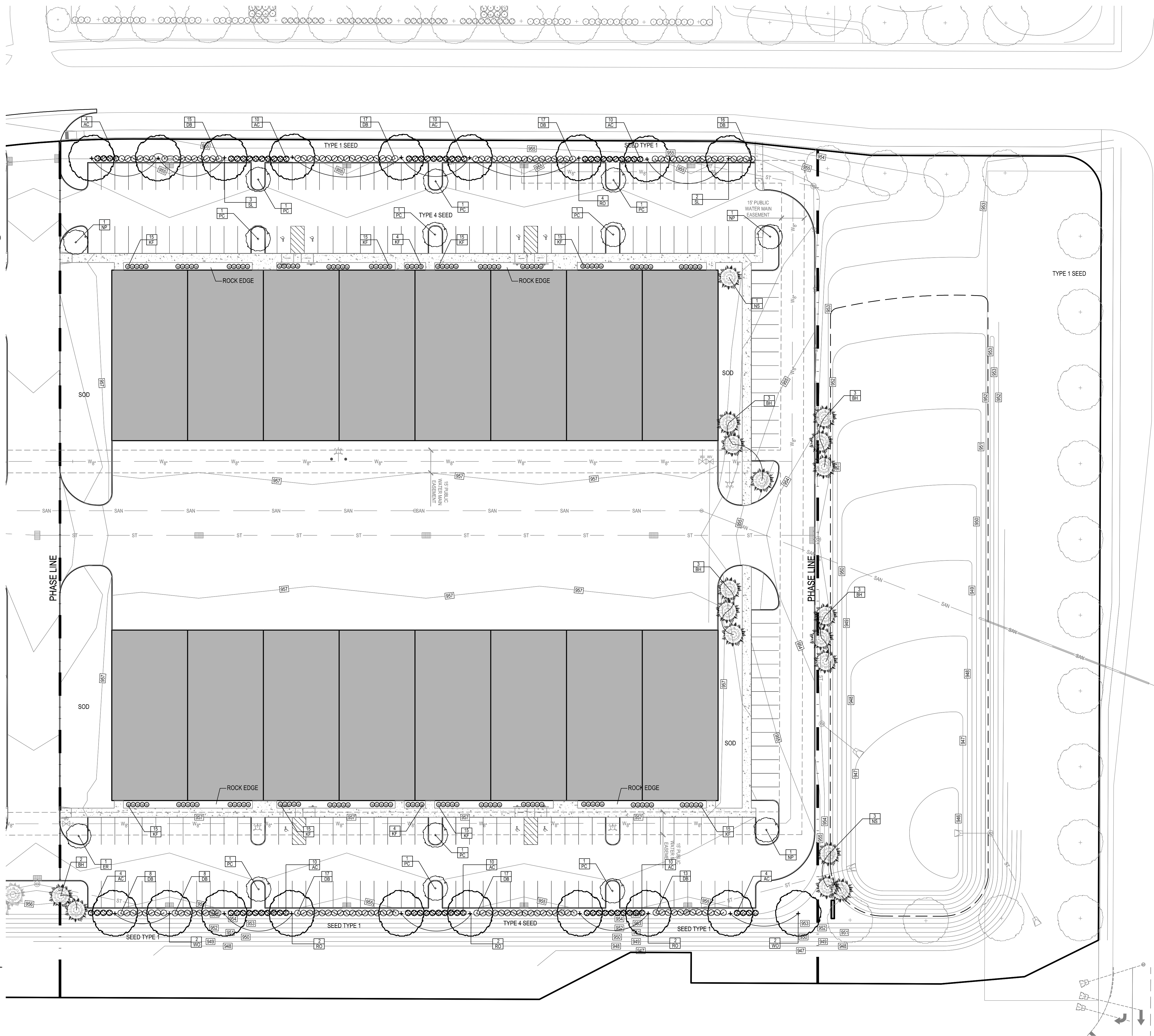
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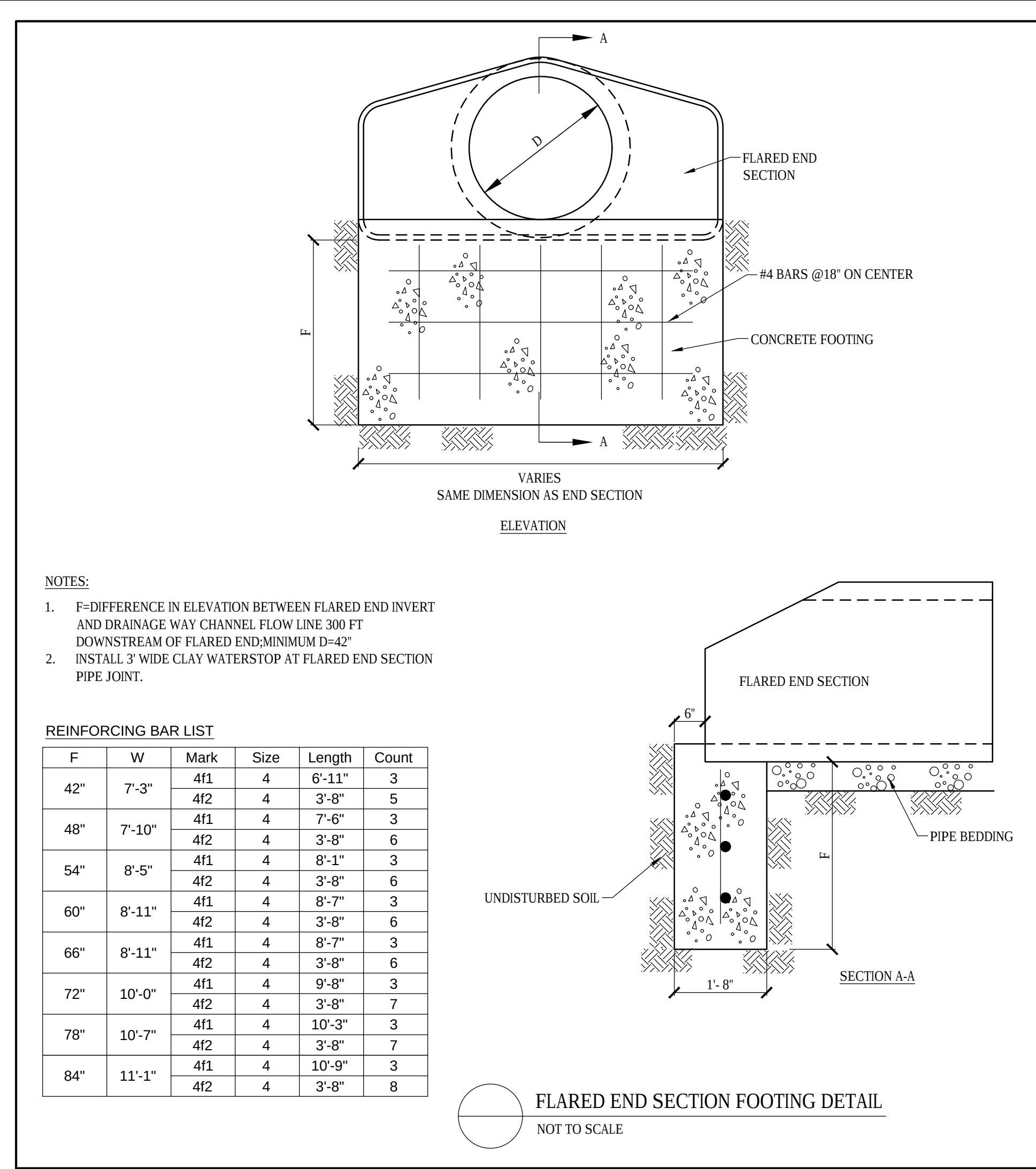
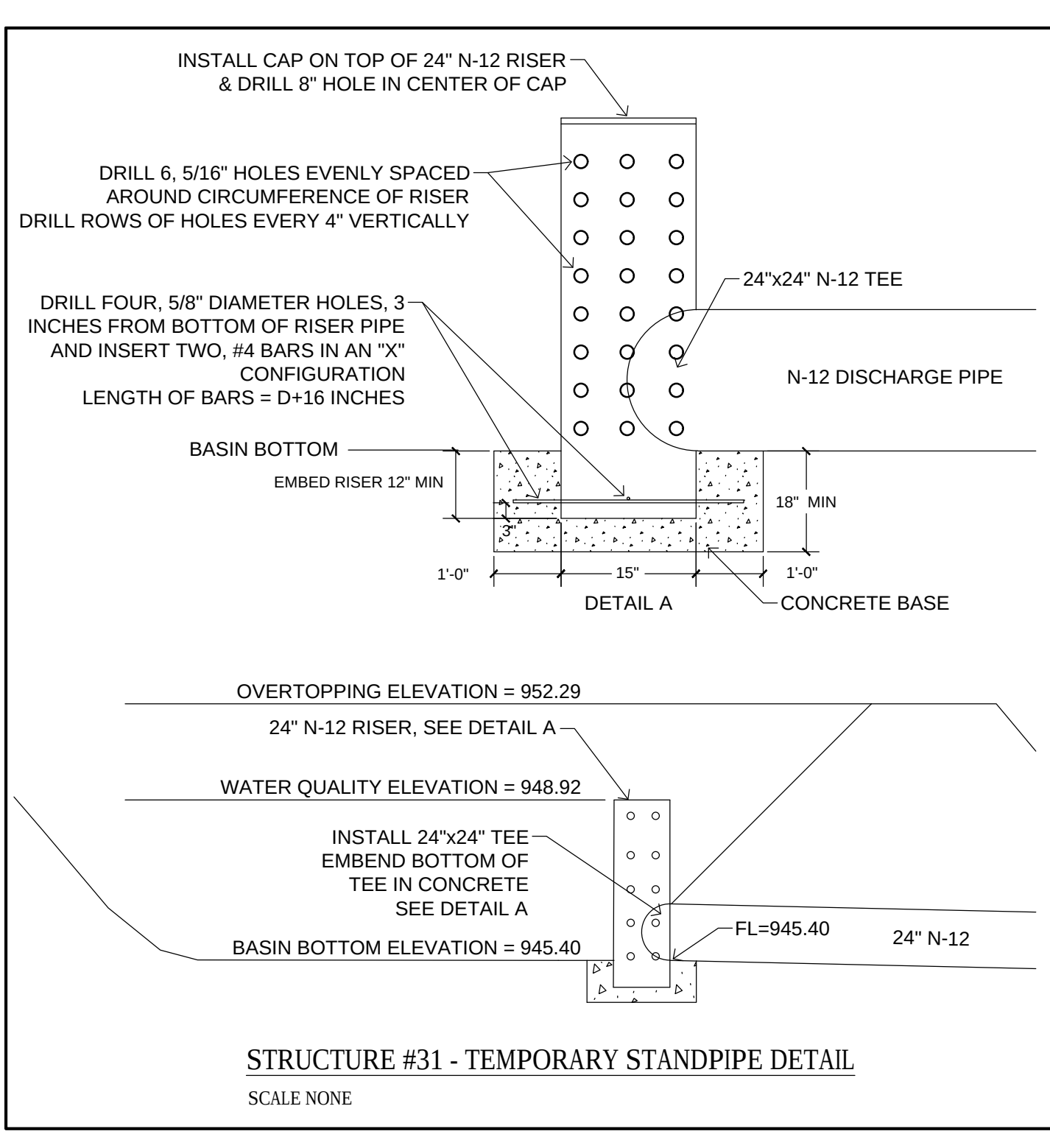
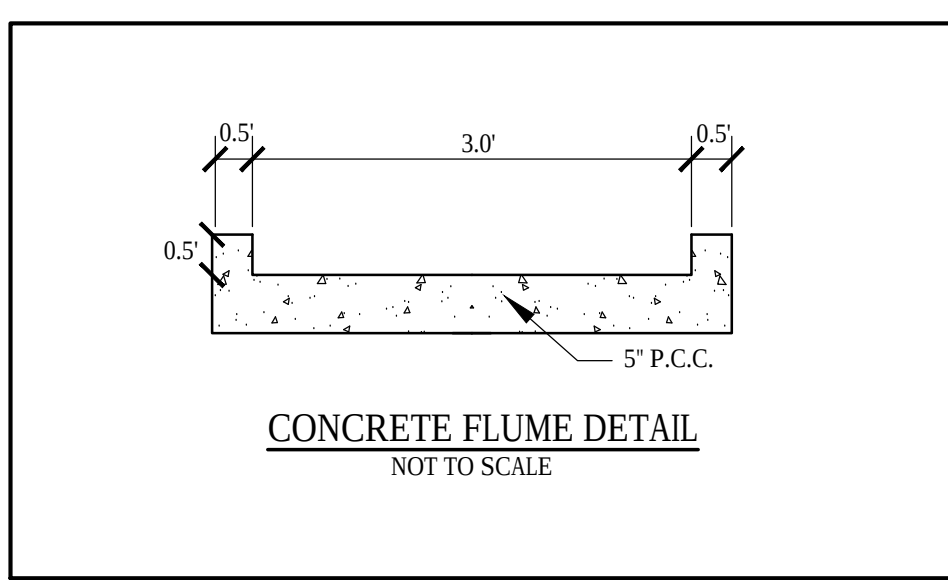
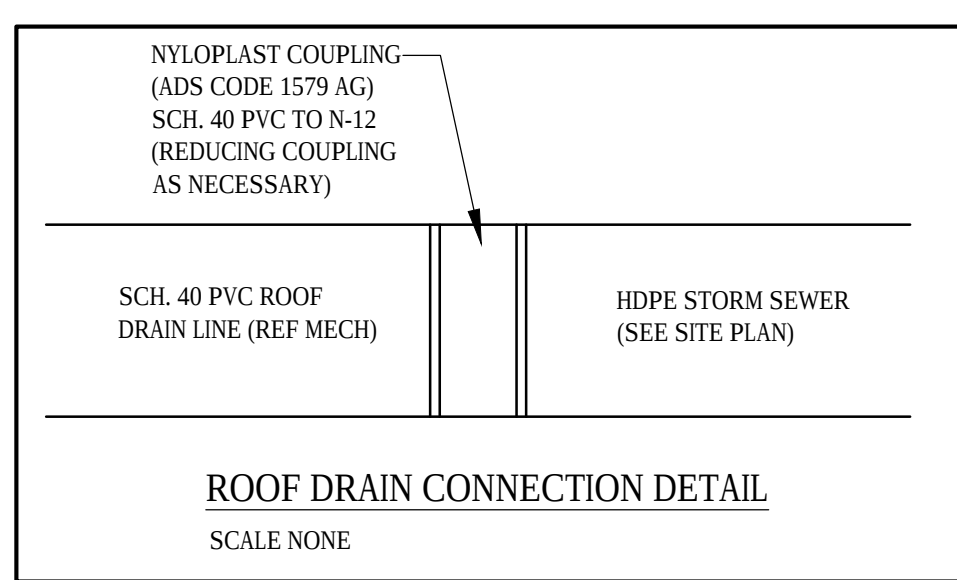
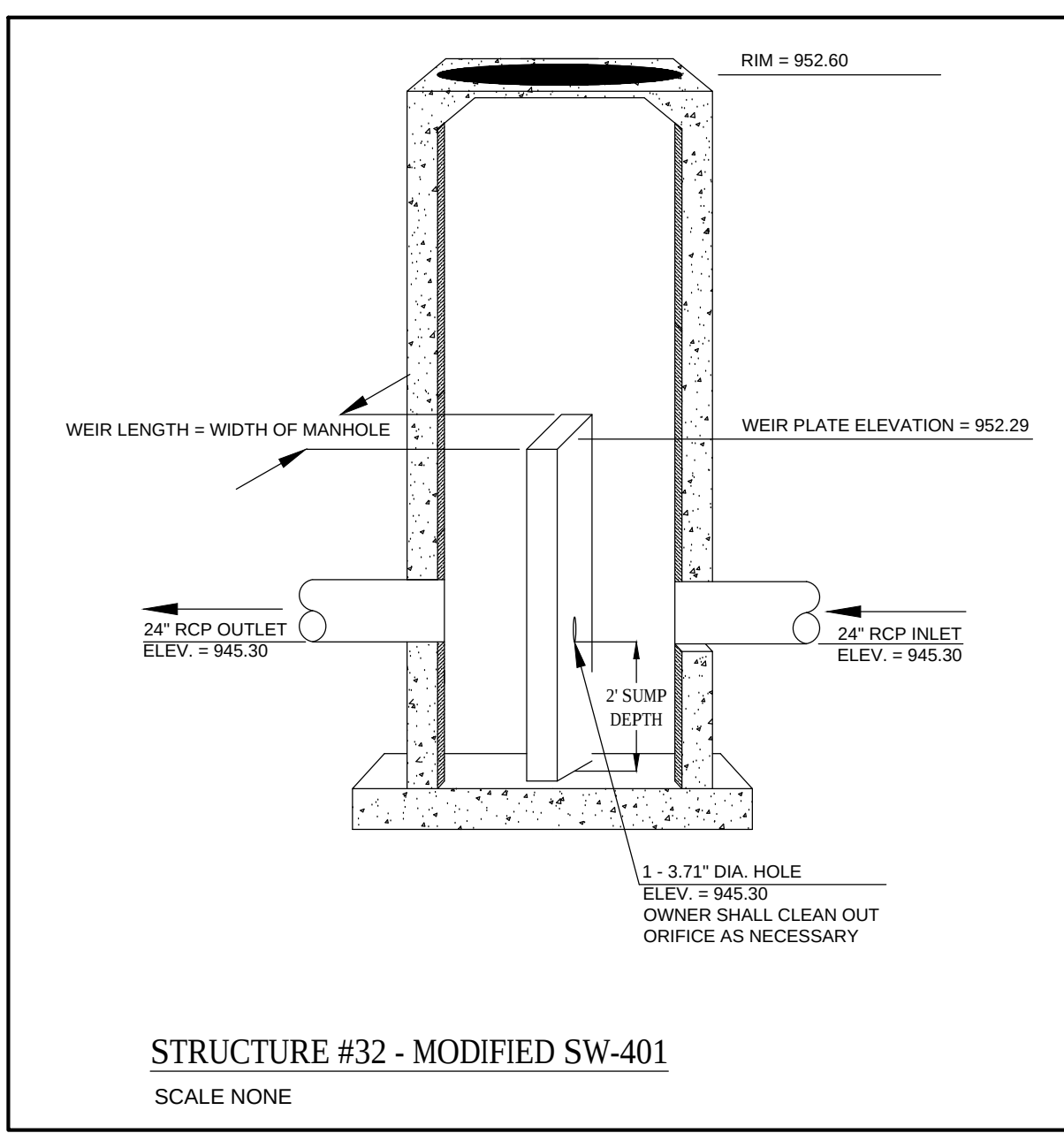
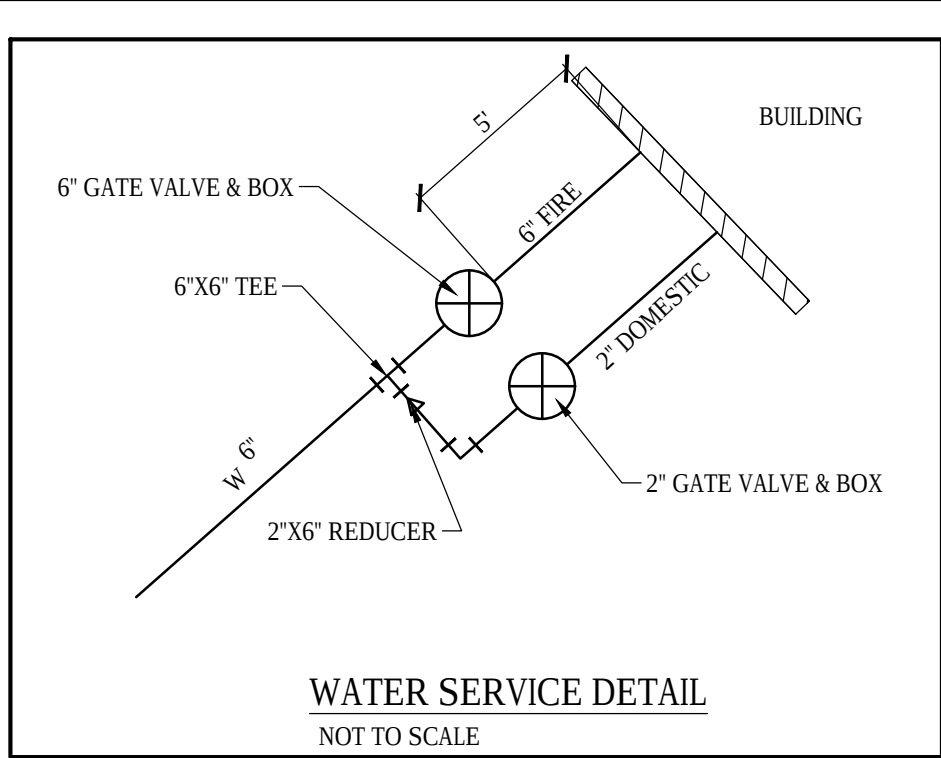
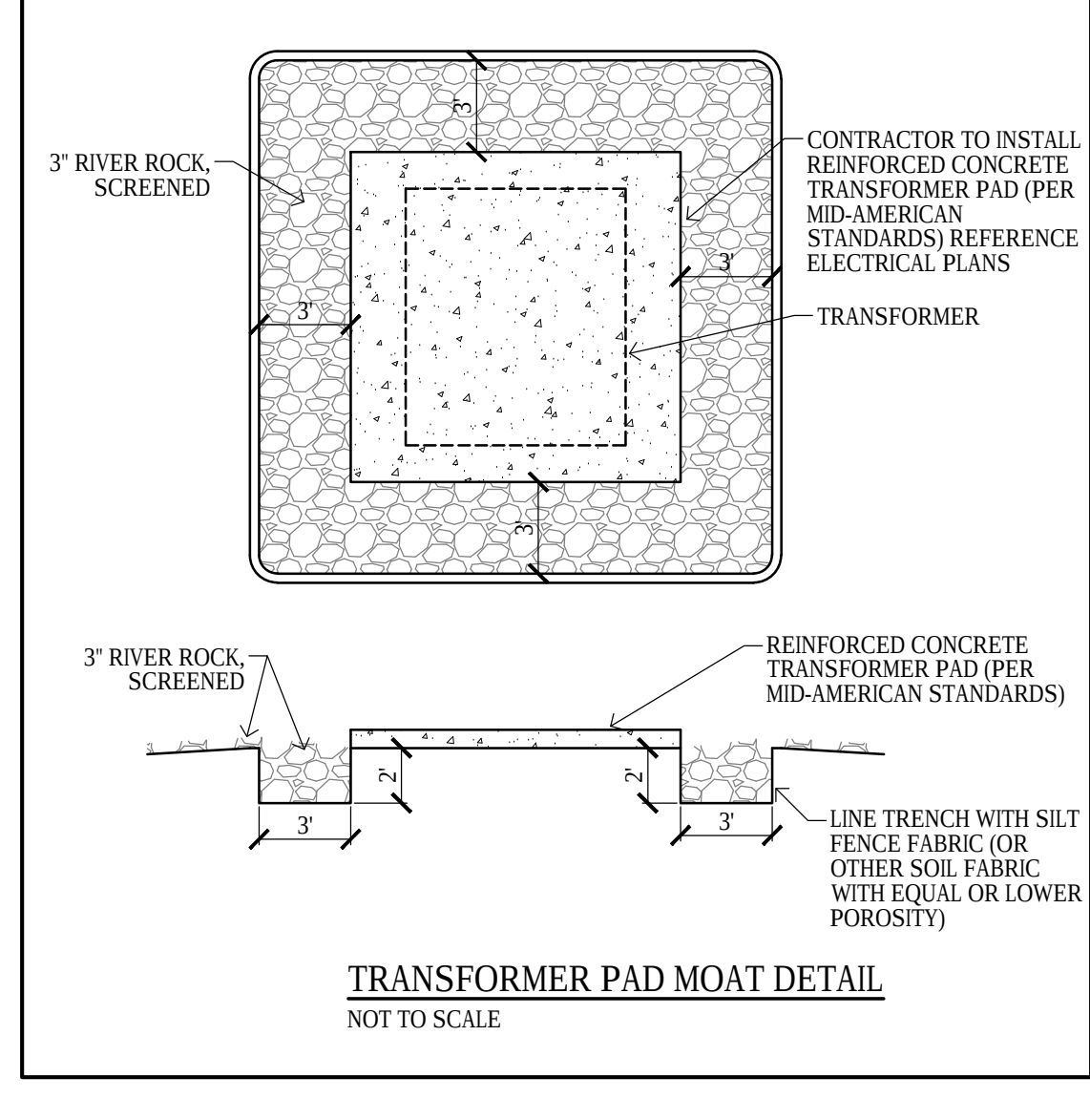
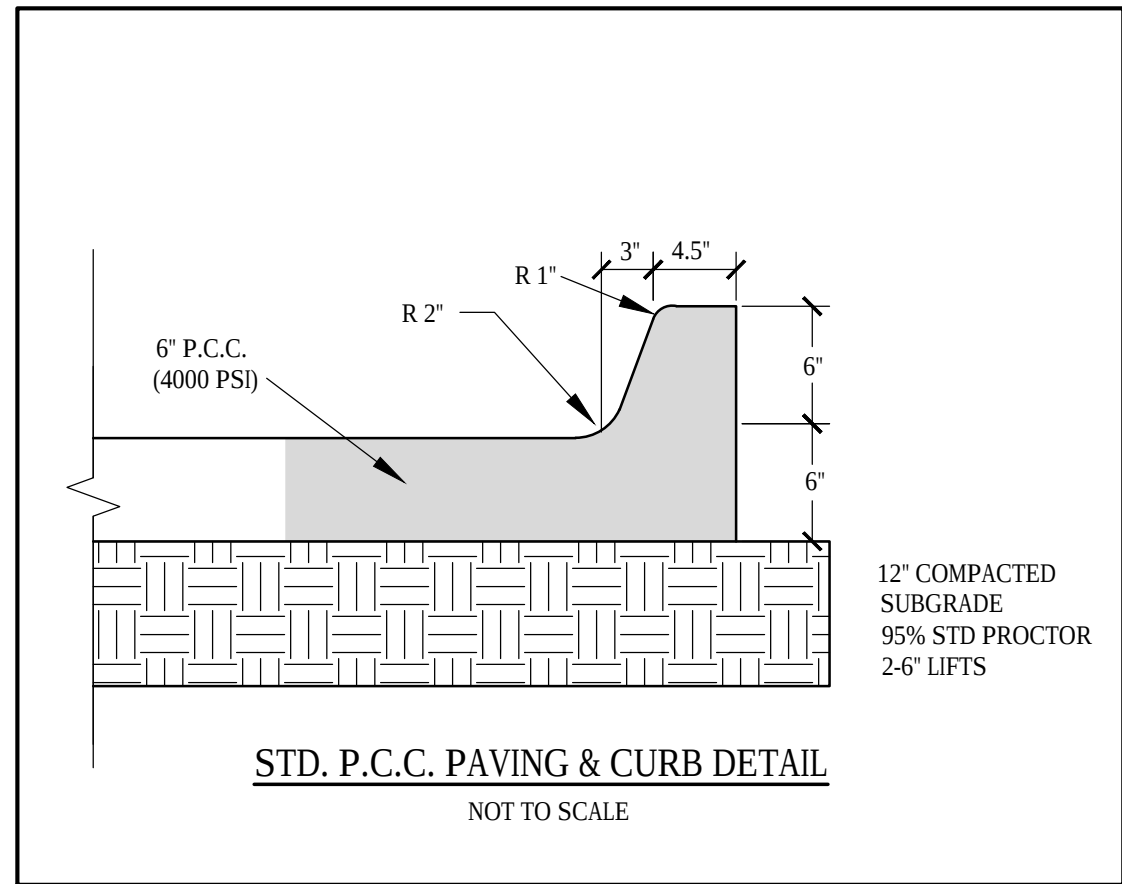
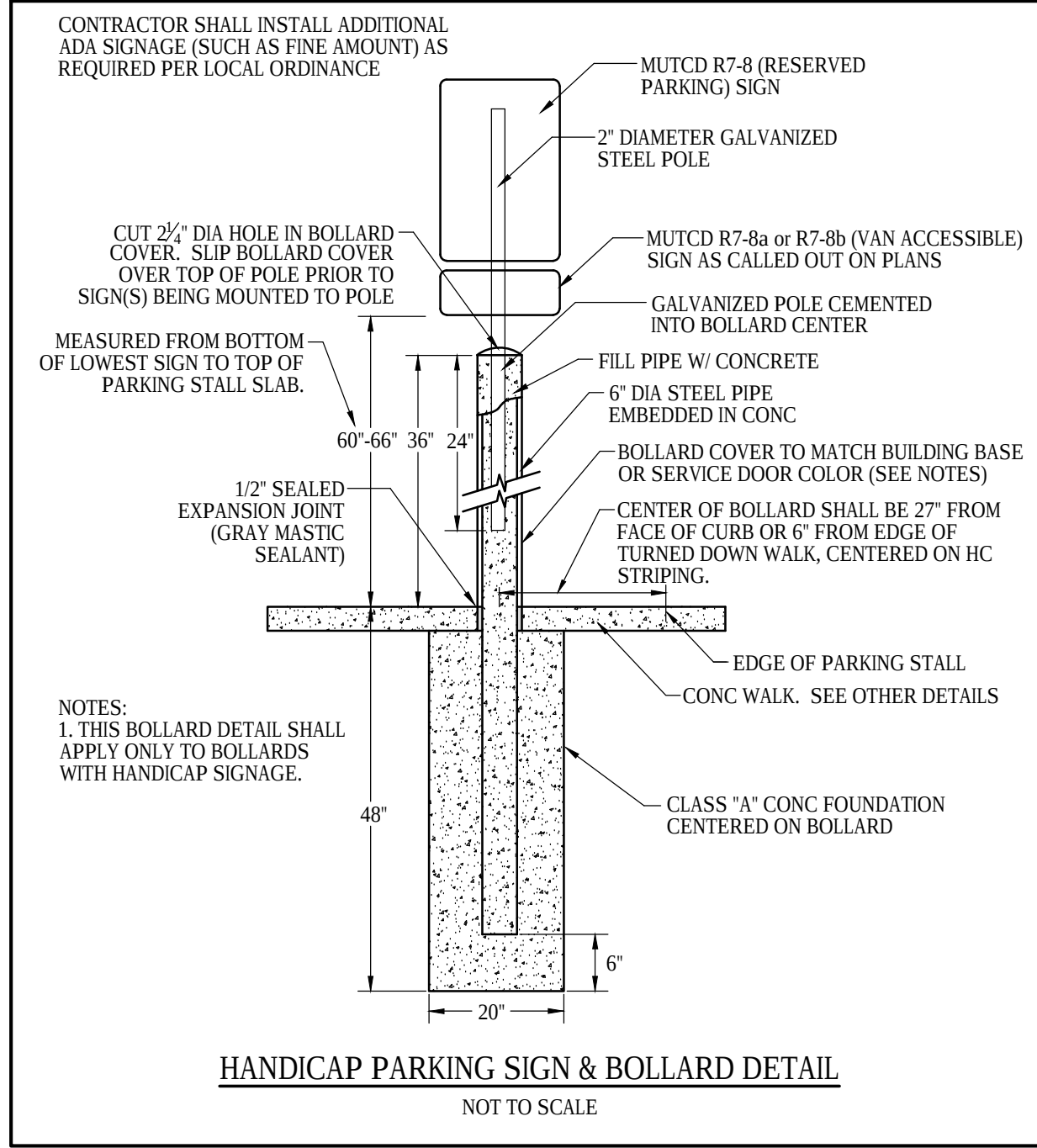
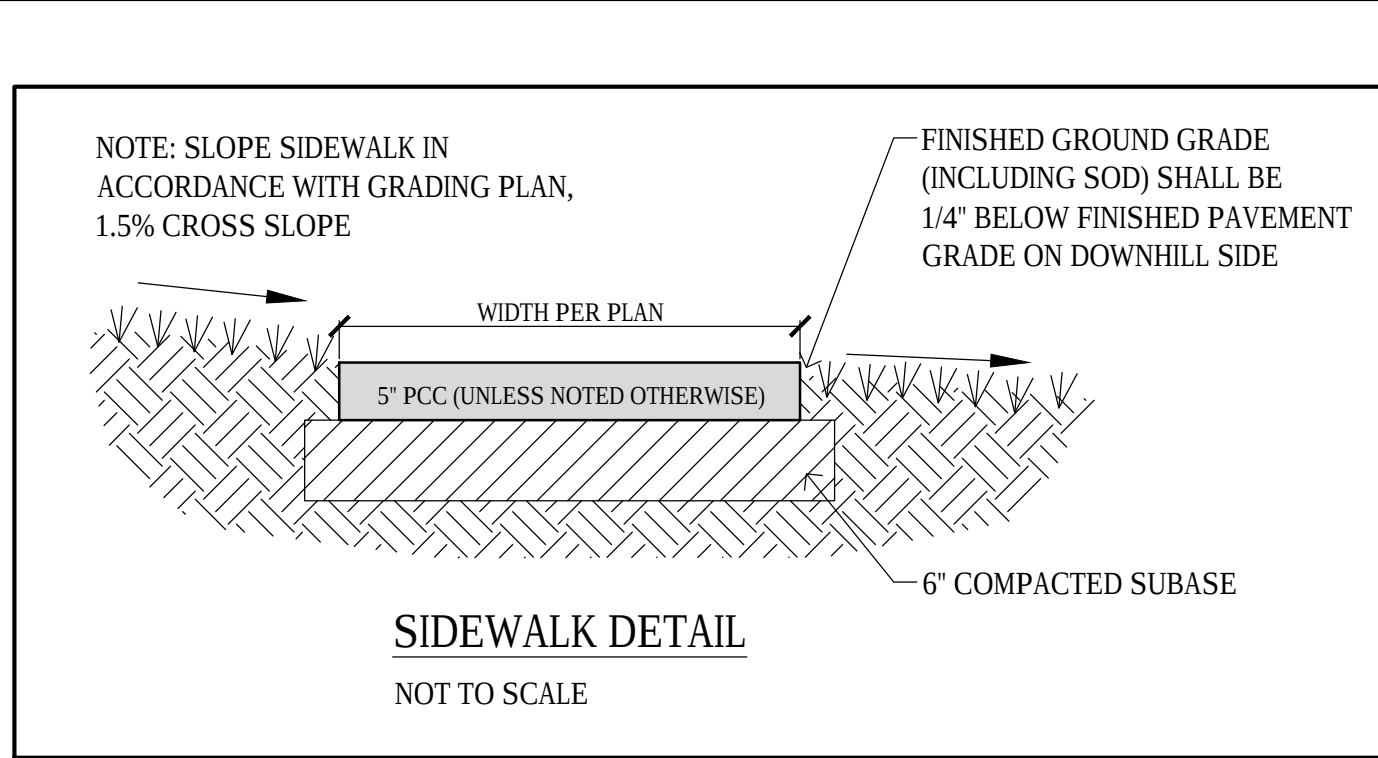
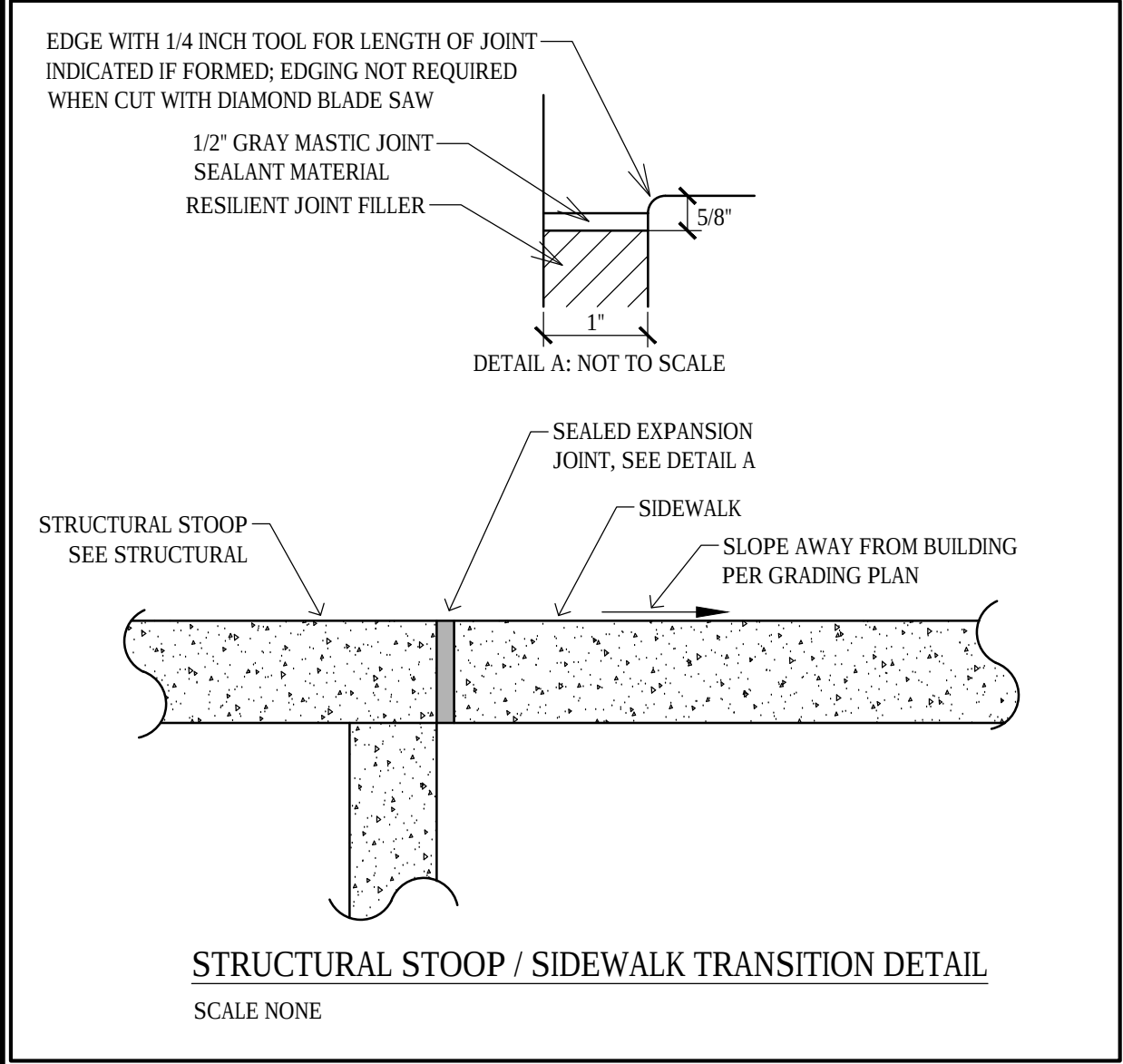
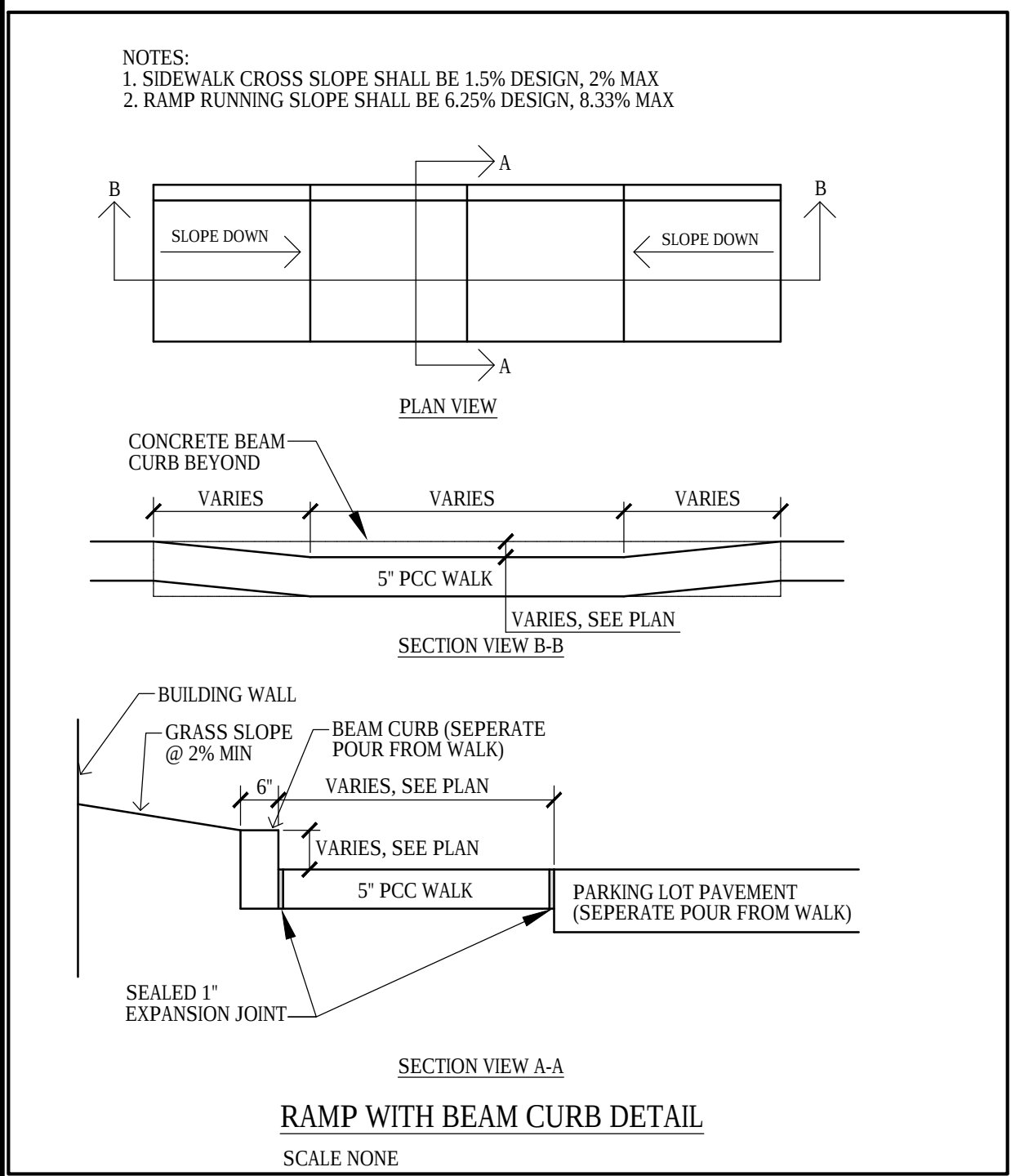
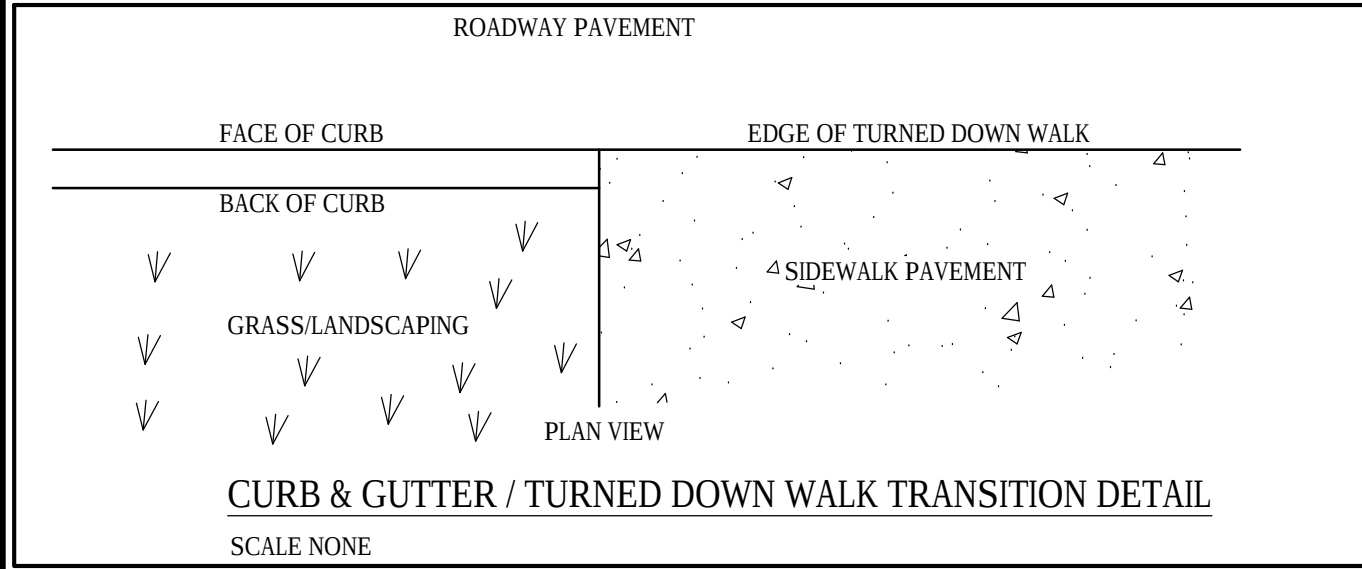
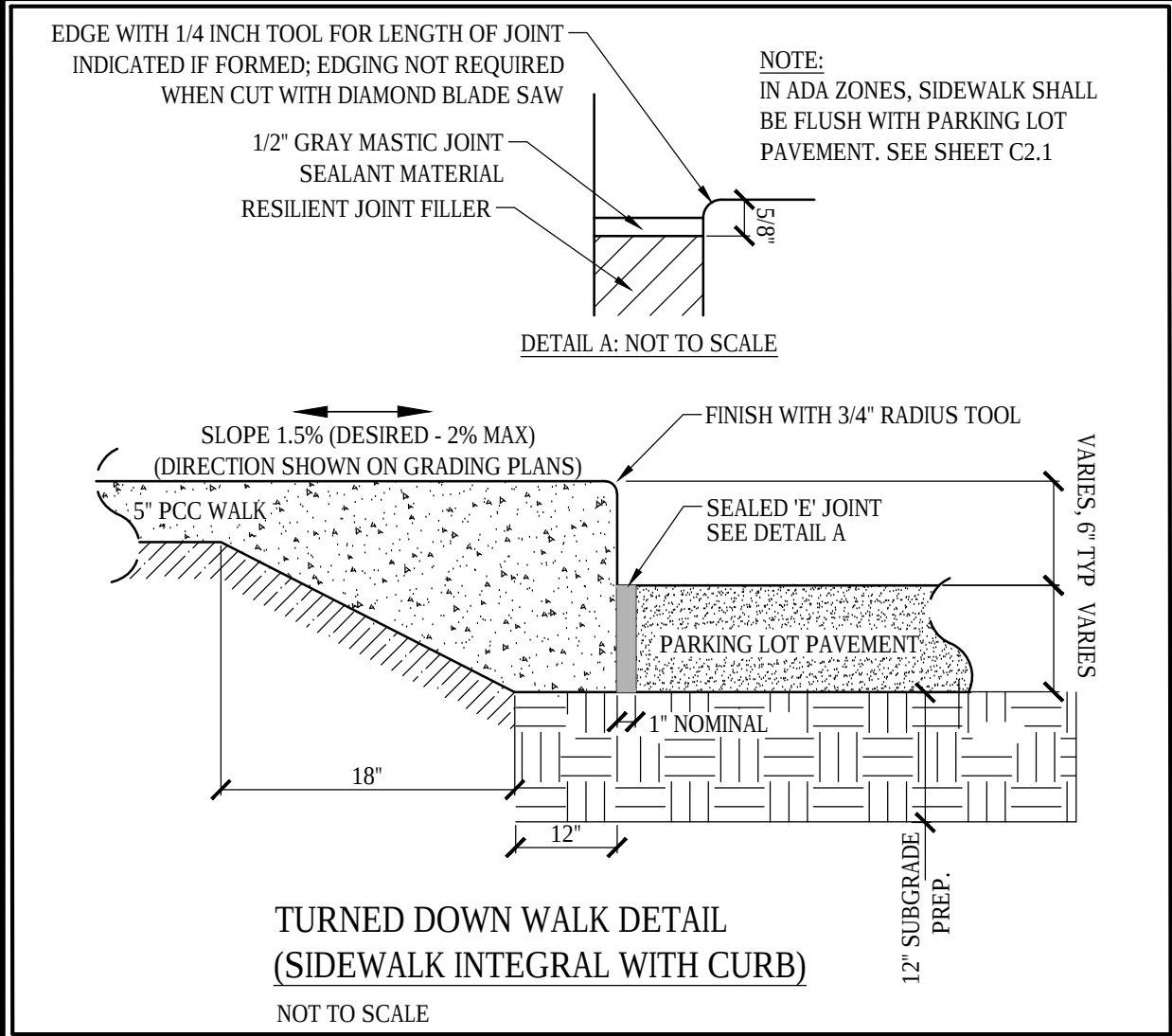
PROJECT NUMBER:
160387-1

SHEET NUMBER:

C5.2



MLAND PROJECTS 2016110387DWG.DWG\$ LOT 1 CG DETAILS 10/10/2019 3:23:13 PM



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160387-1

SHEET NUMBER:

C6.1

STORM WATER POLLUTION PREVENTION PLAN

PROPERTY DESCRIPTION:

LOT 1, LEGACY PARK, AN OFFICIAL PLAT IN THE CITY OF GRIMES, POLK COUNTY, IOWA.

SAID PARCEL CONTAINS 15.33 ACRES (667,782 SF).

PROPERTY SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

ADDRESS:

2105 SE 19TH STREET
GRIMES, IOWA 50111

OWNER:

ANDERSON FOUR LLC
CONTACT: W. MARK ANDERSON
3041 JUSTIN DRIVE
URBANDALE, IA 50322
PH: (515)-270-6104

ZONING:

M1-A: COMMERCIAL & LIMITED LIGHT INDUSTRIAL DISTRICT

SETBACKS:

FRONT=25 FEET
SIDE=NONE, EXCEPT ADJACENT TO R DISTRICT THEN 25 FEET
REAR=25 FEET
MAX. BUILDING HEIGHT=50 FEET

LAND USE:

TRUCKING & DISTRIBUTION FACILITY

OVERLAY DISTRICT:

HIGHWAY 141 MIXED USE CORRIDOR ZONE 1 (LOT 1)

BENCHMARK:

BM1: NORTHEAST BURY BOLT ON HYDRANT ON EAST SIDE OF SE LITTLE BEAVER DRIVE NORTH OF SE 19TH STREET.
ELEVATION=962.83 (NAVD 88 DATUM)

BM2: NORTHWEST BURY BOLT ON HYDRANT AT NORTHWEST QUADRANT OF SE 19TH STREET & SE GATEWAY DRIVE.
ELEVATION=955.14 (NAVD 88 DATUM)

EROSION CONTROL NOTES:

- SEE SUPPLEMENTAL DETAIL STORM WATER POLLUTION PLAN NARRATIVE FOR ALL EROSION CONTROL MEASURES, ADDITIONAL DETAILS AND NOTE. ADDITIONAL NOTES AND MEASURES IN NARRATIVE SHALL BE CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE ORIGINAL BID.
- SWPPP PLAN AND NARRATIVE ARE CONSIDERED A LIVING DOCUMENT AND WILL NEED PERIODIC UPDATES AND ADJUSTMENTS AS NECESSARY DEPENDING ON SITE CONDITIONS TO ASSURE COMPLIANCE WITH NPDES GENERAL PERMIT NO. 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UPDATE THE SWPPP AND IMPLEMENT ANY AND ALL MEASURES NECESSARY TO COMPLY WITH SAID PERMIT NO. 2.
- INSTALL PERIMETER SILT FENCE AS SHOWN ON PLANS PRIOR TO CONSTRUCTION.
- INSTALL INTAKE PROTECTION WITH SILT FENCE IMMEDIATELY AFTER STORM SEWER CONSTRUCTION.
- INSTALL FINISHED PAVING INLET PROTECTION IMMEDIATELY AFTER PAVING IS COMPLETED AROUND INTAKE.
- OTHER EROSION CONTROL TYPES MAY NOT BE SUBSTITUTED FOR SILT FENCE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A CONCRETE WASHOUT IN ACCORDANCE WITH NPDES GENERAL PERMIT NO. 2 DURING ALL CONCRETE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING TEMPORARY RESTROOM FACILITIES. SANITARY WASTE SHALL BE DISPOSED OF PER ALL FEDERAL, STATE AND LOCAL REGULATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.
- WITH THE AMOUNT OF SAWCUTTING TAKING PLACE ON SE 19TH STREET CONTRACTOR WILL BE REQUIRED TO PICK UP AND AND COLLECT THE SAWCUTTING DUST OR SLURRY CREATED DURING THE CUTTING PROCESS.
- ALL AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH CITY OF GRIMES STANDARD SPECIFICATIONS AND THE CURRENT VERSION OF SUDAS.
- REFER TO THE LANDSCAPE PLAN FOR PROPOSED SEED TYPES.

TOPSOIL NOTES:

- STRIP AND STOCKPILE THE TOPSOIL ON ALL DISTURBED AREAS.
- RESPREAD TOPSOIL IN COMPLIANCE WITH SUDAS SECTION 2010 ON ALL GREEN (NON-PAVED) AREAS.
- TOPSOIL SHALL BE FREE OF ALL ROCK AND DEBRIS LARGER THAN 3/4" IN SIZE.
- TOPSOIL IS DEFINED AS: FERTILE, FRIABLE LOAM, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FROM WELL DRAINED SITE FREE FROM FLOODING, NOT IN FROZEN OR MUDDY CONDITIONS; REASONABLE FREE FROM SUBSOIL, CLAY LUMPS, ROOTS, GRASS, WEEDS, STONES LARGER THAN 3/4 INCH IN DIAMETER, AND FOREIGN MATTER; ACIDITY RANGE (PH) OF 5.5 TO 7.5; CONTAINING MINIMUM 4 PERCENT AND MAXIMUM 30 PERCENT ORGANIC MATTER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF NPDES GENERAL PERMIT NO. 2 ARE MET.

EROSION CONTROL REMOVAL NOTES:

- AFTER FINAL STABILIZATION HAS OCCURED, AS DEFINED IN NPDES GENERAL PERMIT NO. 2, CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO: SILT FENCE, INLET PROTECTION, AND TEMPORARY STANDPIPES.

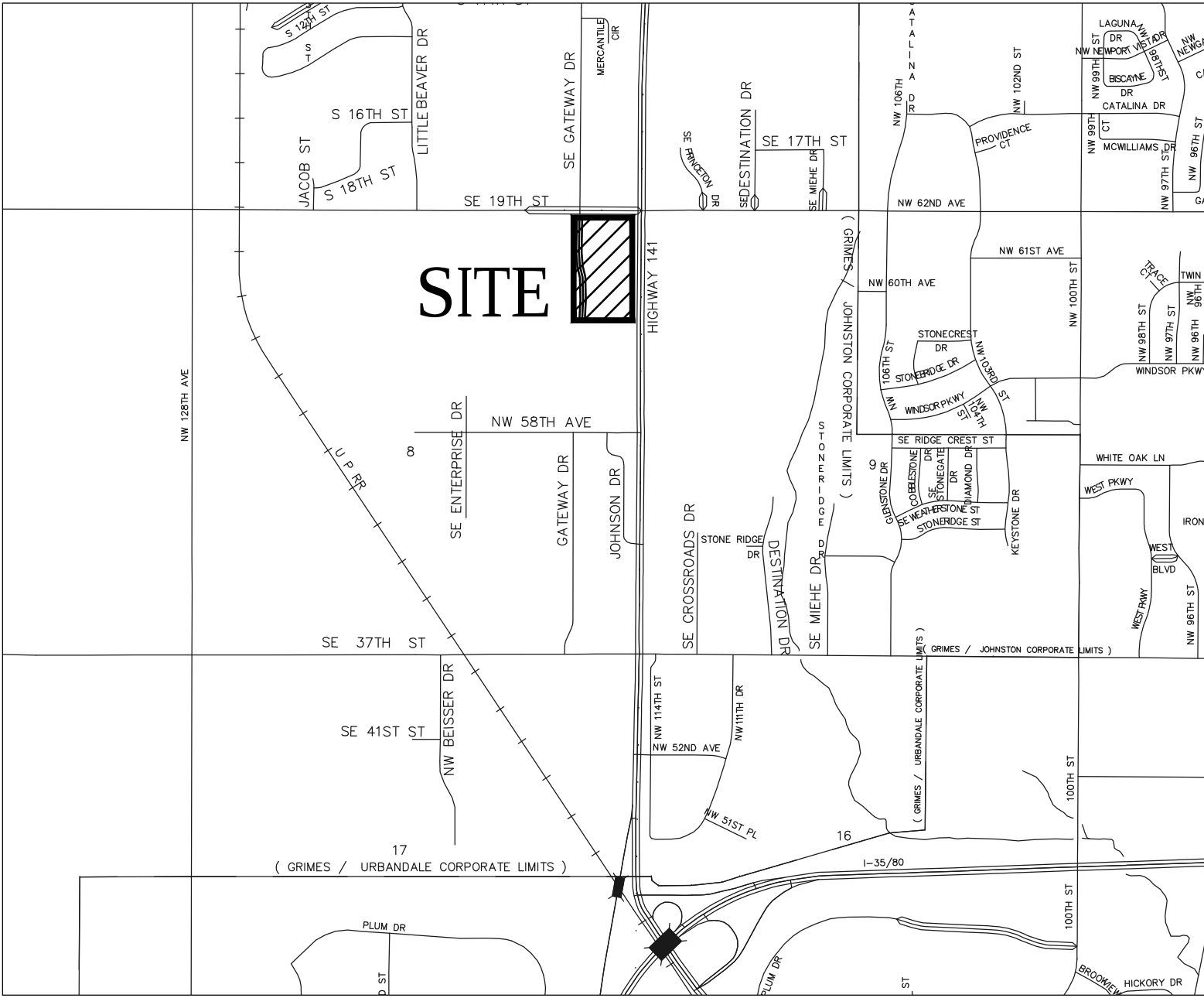
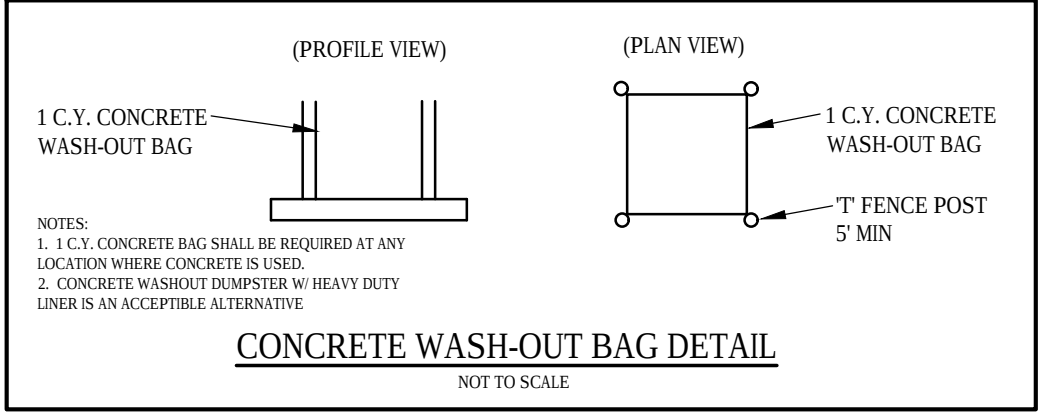
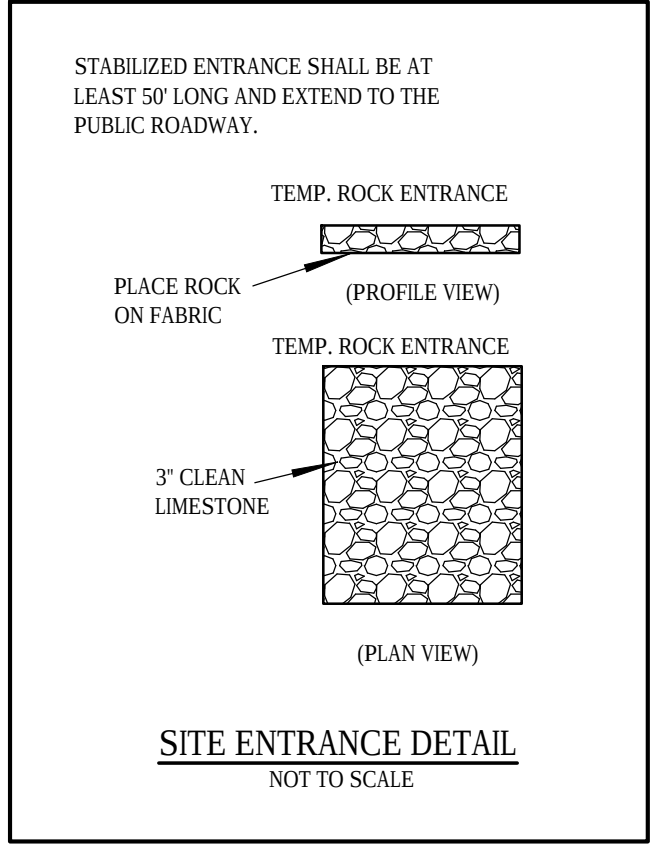
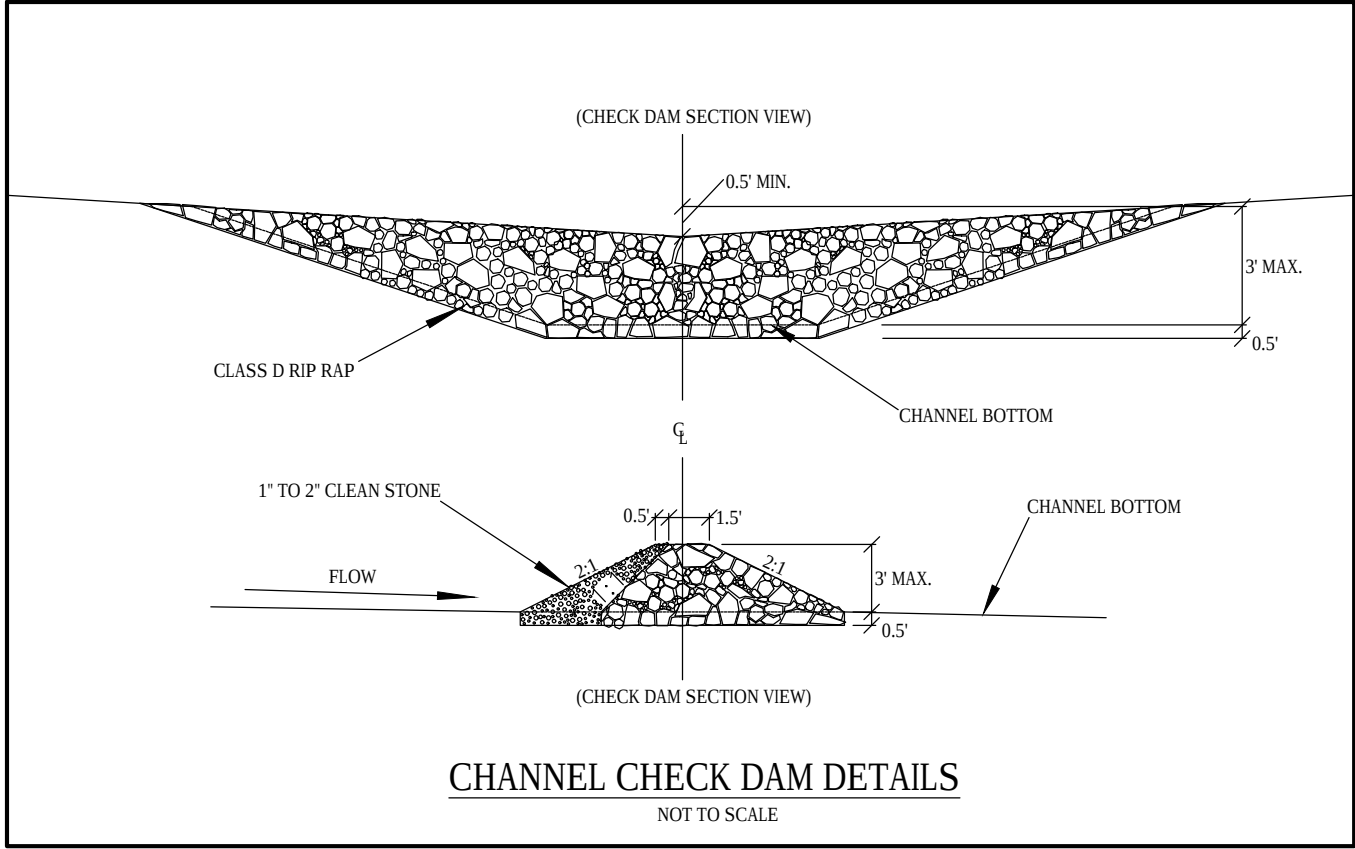
SWPPP LEGEND:

- SF SF SILT FENCE (TYP)
120 EXISTING CONTOUR
120 PROPOSED CONTOUR
STABILIZED ENTRANCE 30'X90'-6"
DEEP 2" CLEAN CRUSHED ROCK
DRIVE ON GEOTEXTILE



UTILITY NOTE:

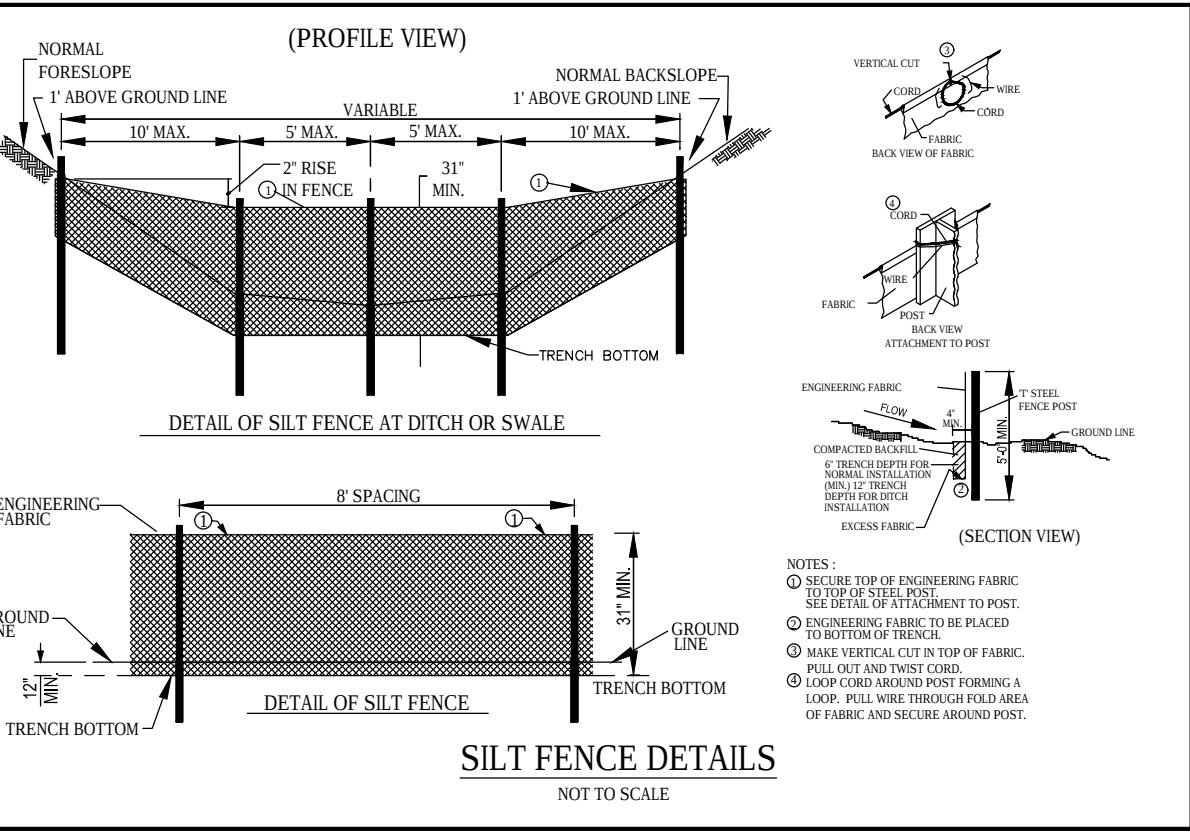
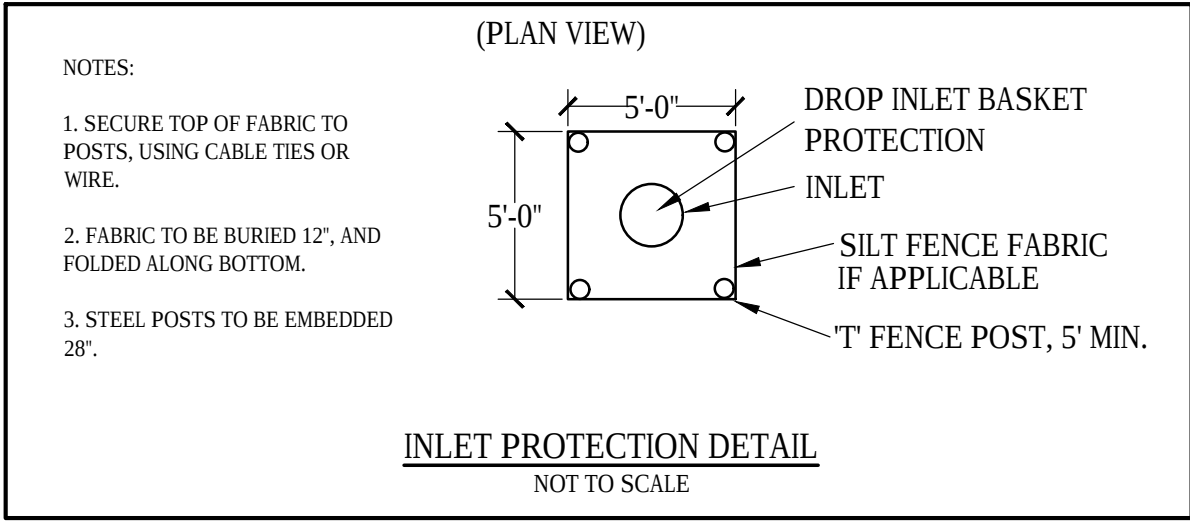
THE LOCATION OF THE UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS AND ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS OF ALL UTILITIES MUST BE ASCERTAINED IN THE FIELD. IT SHALL BE THE DUTY OF THE CONTRACTOR TO DETERMINE WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.



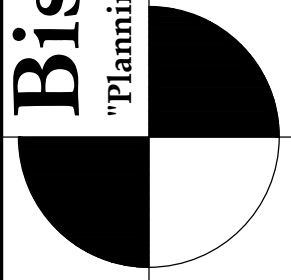
VICINITY MAP
NOT TO SCALE

LEGEND:

- 120 EXISTING CONTOUR
120 PROPOSED CONTOUR
SF SILT FENCE
SAN SANITARY SEWER
ST STORM SEWER
W WATER LINE
G GAS LINE
U/E UNDERGROUND ELECTRIC
O/E OVERHEAD ELECTRIC
TELE TELEPHONE LINE
F/O FIBER OPTIC
CATV CABLE TV
SM STORM MANHOLE
CI CURB INTAKE
SI SURFACE INTAKE
FES FLARED END SECTION
SM SANITARY MANHOLE
C CLEANOUT
FH FIRE HYDRANT
SP SPRINKLER
ICV IRRIGATION CONTROL VALVE
WM WATER MANHOLE
WELL
WV WATER VALVE
WSO WATER SHUT OFF
YH YARD HYDRANT
EM ELECTRIC MANHOLE
EM ELECTRIC METER
ER ELECTRIC RISER
EV ELECTRIC VAULT
PP POWER POLE
TP TRANSFORMER POLE
LP LIGHT POLE
EJB ELECTRIC JUNCTION BOX
EP ELECTRIC PANEL
TR TRANSFORMER
GL GROUND LIGHT
GW GUY WIRE
EH ELECTRIC HANDHOLE
GM GAS METER
GV GAS VALVE
ACU AIR CONDITIONING UNIT
TR TELEPHONE RISER
TV TELEPHONE VAULT
TM TELEPHONE MANHOLE
TSM TRAFFIC SIGNAL MANHOLE
FOR FIBER OPTIC RISER
FOF FIBER OPTIC FAULT
CTR CABLE TV RISER
S SIGN



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Established 1959
Civil Engineering & Land Surveying

LOT 1 LEGACY PARK
GRIMES, IOWA

SWPPP

REFERENCE NUMBER:

DRAWN BY:
BK & CJ

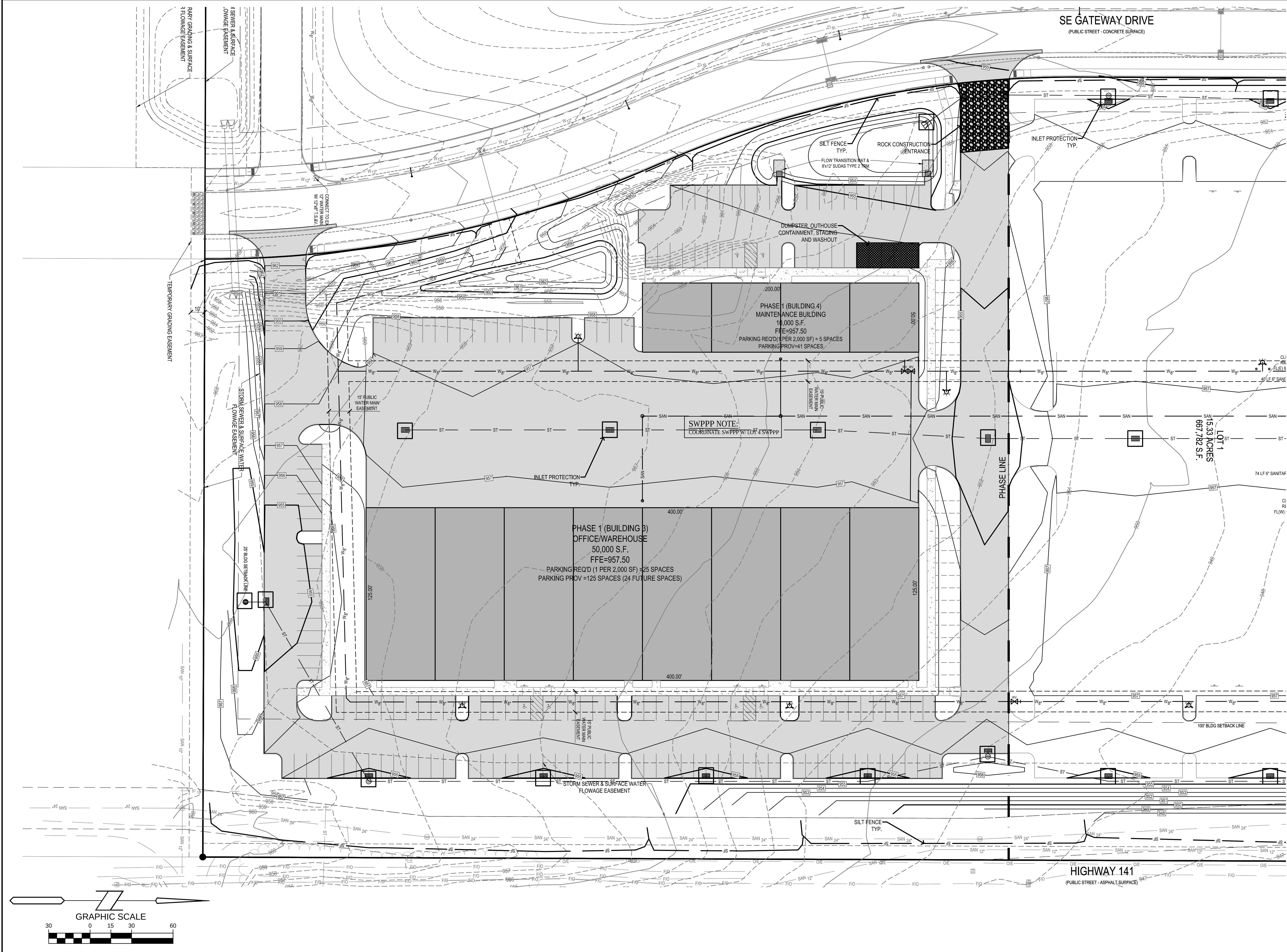
CHECKED BY:
CJB

REVISION DATE:
10/10/19 CITY #1
11/11/19 CITY #2
11/25/19 CITY #3

PROJECT NUMBER:
160387-1

SHEET NUMBER:

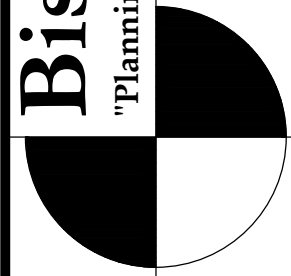
C7.1



LOT 1 LEGACY PARK
GRIMES, IOWA

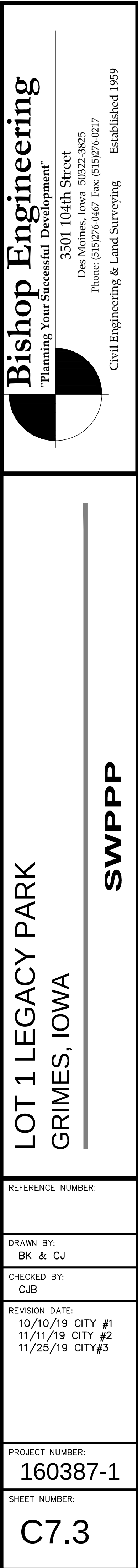
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PROJECT NUMBER: 160387-1
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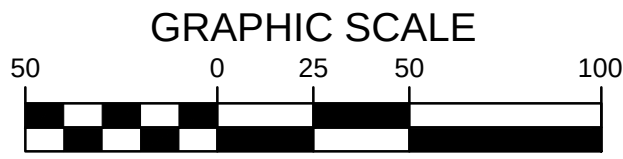
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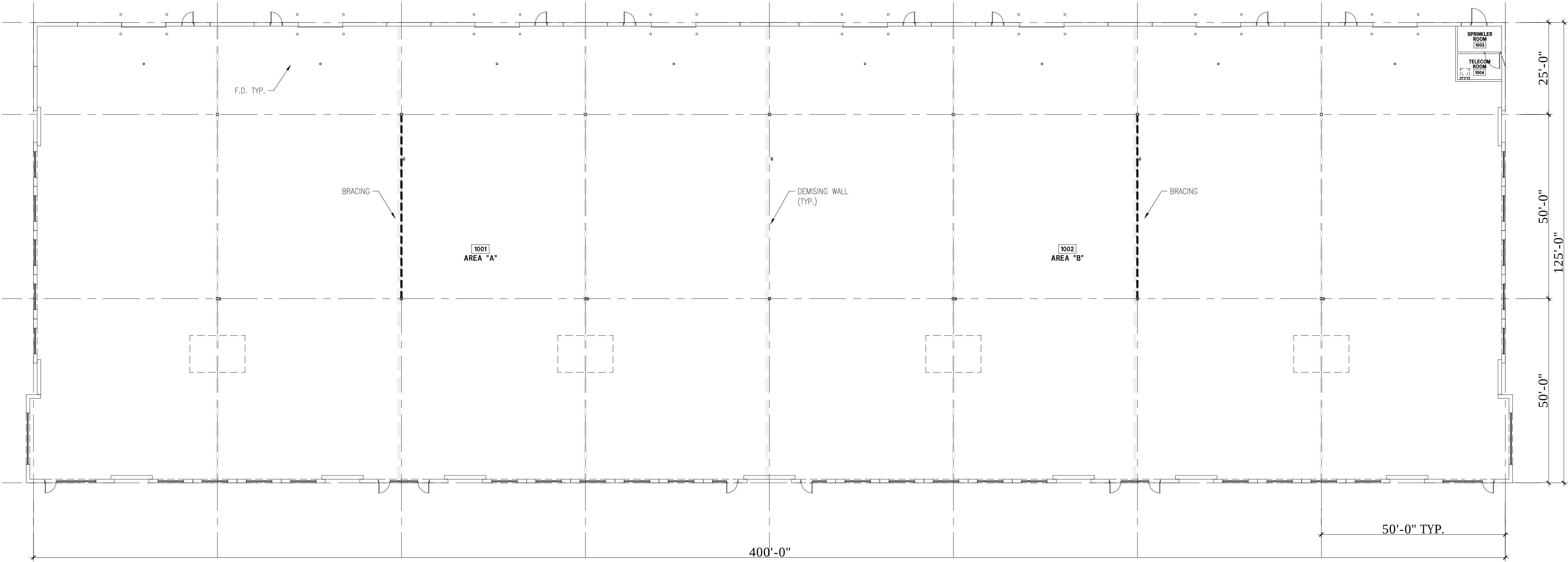
SWPPP



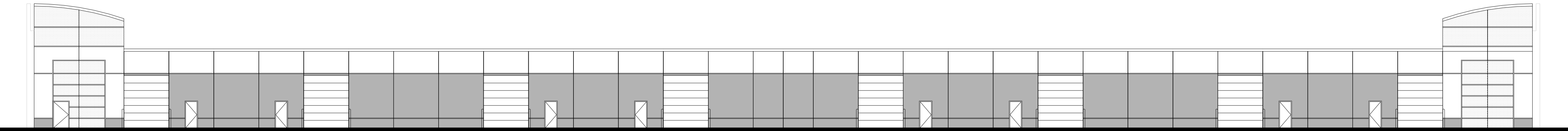
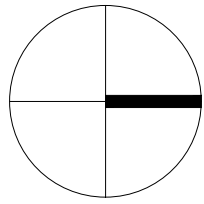
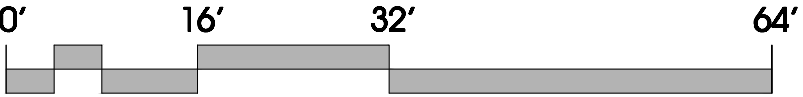


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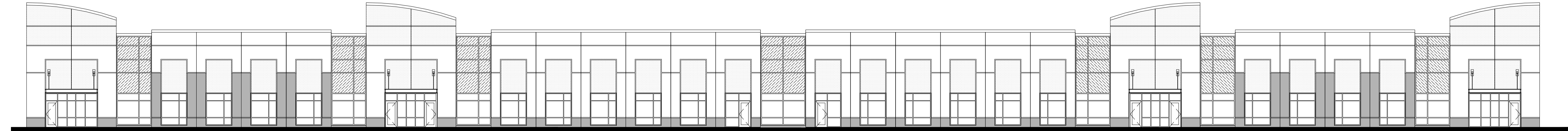
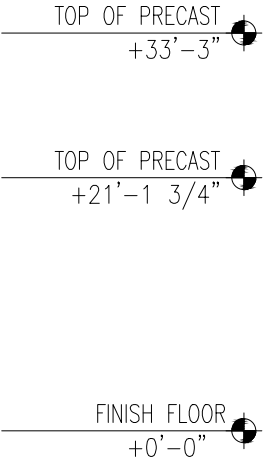
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C7.4



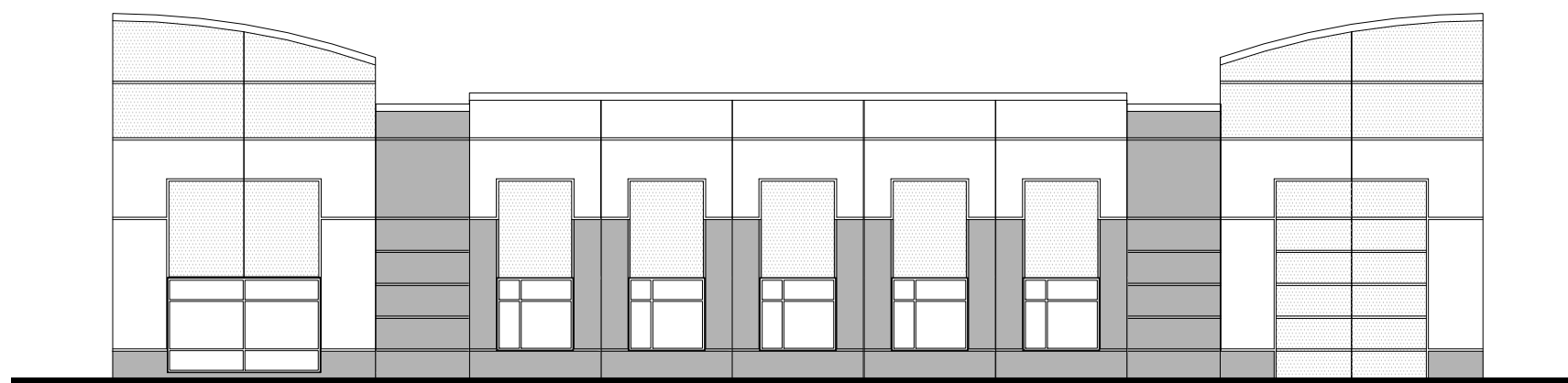
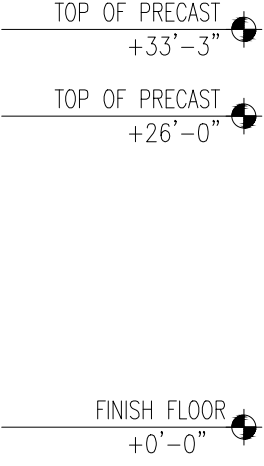
Floor Plan



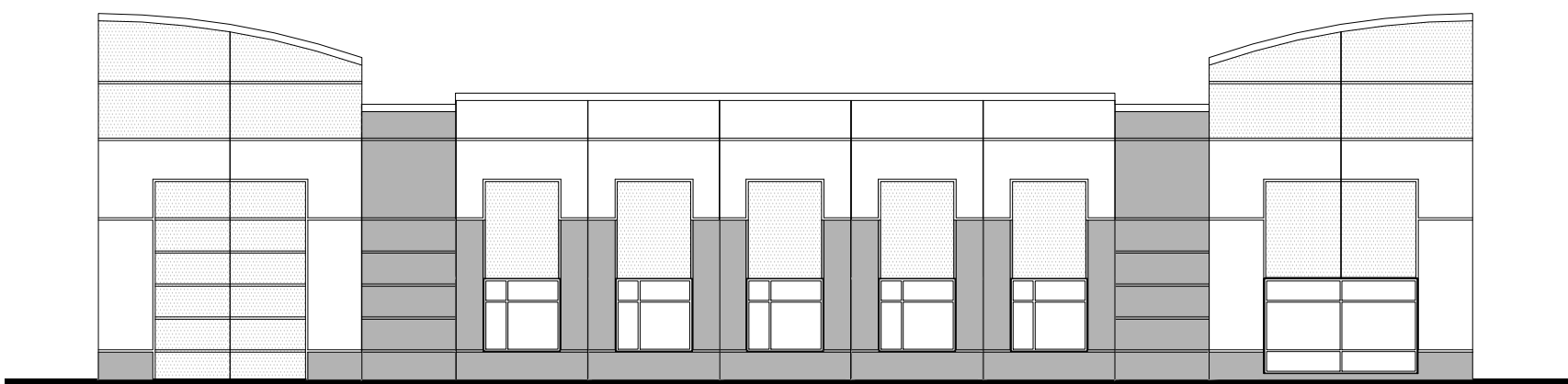
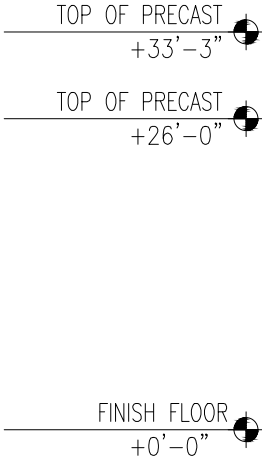
West Elevation



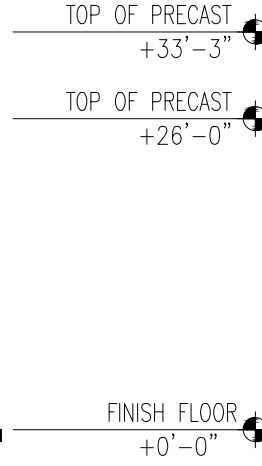
East Elevation



North Elevation



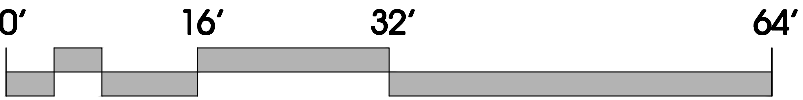
South Elevation

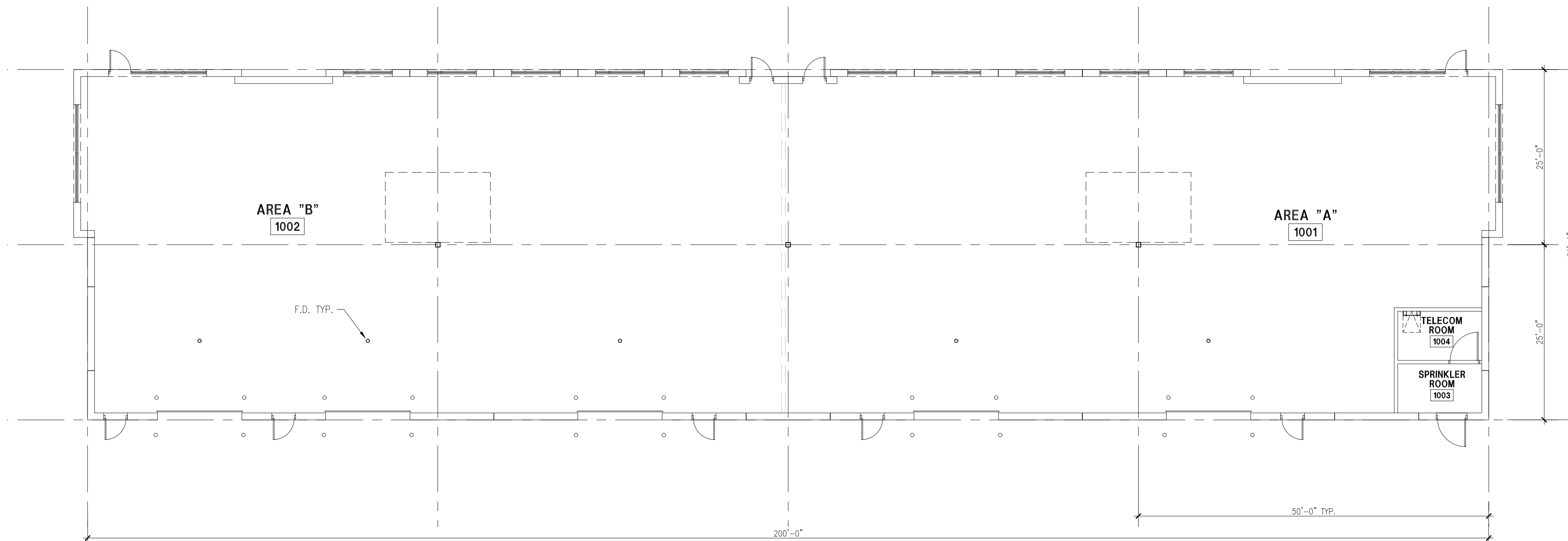


GROUND FLOOR FRONTAGE GLAZING (EAST WALL)

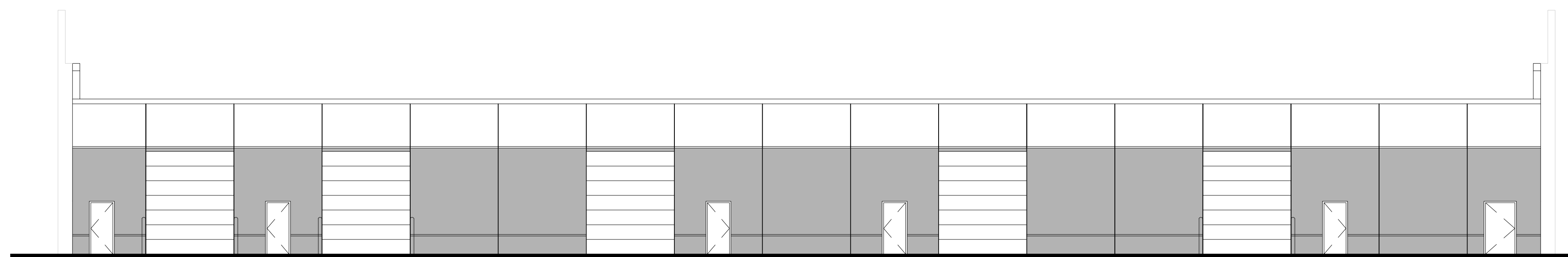
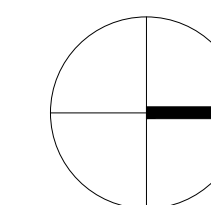
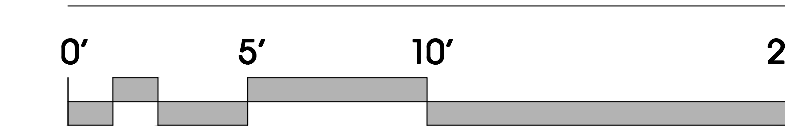
AREA OF WALLS	11,002 SF	
TOTAL AREA OF WINDOWS / DOORS	3,334 SF	30.3% OF WALL

Exterior Elevations





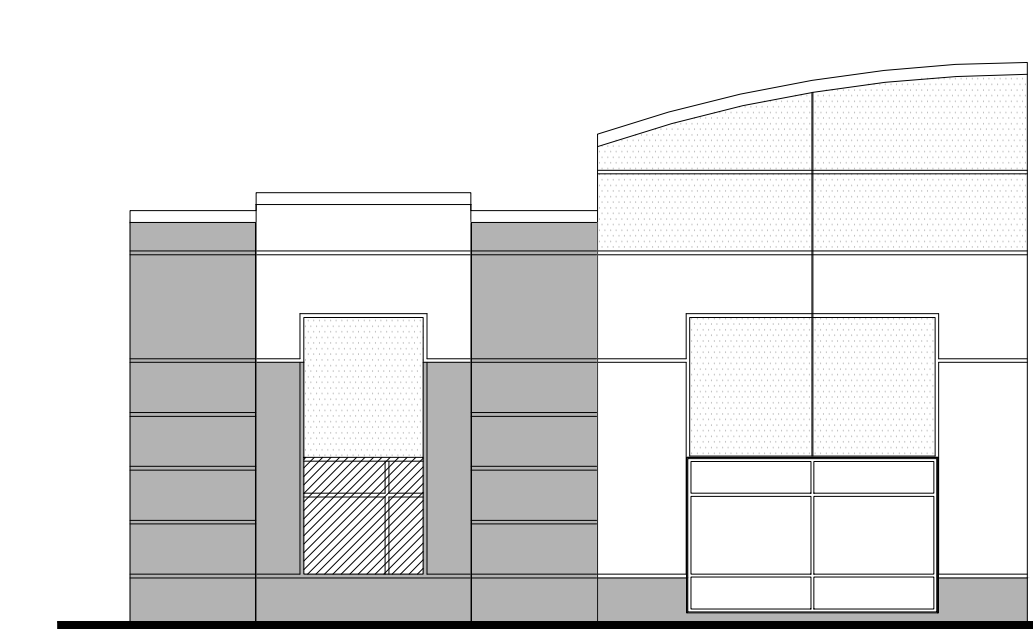
Floor Plan



East Elevation

TOP OF PRECAST
+21'-1 3/4"

FINISH FLOOR
+0'-0"

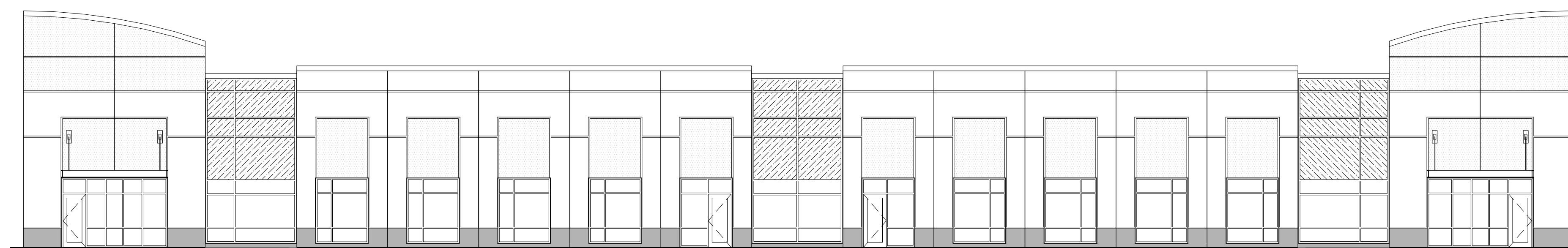


North Elevation

TOP OF PRECAST
+31'-2"

TOP OF PRECAST
+23'-11"

FINISH FLOOR
+0'-0"

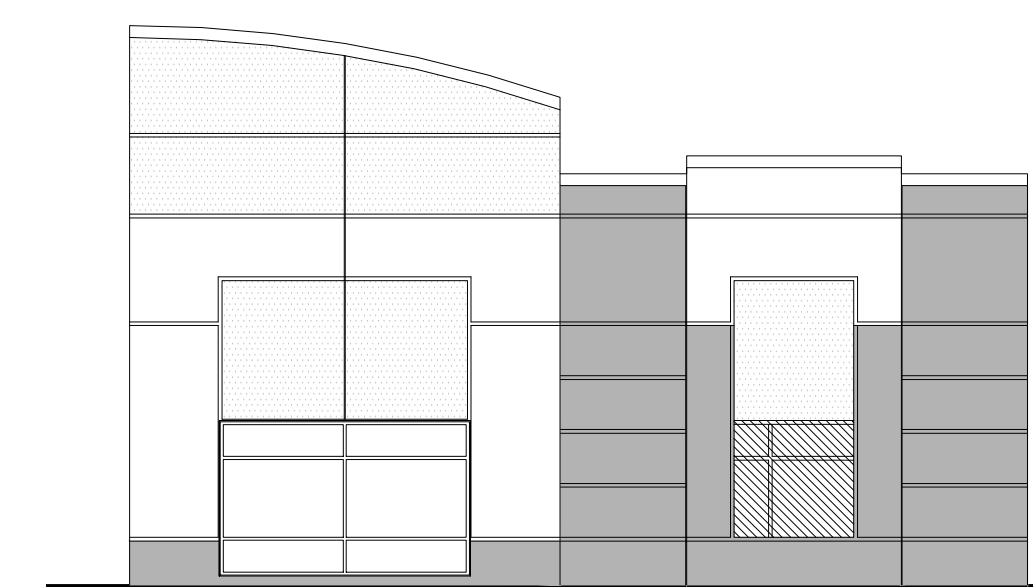


West Elevation

TOP OF PRECAST
+31'-2"

TOP OF PRECAST
+23'-11"

FINISH FLOOR
+0'-0"



South Elevation

TOP OF PRECAST
+31'-2"

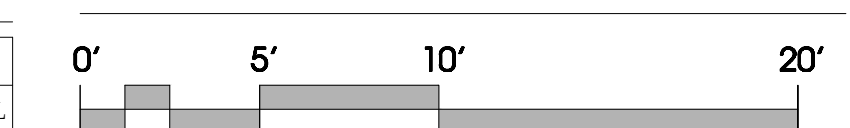
TOP OF PRECAST
+23'-11"

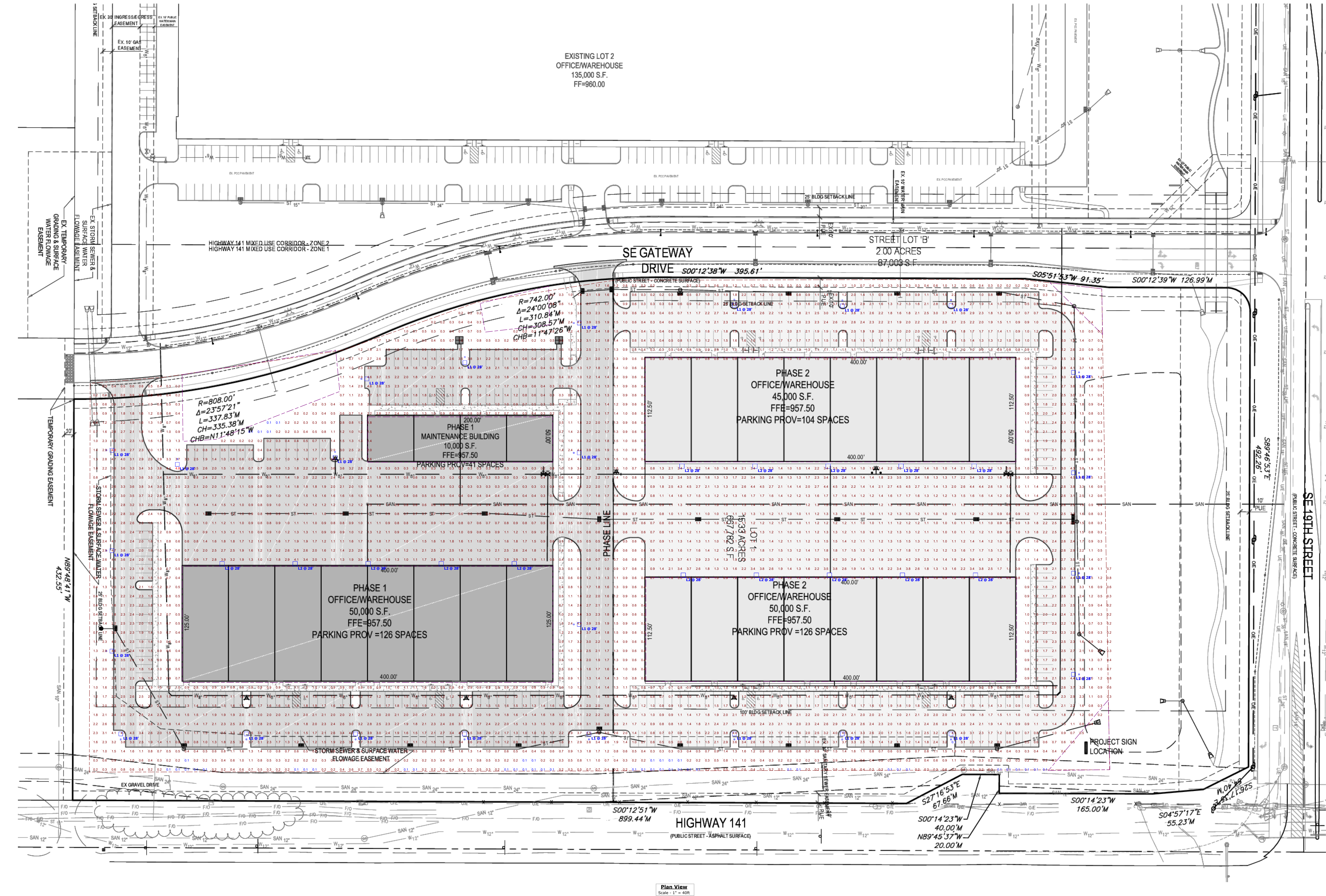
FINISH FLOOR
+0'-0"

GROUND FLOOR FRONTAGE GLAZING (WEST WALL)

AREA OF WALLS	5,127 SF
TOTAL AREA OF WINDOWS / DOORS	1,643 SF 32.1% OF WALL

Exterior Elevations





Schedule									
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp
	L1	25	Lithonia Lighting	RSX2 LED P3 40K R3	RSX Area Fixture Size 2 P3 Lum Package 4000K CCT Type R3 Distribution		1	RSX2_LED_P3_40K_R3.ies	21736
	L2	15	Lithonia Lighting	TWR2 LED ALO 40K #8 setting	SML707-12 4000K		1	TWR2_LED_ALO_40K_#8_setting.ies	11771

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Cak Zone #1	+	1.5 f/c	4.8 f/c	0.1 f/c	48.0:3	15.0:1

Note
1. CALCULATIONS ARE NOT A GUARANTEE OF PERFORMANCE. ACTUAL LIGHT LEVELS MAY VARY. DRAWINGS ARE FOR REFERENCE ONLY.



RSX2 LED

Area Luminaire

Catalog
Number

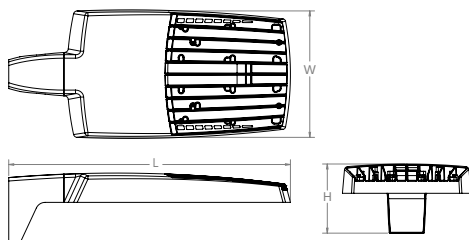
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft²@0°):	0.69 ft² (0.06 m²)
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight (max):	39.0 lbs (17.7 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD

RSX2 LED					
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1 P2 P3 P4 P5 P6	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide R5S Type 5 Short AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) 1 HVOLT (347V-480V) 2 (use specific voltage for options as noted) 120 3 277 3 208 3 347 3 240 3 480 3	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) 4 WBA Wall bracket WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting 4 AARP Adjustable tilt arm round pole mounting 4 AAWB Adjustable tilt arm with wall bracket 4 AAWSC Adjustable tilt arm wall bracket and surface conduit box 4

Options			Finish
Shipped Installed HS House-side shield 5 PE Photocontrol, button style 6,7 PEX Photocontrol external threaded, adjustable 7,8 PER7 Seven-wire twist-lock receptacle only (no controls) 7,9,10,11 CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) 3 DF Double fuse (208, 240, 480) 3 SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output 7,11 DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) 7,11 DS Dual switching 7,11			DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White
Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 11,12,13 PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) 11,13,14 *Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield 5 EGFV External glare full visor (360° around light aperture) 5 BS Bird spikes 15			



Ordering Information

Accessories

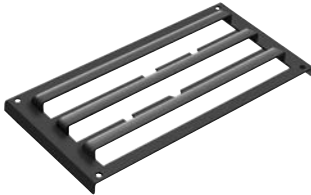
Ordered and shipped separately.

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glares hield (specify finish)
RSX2HSAFRR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish)
RSXSGB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) ¹⁶
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) ¹⁶
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) ¹⁶
DSHORT SBK U	Shorting cap ¹⁶

NOTES

- 1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 2 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- 3 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- 4 Maximum tilt is 90° above horizontal.
- 5 It may be ordered as an accessory.
- 6 Requires MVOLT or 347V.
- 7 Not available in combination with other light sensing control options (following options cannot be combined: PÉ, PEX, PÉ7, FAO, DMG, PIRHN).
- 8 Requires 120V, 208V, 240V, 277V or 347V.
- 9 Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- 10 For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- 11 Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN.
- 12 Must be ordered with PIRHN.
- 13 Requires MVOLT or HVOLT.
- 14 Must be ordered with NLTAIR2. For additional information on PIRHN visit [here](#).
- 15 Must be ordered with fixture for factory pre-drilling.
- 16 Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield



External Glare Shield

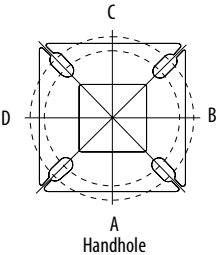


External 360 Full Visor

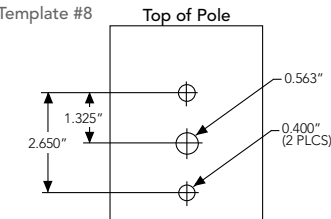
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

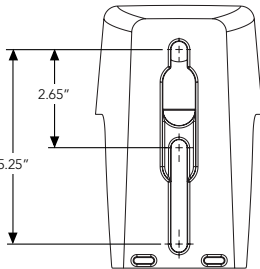
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX2 - Luminaire EPA

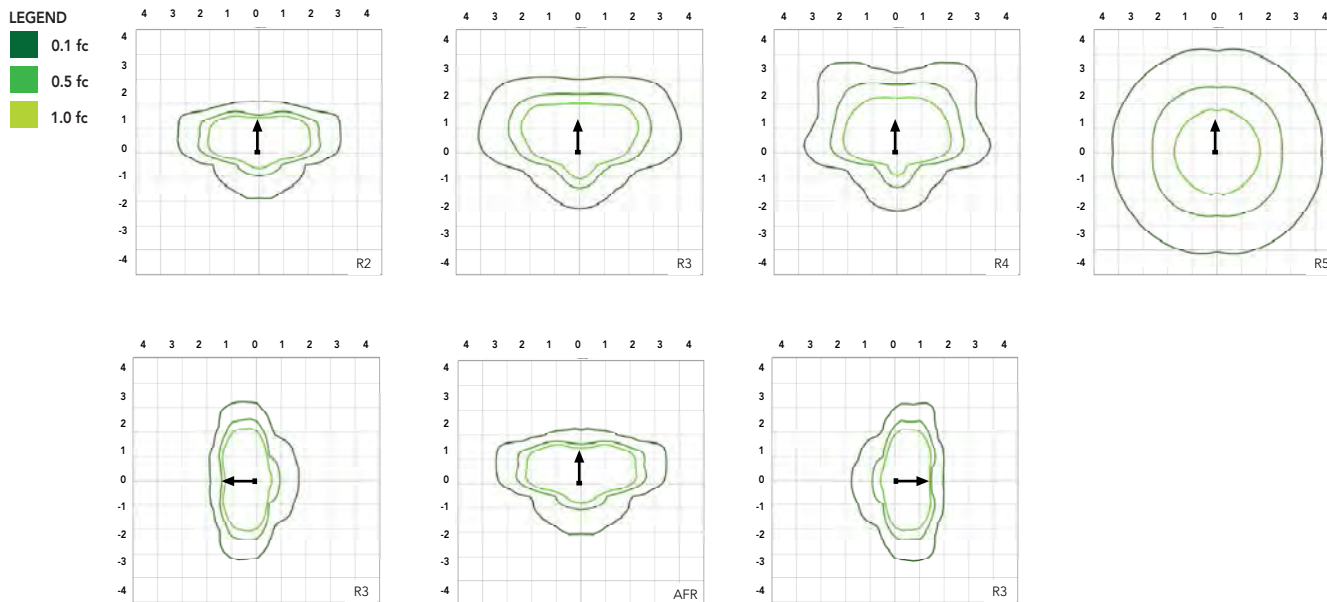
*Includes Luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Performance Data

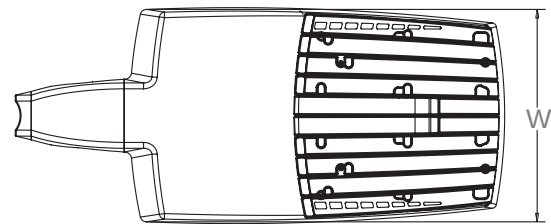
Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

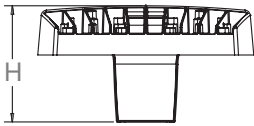
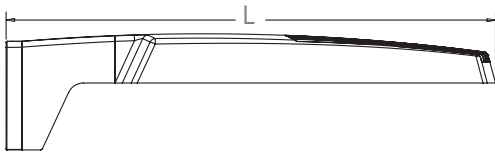
Performance Package	System Watts	Distribution. Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R3S	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R4S	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R5S	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R3S	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R4S	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R5S	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R3S	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R4S	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R5S	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R3S	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R4S	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R5S	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R3S	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R4S	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R5S	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R3S	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R4S	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R5S	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

Dimensions

RSX2 with Round Pole Adapter (RPA)



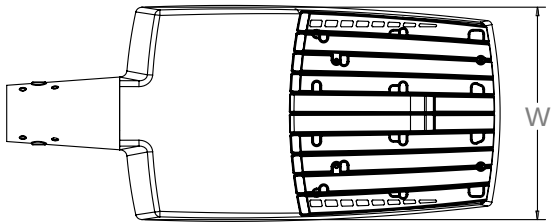
Length: 30.3" (77.0 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.3 cm) Arm



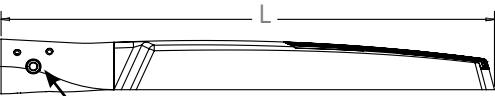
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX2 with Mast Arm Adapter (MA)

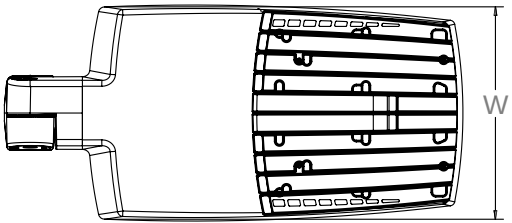


Length: 30.6" (77.7 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm

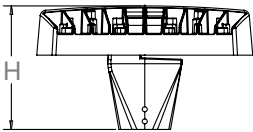
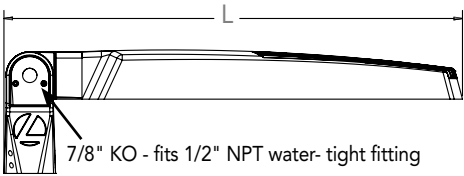


7/16" locking thru bolt/nut provided

RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water- tight fitting



FEATURES & SPECIFICATIONS

INTENDED USE — ThesespecificationsareforUSAstandardsonly.CheckwithfactoryforCanadian specifications. Square Straight Steel is a general purpose light pole for up to 39-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION — **Pole Shaft:** The pole shaft is of uniform dimension and wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 55 KSI (11-gauge, .1196"), or 50 KSI (7-gauge, .1793"). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5" and 6".

Pole Top: A flush non-metallic black top cap is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with PT option.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

Base Cover: A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

Anchor Base/ Bolts: Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

HARDWARE — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

FINISH — Extra durable standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

WARRANTY — 1-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Catalog Number
Notes
Type



Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

SSS Square Straight Steel Poles

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: SSS 20 5C DM19 DDB

SSS						
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness ¹	Mounting ²		Options	Finish ¹⁰
SSS	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) <u>KAC/KAD/KSE/KSF/KVR/KVE Drill mounting³</u> DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° <u>CSX/DSX/R SX/AERIS™/OMERO™/HLA/KAX Drill mounting³</u> DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° <u>RAD drill mounting³</u> DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM32RAD 3 at 120° DM39RAD 3 at 90° DM49RAD 4 at 90°	AERIS™ Suspend drill mounting ^{3,4} DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° <u>OMERO™ Suspend drill mounting^{3,4}</u> DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed L/AB Less anchor bolts (Include when anchor bolts are not needed) VD Vibration damper TP Tamper resistant handhole cover fasteners HAXy Horizontal arm bracket (1 fixture) ^{5,6} FDLxy Festoon outlet less electrical ⁵ CPL12/xy 1/2" coupling ⁵ CPL34/xy 3/4" coupling ⁵ CPL1/xy 1" coupling ⁵ NPL12/xy 1/2" threaded nipple ⁵ NPL34/xy 3/4" threaded nipple ⁵ NPL1/xy 1" threaded nipple ⁵ EHHxy Extra handhole ^{5,7} MAEX Match existing ⁸ USPOM United States point of manufacture ⁹ IC Interior coating ¹⁰ UL UL listed with label (Includes NEC compliant cover) NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) <u>Shipped separately (replacement kit available)</u> (blank) FBC Full base cover (plastic) (blank) TC Top cap (blank) HHC Handhole cover	Standard colors DDBXD Dark bronze DWHXD White DBLXD Black DMBXD Medium bronze DNAXD Natural aluminum Classic colors DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue Architectural Colors and Special Finishes ¹¹ Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:

- Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
- PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
- Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
- Insert "1" or "2" to designate fixture size; e.g. DM19AST2.

- Specify location and orientation when ordering option.
For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
Example: 5ft = 5 and 20ft 3in = 20-3
For "y": Specify orientation from handhole (A,B,C,D)
Refer to the Handhole Orientation diagram below.
Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
- Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAXxy. Example: HA20BD.

- Combination of tenon-top and drill mount includes extra handhole.
- Must add original order number of existing pole(s).
- Use when mill certifications are required.
- Provides enhanced corrosion resistance.
- Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

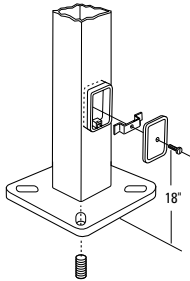
SSS 25 4C DM19AS VD DDBXD

SSS Square Straight Steel Poles

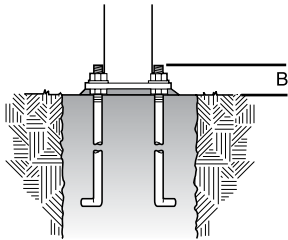
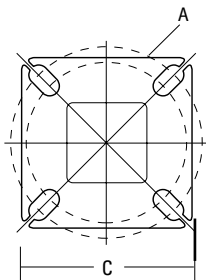
TECHNICAL INFORMATION — EPA (ft2) with 1.3 gust													
Catalog Number	Nominal Shaft Length (ft.)*	Pole Shaft Size (Base in. x Top in. x ft.)	Wall thick (in)	Gauge	EPA (ft²) with 1.3 gust						Bolt circle (in)	Bolt size (in. x in. x in.)	Approximate ship weight (lbs.)
					80 MPH	Max. weight	90 MPH	Max. weight	100 MPH	Max. weight			
SSS 10 4C	10	4.0 x 10.0	0.1196	11	30.6	765	23.8	595	18.9	473	8-9	3/4 x 18 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.1196	11	24.4	610	18.8	470	14.8	370	8-9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.1196	11	19.9	498	15.1	378	11.7	293	8-9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.1196	11	15.9	398	11.8	295	8.9	223	8-9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.1196	11	12.6	315	9.2	230	6.7	168	8-9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.1196	11	9.6	240	6.7	167	4.5	150	8-9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.1793	7	14	350	11	275	8	200	8-9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.1196	11	17.7	443	12.7	343	9.4	235	10-12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.1793	7	28.1	703	21.4	535	16.2	405	10-12	1 x 36 x 4	265
SSS 25 4C	25	4.0 x 25.0	0.1196	11	4.8	150	2.6	100	1	50	8-9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.1793	7	10.8	270	7.7	188	5.4	135	8-9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.1196	11	9.8	245	6.3	157	3.7	150	10-12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.1793	7	18.5	463	13.3	333	9.5	238	10-12	1 x 36 x 4	360
SSS 30 4G	30	4.0 x 30.0	0.1793	7	6.7	168	4.4	110	2.6	65	8-9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.1196	11	4.7	150	2	50	--	--	10-12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.1793	7	10.7	267	6.7	167	3.9	100	10-12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.1793	7	19	475	13.2	330	9	225	11-13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.1793	7	5.9	150	2.5	100	--	--	10-12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.1793	7	12.4	310	7.6	190	4.2	105	11-13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.1793	7	7.2	180	3	75	--	--	11-13	1 x 36 x 4	605

* EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

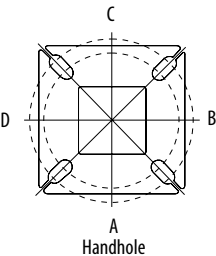
BASE DETAIL



POLE DATA								
Shaft base size	Bolt circle A	Bolt projection B	Base diameter C	Base plate thickness	Template description	Anchor bolt description	Anchor bolt and template number	Anchor bolt description
4"C	8" - 9"	3.25" - 3.75"	8" - 8.25"	0.75"	ABTEMPLATE PJ50004	AB18-0	ABSSS-4C	3/4"x18"x3"
4"G	8" - 9"	3.38" - 3.75"	8" - 8.25"	0.875"	ABTEMPLATE PJ50004	AB30-0	ABSSS-4G	3/4"x30"x3"
5"	10" - 12"	3.5" - 4"	11"	1"	ABTEMPLATE PJ50010	AB36-0	ABSSS-5	1"x36"x4"
6"	11" - 13"	4" - 4.50"	12.5"	1"	ABTEMPLATE PJ50011	AB36-0	N/A	1"x36"x4"



HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.



Catalog Number
Notes
Type

Contractor Select™

TWR LED

Wall Pack



Cast in a traditional dayform, the TWR LED luminaire offers a popular, classic appearance. Its advanced LEDs deliver an expected service life of more than 20 years and eliminate frequent lamp and ballast replacements associated with traditional technologies.

FEATURES:

- Replaces 100W to 400W HID lamps
- Energy savings of 85%, payback within two years
- Photocell option available



Catalog Number	UPC	Description	Replaces Up To	Lumens	Wattage	CCT	Voltage	Finish	Pallet qty.
TWR1 LED ALO 40K MVOLT DDBTXD M2	193047213516	WALL PACKS	50-250W METAL HALIDE	1,100 - 6,200	9W - 51W	4000K	120-277V	TEXTURED DARK BRONZE	60
TWR1 LED ALO 50K MVOLT DDBTXD M2	193047213523	WALL PACKS	50-250W METAL HALIDE	1,100 - 6,200	9W - 51W	5000K	120-277V	TEXTURED DARK BRONZE	60
TWR2 LED ALO 40K MVOLT DDBTXD M2	193047218542	WALL PACKS	150W TO 400W METAL HALIDE	3,050 - 11,800	21W - 87W	4000K	120-277V	TEXTURED DARK BRONZE	48
TWR2 LED ALO 50K MVOLT DDBTXD M2	193047218627	WALL PACKS	150W TO 400W METAL HALIDE	3,050 - 11,800	21W - 87W	5000K	120-277V	TEXTURED DARK BRONZE	48

More configurations are available. [Click here](#) or visit www.acuitybrands.com and search for TWR LED.



Specifications

INTENDED USE:

The TWR1 LED combines traditional wall pack design with high-output LEDs to provide an energy-efficient, low maintenance LED wall pack suitable for replacing up to 400W Metal Halide fixtures. The traditional shape helps maintain building aesthetics when replacing only a portion of your building's wall packs. TWR LED is ideal for outdoor applications such as carports, loading areas, driveways and parking areas.

CONSTRUCTION:

Rugged cast-aluminum housing with bronze polyester powder paint for lasting durability. Door is hinged on the side so door swings out of the way during installation and service. Castings are sealed with a one-piece gasket to inhibit the entrance of external contaminants. MVOLT driver operates on any line voltage from 120-277V (50/60Hz). All luminaires have 6kV surge protection. Rated for outdoor installations, -40°C minimum ambient. Please consult factory for surge rating of photocells.

ELECTRICAL:

Light engine consists of long-life, high-efficacy LEDs mounted on an internal aluminum heat sink to maximize heat dissipation and promote long life (L90/100,000 hours at 40°C). Driver and integral photocell operate at 120V and are fully enclosed in the upper housing. There are no user serviceable parts. LEDs maintain 70% of light output at 35,000 hours of service. (LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.)

INSTALLATION

Designed for wall mounting above four feet from ground. Housing is configured for mounting directly over a standard 4" outlet box (by others) or for surface wiring via any of three convenient 1/2" threaded conduit entry hubs.

LISTINGS:

UL Listed to U.S. and Canadian safety standards for wet locations. Tested in accordance with IESNA LM-79 and LM-80 standards.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY:

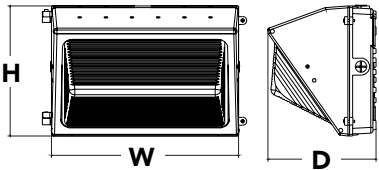
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Dimensions

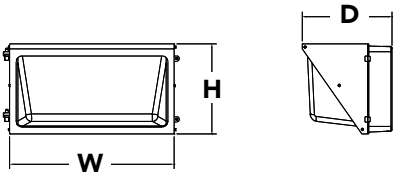
TWR1:

Width: 12-15/16(32.9cm)
Height: 9"(22.9cm)
Depth: 7-1/2 (19cm)
Weight: 11.95 (5.42kg)



TWR2:

Width: 17"(42.2cm)
Height: 9"(22.9cm)
Depth: 9-5/16"(23.6cm)
Weight: 17.2lbs (5.42kg)



All dimensions are inches (centimeters) unless otherwise indicated.



Memo

TO: Planning and Zoning Commission

FROM: Alex Pfaltzgraff, AICP

DATE: November 27, 2019

RE: Legacy Park Lot 2 – Site Plan Amendment

Development Services

The applicant, Anderson Companies, has requested approval of a Site Plan Amendment to allow for a modification to the building elevations on Legacy Park Lot 2, building 2. The change is minor in nature, but staff felt that it warranted a review.

The building was original proposed with a height of 32 feet. The proposed height allowed for additional high rack storage, if desired by the tenant. Due to the majority of tenants not needing the high rack storage, the applicant desires to reduce the overall height of the building by 6-feet, to a new height of 26-feet.

No additional changes to the building façade or site have been proposed. The building still needs the minimum standards within the Zoning District, and HWY 141 Corridor Zone 2 Overlay.

Staff would recommend approval of the Site Plan Amendment.

If you should have any questions prior to the meeting, please contact me at either 515-986-3036 or at apfaltzgraff@grimesiowa.gov

Alex Pfaltzgraff, AICP

Development Services Director



November 5, 2019

Development Services

410 SE Main St, Suite 102

Grimes, IA 50111

(515)986-4050

www.grimesiowa.gov

Bishop Engineering

Attn: Brad Kuehl

3501 104th Street

Urbandale, IA 50322

RE: Legacy Park Lot 2 Elevations

Dear Mr. Kuehl:

The Development Services Department is in receipt of a proposed Site Plan for the Legacy Park Lot 2 Elevations. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

- ~~1. Please submit an minor site plan application and fee.~~
- ~~2. Please provide the required 5 architectural factors as required in 165A. Please provide on the architectural sheets.~~
- ~~3. Please revise the elevations to meet the minimum glazing requirements. Chapter 165A requires that 20% of the elevations facing the Public ROW to be glass. The architect has instead calculated the horizontal length. Based upon staff calculations, additional glazing is needed.~~
- ~~4. Please provide the roof deck height as it relates to the parapet. Note that all roof top mechanical units must be screened from view if above the parapet height.~~

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: November 11, 2109
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: December 3, 2019 at 5:30 at the Grimes City Hall

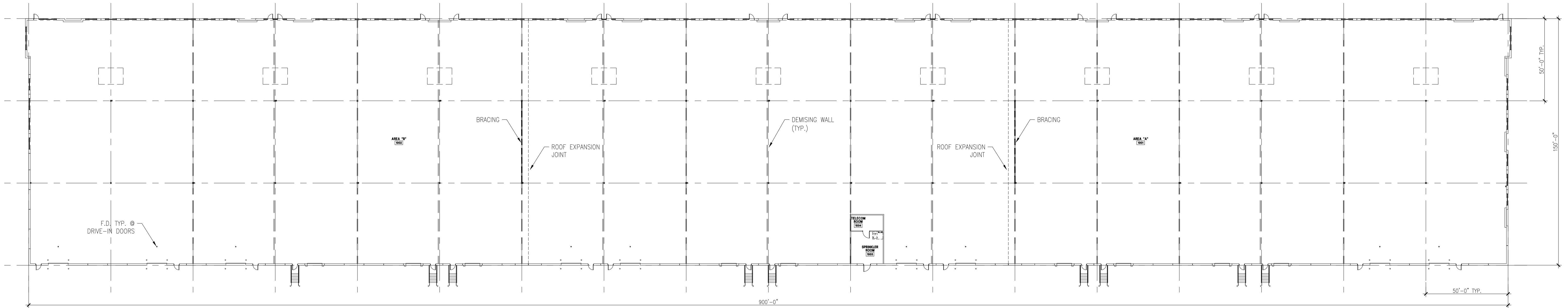
COUNCIL MEETING: December 10, 2019 at 5:30 at the Grimes City Hall

Please feel free to contact me at apfaltzgraff@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

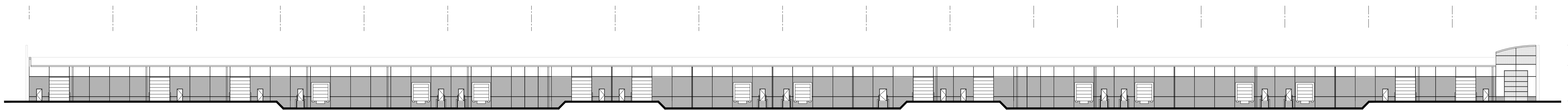
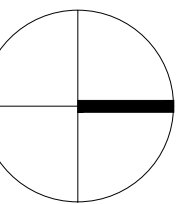
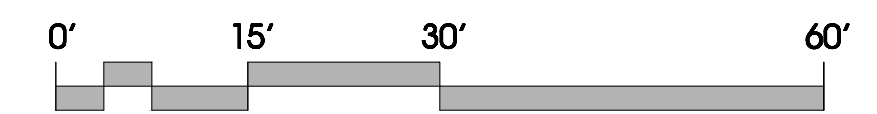
Sincerely,

A handwritten signature in black ink, appearing to read "Alex Pfaltzgraff", is positioned above the printed name.

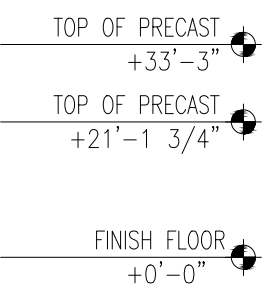
Alex Pfaltzgraff
Development Services Director



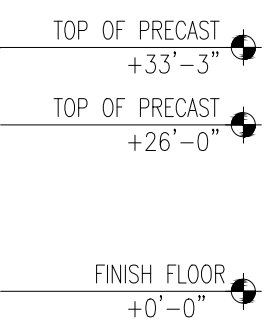
Floor Plan



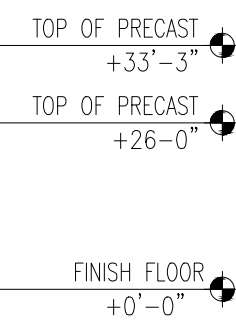
East Elevation



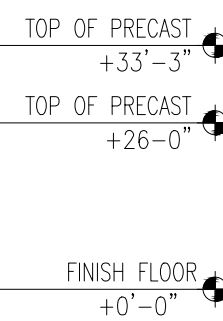
West Elevation



South Elevation



North Elevation



GROUND FLOOR FRONTAGE GLAZING (NORTH WALL)

AREA OF WALLS	4,154 SF	
TOTAL AREA OF WINDOWS / DOORS	840 SF	20.2% OF WALL

Exterior Elevations

