Wednesday, September 11, 2024
Development Review Committee

DEVELOPMENT REVIEW COMMITTEE AGENDA
PUBLIC NOTICE is hereby given that the Development Review Committee of Spanish Fork, Utah, will hold a regular meeting at the City Council Chambers at Library Hall, 80 South Main Street, Second Floor, Spanish Fork, Utah, commencing at 10:00 a.m. This meeting is not available to attend virtually.

1. Approval of Minutes

A. August 28, 2024.

2. Preliminary Plat and Zone Change

A. ZIONS LANDING. This proposal involves changing the current zoning from A-E to R-1-6 to approve a Preliminary Plat for a standard subdivision to allow for a residential development to be located at 1495 East 400 North.

3. Minor Subdivision

A. GATEWAY COMMERCE PLAT D AMENDED. This proposal involves amending a previously recorded plat that will subdivide a single lot to create two separate lots located at 151 East 3450 North.

4. Discussion

A. DENALI CONCRETE DISCUSSION.

B. TITLE 5 HOME OCCUPATIONS.

C. TITLE 15 ARTIFICIAL TURF.

5. Adjourn

Draft Minutes
Spanish Fork City Development Review Committee
80 South Main Street
Spanish Fork, Utah
August 28, 2024

Staff Members Present: Chris Thompson, Public Works Director; Seth Perrins, City Manager; Dave Anderson, Community Development Director; Brandon Snyder, Senior Planner; David Mann, Senior Planner; Kasey Woodard, Community Development Secretary; Ian Bunker, Associate Planner; Vaughn Pickell, City Attorney; John Little, Chief Building Official; Byron Haslam, Senior Engineer; Marcie Clark, Engineering Department Secretary; Jered Johnson, Engineering Division Manager; Kevin Taylor, Senior Power Utility Planner; Jake Theurer, Power and Light Superintendent; Bart Morrill, Parks Maintenance Supervisor.

Citizens Present: Jared Morgan, Ryan Christofferson, Dave Hennefer, Conner Austin, Michelle Rowe, AJ DelPivo, Nate Reiner, Whit Hill, Tyler Horan, Mattias Johanson, Hunter Horsely, Nate Horan, Gavin West, Shay Smith.

Chris Thomspon called the meeting to order at 10:00 a.m.

MINUTES

August 21, 2024

Jake Theuer moved to approve the minutes of August 21, 2024.

Seth Perrins seconded and the motion passed all in favor.

FINAL PLAT

NORTH AIRPORT INDUSTRIAL PLAT C

Brandon Snyder stated this is the final phase that includes 5 lots. He stated there are a few minor redlines to be addressed.

Byron Haslam stated the application would need a cash bond of $250,000, and then he discussed the relocation of the power pole. He stated the applicant needs to get in touch with Rocky Mountain Power to start the relocation process.

AJ DelPivo approached the podium and stated that Brandon Wilson is aware of these items and is currently working on them but is unaware of the current relocation status.

There was a brief discussion regarding the details of the relocation of the power pole.

Chris Thompson suggested that Jered Johnson make this reflection in the motion.

Jake Theurer stated the applicant needs to call out the Rocky Mountain Power Easement on the plans and the location of the power pole.

Brandon Snyder asked Byron Haslam to update his redline comments in Citizenserve to reflect these requirements.

Jered Johnson moved to approve the proposed North Airport Industrial Plat C Final Plat based on the following finding and subject to the following conditions:

Finding:

1. That the proposal conforms to the City's Zoning Map.
2. That the application is consistent with the approved Preliminary Plat.

Conditions:

1. That the applicant meets the City's Development and Construction standards, zoning requirements, and other applicable City ordinances.
2. That the applicant addresses any red-lines.
3. The applicant provide a $250,000 cash bond to relocate the Rocky Mountain power pole, and provide barriers around the pole for protection.

Jake Theurer seconded and the motion passed all in favor.

STOCKMAN FLAT 320 INFRASTRUCTURE PLAN

Brandon Stated there are 16 proposed lots. He stated the applicant will be completing this in a single phase. He stated there are few remaining redlines.

Byron Haslam reminded the applicant that fees need to be paid.

Seth Perrins asked if the key issued with the redlines have been completed and Brandon Snyder addressed the redlines and stated he will work with the applicant to have these addressed.

There was a brief discussion regarding impact fees that need to be paid.

Seth Perrins stated this project is very close to the lake, and he brought up the water levels that are continuing to rise. He stated this area will have a spotlight on it as it is within the wetlands and will need to be delineated.

Byron Haslam provided the development regulations of the floodplain.

Seth Perrins asked if this approval includes the road approval and it was stated that yes, this approval includes the road.

Vaugh Pickell moved to approve the proposed Stockman Flats 320 Infrastructure Plan Final Plat based on the following finding and subject to the following conditions:

Finding:

1. That the proposal conforms to the City's Zoning Map.
2. That the application is consistent with the approved Preliminary Plat.

Conditions:

1. That the applicant meets the City's Development and Construction standards, zoning requirements, and other applicable City ordinances.
2. That the applicant addresses any red-lines.

Jake Theurer seconded and the motion passed all in favor.

CONCEPT REVIEW

HALES TRG CONCEPT

Brandon Snyder invited the applicant up to the podium to speak about the concept.

Dave Hennefer stated they did not have any questions; they were mainly in attendance to answer any questions the City staff may have.

Jered Johnson discussed the sewer lift station briefly.

There was a question whether the GWC (Stockman Flats) sewer lift station would be able to serve the Hales property. It was stated that the lift station will serve the property, but there is only one pump and it was discussed that another pump may need to be added.

Dave Hennefer approached the podium to express his gratitude to the City staff with their help in getting his projects approved. He stated that he spoke with his engineer and asked if this lift station has the proper capacity and was assured that it should. He stated that he will work with the City to ensure this is addressed.

Jake Theurer asked the applicant to provide them the power plans as soon as they can to ensure that the planned power capacity can meet the needs.

Chris Thompson spoke about the wetlands and the city's delineation regulations.

RIVER RUN H CONCEPT

Brandon Snyder invited the applicant up to the podium to speak briefly about the proposal.

Tyler Horan approached the podium.

Seth Perrins wanted to briefly state that this is a high-level briefing of the project and that it is still in a conceptual phase and it is not a set plan.

Tyler Horan provided details of the proposed phasing of the development and stated they are just wanting to continue with the same style of housing product. He stated they are wanting to improve the frontage and make the road connection to Volunteer Drive. He stated they need some City input regarding the intersection. He stated they are wanting Civil Science and WGC to come in and help align this intersection so that they get it the first time.

Seth Perrins asked if there needs to be a short-term intersection at Volunteer Drive and River Bottoms Road? He feels that short term, this connection serves two residential homes. So, he pondered whether the road is necessary as the homes long term will be addressed with the long-term development of the connection between the two roads.

Tyler Horan asked the committee members if they have any suggestions to get WGC talking with the City or would the City prefer to meet in person with WGC to discuss these road concerns.

it was stated that the City can meet with WGC. The DRC feels that the plans submitted are good and they urged the applicant to move forward with a preliminary plat application. The City staff stated they will meet with the property owners to the south prior to holding any discussions with WGC.

Dave Anderson quickly discussed the design of the project and its density.

Brandon Snyder expressed his concerns with the applicants moving too far ahead in the development process as they have yet to address the concerns with the Mills property. He stated that those property owners need to be spoken to as they are very frustrated that this type of design is being worked on with the City and they are not being involved.

Dave Anderson anticipated the City having conversations with the Mills property owners.

Byron Haslam stated that he reached out to Marissa Mills prior to today's meeting to let her know he will be reaching out to her to discuss the proposal.

DISCUSSION

STEPHENS-HILL ANNEXATION

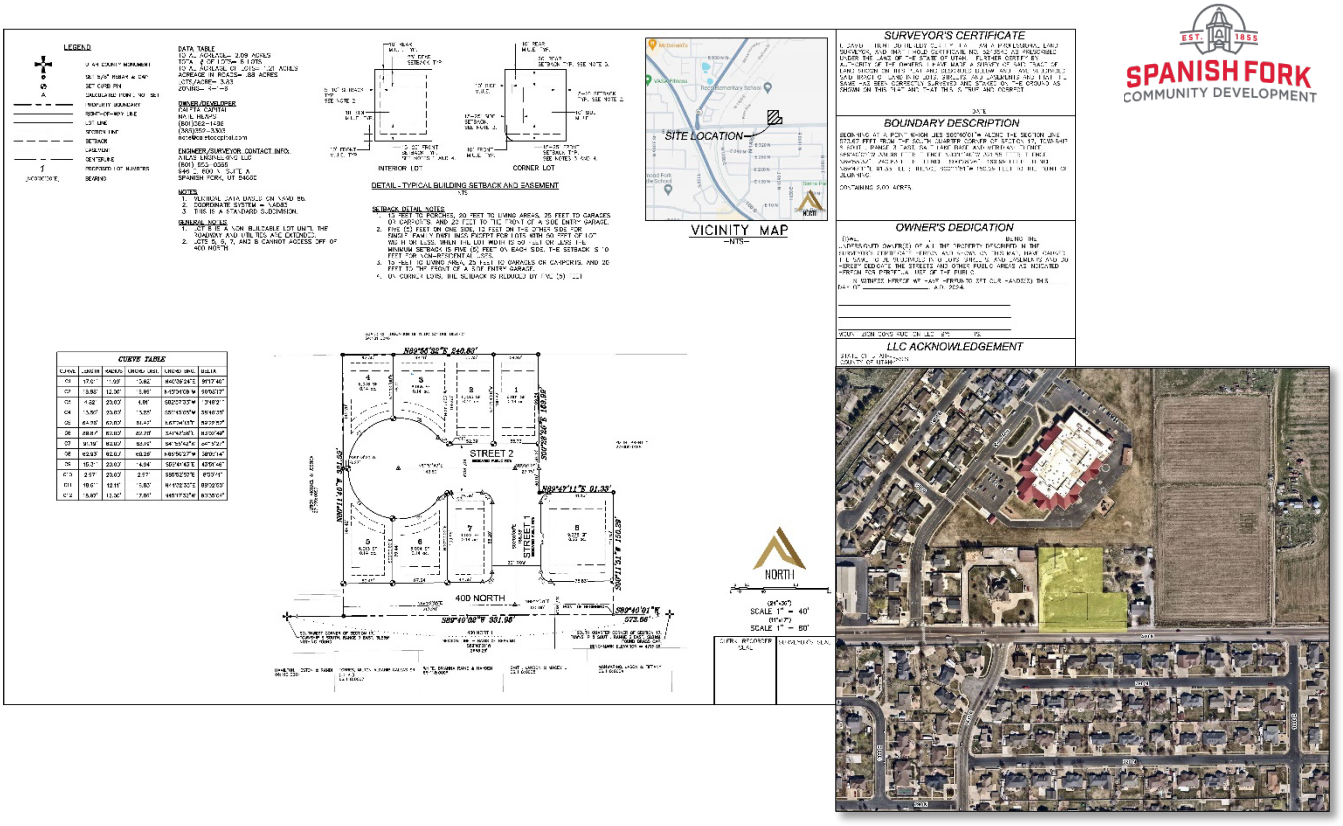
Dave Anderson wanted to briefly address this annexation as there have been inquiries on the status of this proposed annexation. He then asked the committee for feedback.

Seth Perrins feels there is no reason that this should not be able to move forward if this can be redesigned to not create an island.

Jake Theurer moved to adjourn the meeting at 11:00 a.m.

Adopted:

Kasey Woodard
Community Development Division
Secretary



Zion's Landing Preliminary Plat and Zone Change Approval Request

September 11, 2024, Development Review Committee meeting.

Located at 1495 East 400 North, including 2.09 acres.

The subject property is zoned A-E. The General Plan designation is Medium Density Residential.

The applicant has requested approval of a Zone Change to R-1-6 in association with Preliminary Plat approval for a standard subdivision with 8 residential lots.

Key Issues

1. Improvements.
2. Access.
3. Utilities.
4. Easements.

Recommendation

That the proposed Preliminary Plat and Zone Change be recommended for approval based on the following finding and subject to the following conditions.

Finding

1. That the proposal conforms to the City's General Plan Designation.

Conditions

1. That the applicant meets the City's Development and Construction standards, zoning requirements, and other applicable City ordinances.
2. That the applicant addresses any red-lines.

Exhibits

1. Preliminary Plat.
2. Zone Change.

ZIONS LANDING

A RESIDENTIAL SUBDIVISION
SPANISH FORK, UTAH
PRELIMINARY PLAN SET
AUGUST 2024

-SHEET INDEX-

SHEET	SHEET NAME
1	COVER
2	OVERALL BOUNDARY
3	OVERALL SITE PLAN
4	DRAINAGE PLAN
5	EXISTING TOPOGRAPHY
6	UDOT ACCESS PLAN
SS-01	STRIPING SET
PP-01	PLAN & PROFILE – STREET 1 – STA. 9+57 TO STA. 11+83
PP-02	PLAN & PROFILE – STREET 2 – STA. 10+00 TO STA. 12+47
PP-03	PLAN & PROFILE – 400 NORTH – STA. 9+75 TO STA. 13+32
DT-01	DETAIL SHEET
A.L.T.A.	A.L.T.A./N.S.P.S.

UDOT NOTES:
1. ALL CONSTRUCTION WITHIN THE UDOT RIGHT-OF-WAY SHALL CONFORM TO THE MOST CURRENT UDOT STANDARD (INCLUDING SUPPLEMENTAL) DRAWINGS AND SPECIFICATIONS.
2. THE CONTRACTOR IS TO OBTAIN AN ENCROACHMENT PERMIT FROM THE APPLICABLE UDOT REGION PERMIT OFFICE PRIOR TO COMMENCING WORK WITHIN UDOT RIGHT-OF-WAY. WORKING HOUR LIMITATIONS WILL BE LISTED IN THE LIMITATIONS SECTION OF THE ENCROACHMENT PERMIT.
3. UDOT RESERVES THE RIGHT, AT ITS OPTION, TO INSTALL A RAISED MEDIAN ISLAND OR RESTRICT THE ACCESS TO A RIGHT-IN OR RIGHT-OUT AT ANY TIME.
4. OWNER, DEVELOPER, AND/OR CONTRACTOR ARE RESPONSIBLE FOR ANY DAMAGES DIRECTLY OR INDIRECTLY WITHIN THE UDOT RIGHT-OF-WAY AS A RESULT OF DEVELOPMENT ACTIVITIES.
5. OWNER, DEVELOPER, AND/OR CONTRACTOR IS REQUIRED TO HIRE AN INDEPENDENT COMPANY FOR ALL TESTING WITHIN THE UDOT RIGHT-OF-WAY.
6. ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY MUST BE HIGH INTENSITY GRADE (TYPE XI SHEETING) WITH A B3 SLIP BASE. INSTALL ALL SIGNS PER UDOT SN SERIES STANDARD DRAWINGS.
7. COMPLY WITH THE REQUIREMENTS OF UTAH CODE 17-23-14 (DISTURBED CORNERS – COUNTY SURVEYOR TO BE NOTIFIED – COORDINATION WITH CERTAIN STATE AGENCIES).

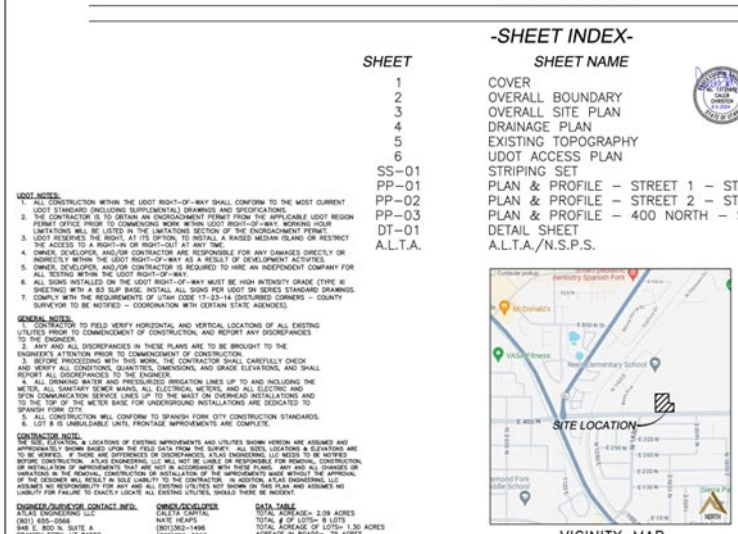
GENERAL NOTES:
1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
2. ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.
4. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING THE METER, ALL SANITARY SEWER MAINS, ALL ELECTRICAL METERS, AND ALL ELECTRIC AND SPCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATIONS ARE DEDICATED TO SPANISH FORK CITY.
5. ALL CONSTRUCTION WILL CONFORM TO SPANISH FORK CITY CONSTRUCTION STANDARDS.
6. LOT 8 IS UNBUILDABLE UNTIL FRONTAGE IMPROVEMENTS ARE COMPLETE.

CONTRACTOR NOTE:
THE EXISTING LOCATIONS OF EXISTING IMPROVEMENTS AND UTILITIES SHOWN HEREON ARE ASSUMED AND APPROXIMATELY SHOWN BASED UPON THE FIELD DATA FROM THE SURVEY. ALL SIZES, LOCATIONS & ELEVATIONS ARE TO BE VERIFIED. IF THERE ARE DIFFERENCES OR DISCREPANCIES, ATLAS ENGINEERING, LLC NEEDS TO BE NOTIFIED BEFORE CONSTRUCTION. ATLAS ENGINEERING, LLC WILL NOT BE LIABLE OR RESPONSIBLE FOR REMOVAL, CONSTRUCTION, OR INSTALLATION OF IMPROVEMENTS THAT ARE NOT IN ACCORDANCE WITH THESE PLANS. ANY AND ALL CHANGES OR VARIATIONS IN THE REMOVAL, CONSTRUCTION OR INSTALLATION OF THE IMPROVEMENTS MADE WITHOUT THE APPROVAL OF THE DESIGNER WILL RESULT IN SOLE LIABILITY TO THE CONTRACTOR. IN ADDITION, ATLAS ENGINEERING, LLC ASSUMES NO RESPONSIBILITY FOR ANY AND ALL EXISTING UTILITIES NOT SHOWN ON THIS PLAN AND ASSUMES NO LIABILITY FOR FAILURE TO EXACTLY LOCATE ALL EXISTING UTILITIES, SHOULD THERE BE INDEED.

ENGINEER/SURVEYOR CONTACT INFO:
ATLAS ENGINEERING LLC
(801) 655-0566
946 E. 800 N. SUITE A
SPANISH FORK, UT 84660

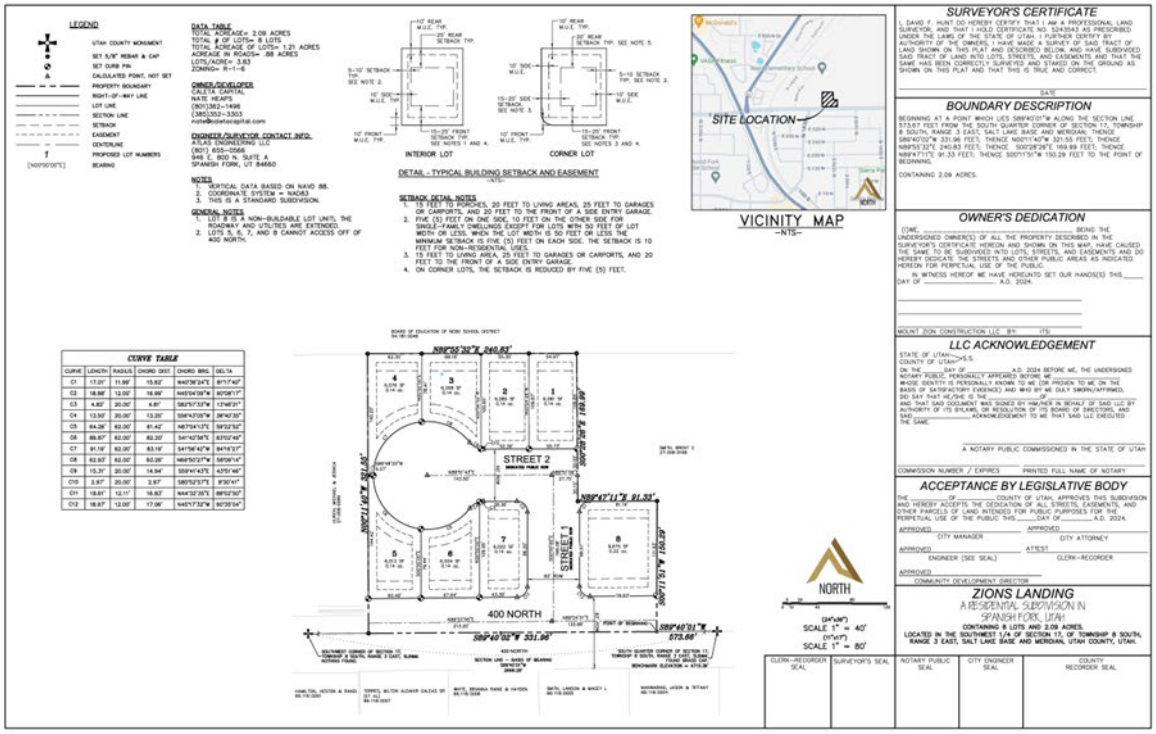
OWNER/DEVELOPER
CALETA CAPITAL
NATE HEAPS
(801)362-1496
(385)352-3303
note@caletacapital.com

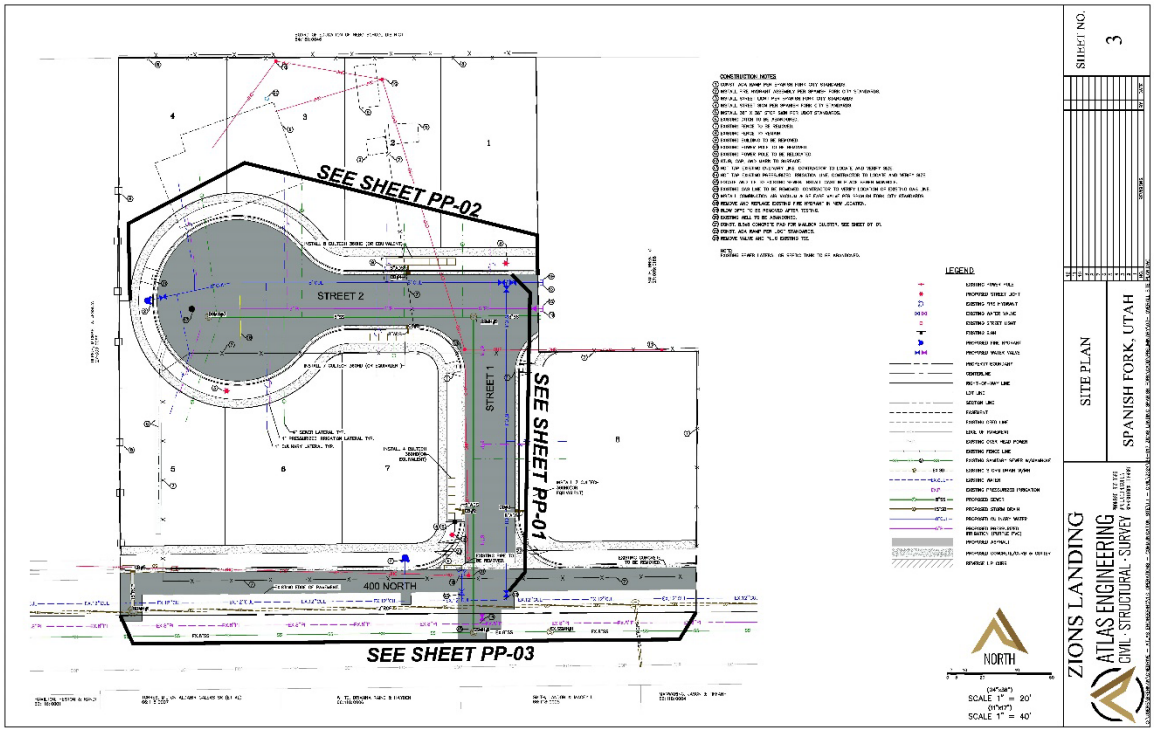
DATA TABLE
TOTAL ACREAGE= 2.09 ACRES
TOTAL # OF LOTS= 8 LOTS
TOTAL ACREAGE OF LOTS= 1.21 ACRES
ACREAGE IN ROADS= .88 ACRES
LOTS/ACRE= 3.83
ZONING= R-1-6

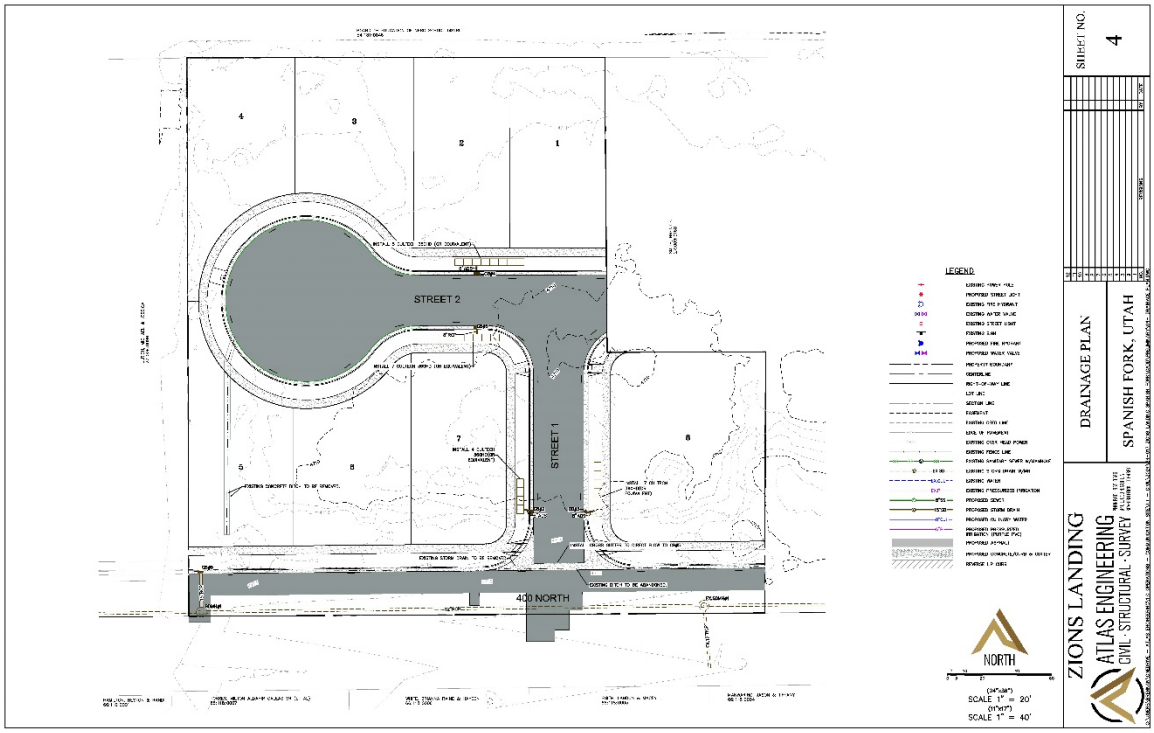


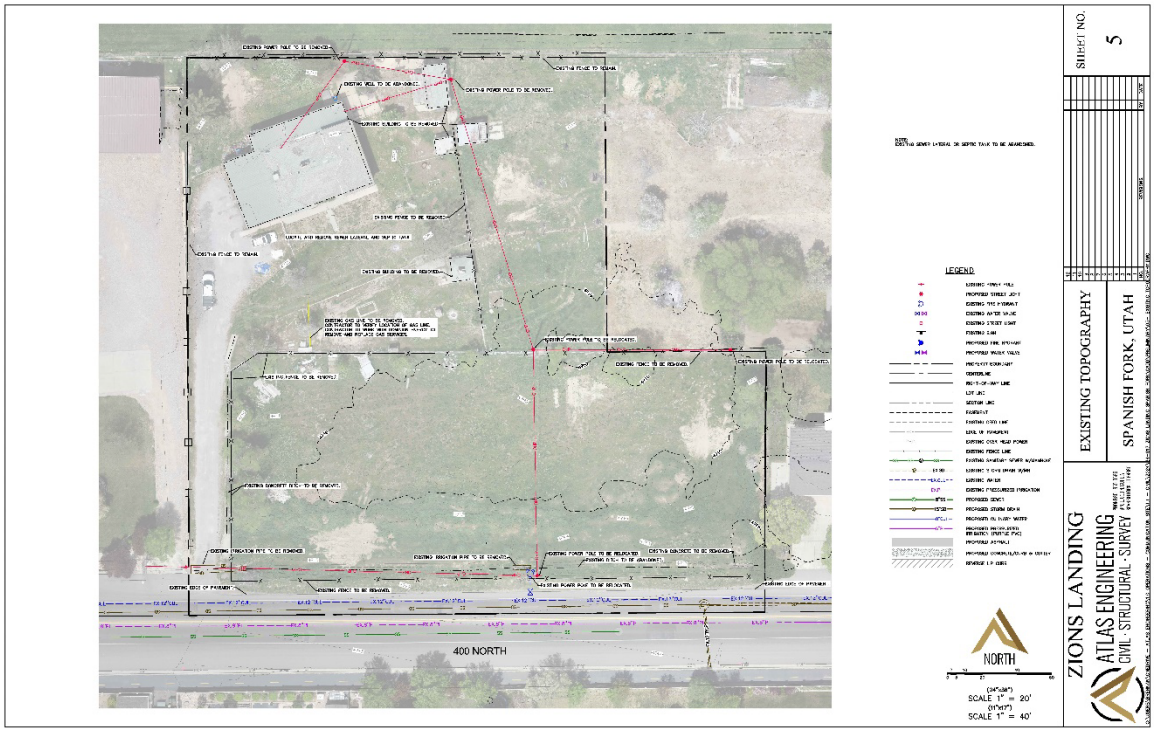
ZIONS LANDING

ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY

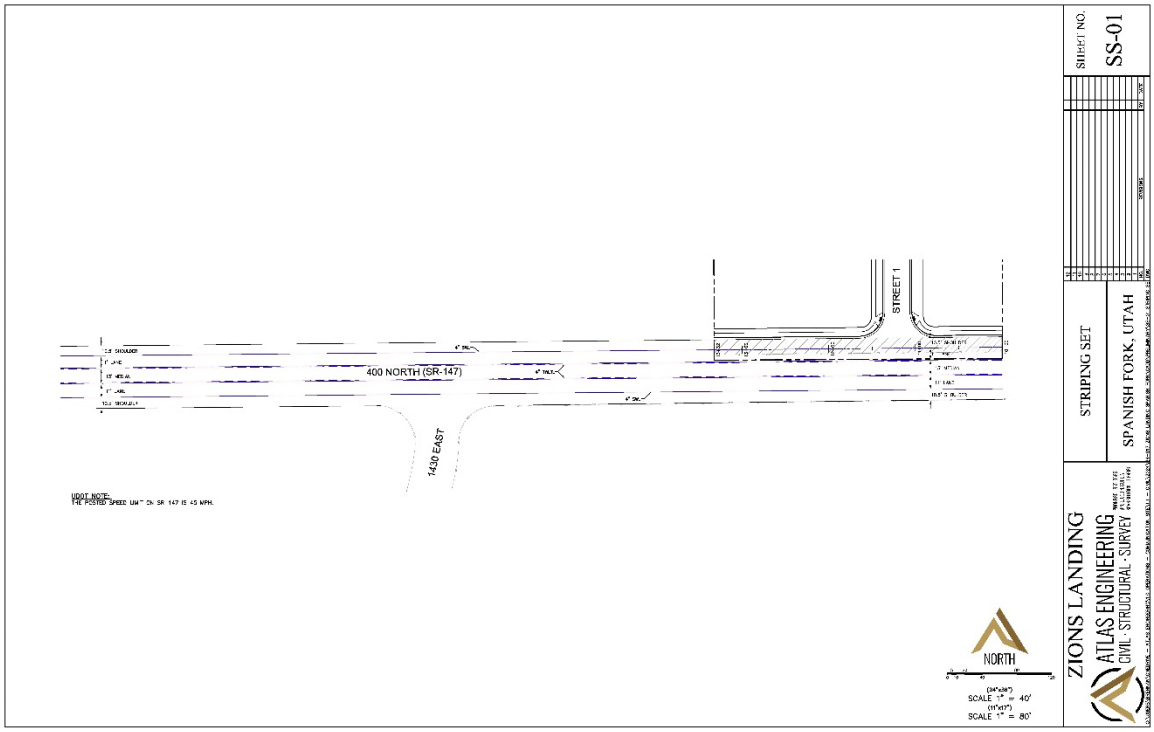


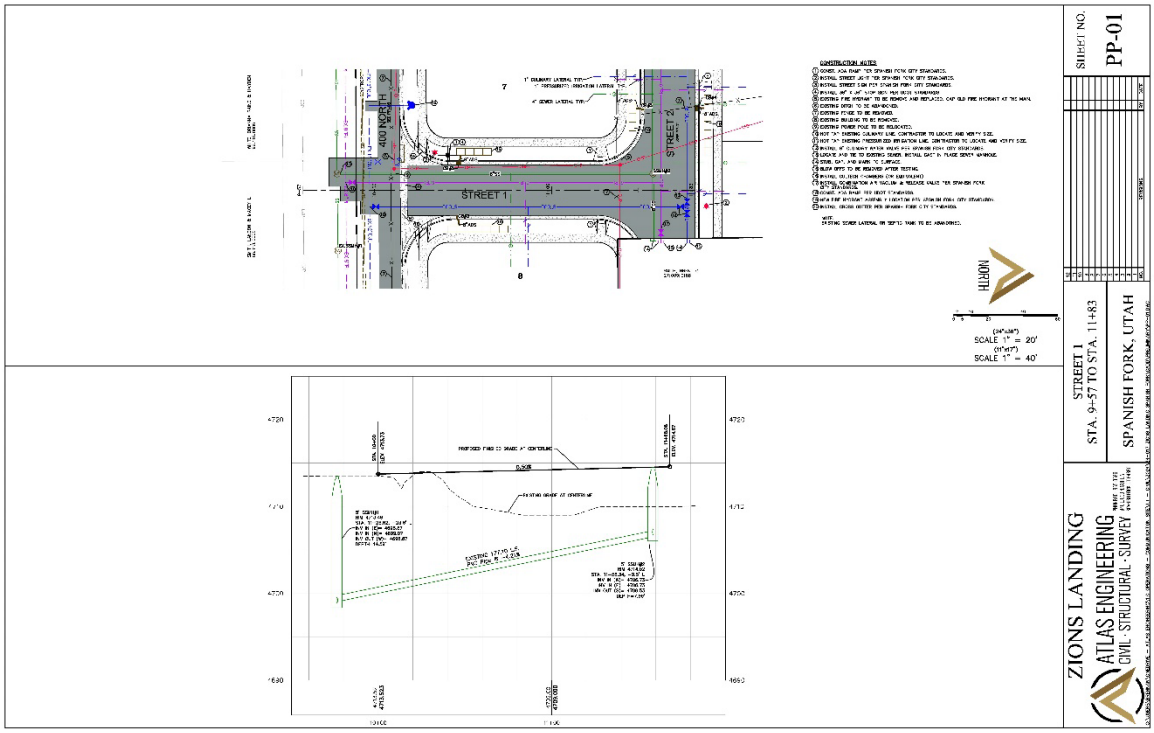

SEE SHEET PP-02
STREET 2
STREET 1
SEE SHEET PP-01
400 NORTH
SEE SHEET PP-03
LEGEND
NORTH
SCALE 1" = 20'
SCALE 1" = 40'
SHEET NO. 3
SITE PLAN
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY

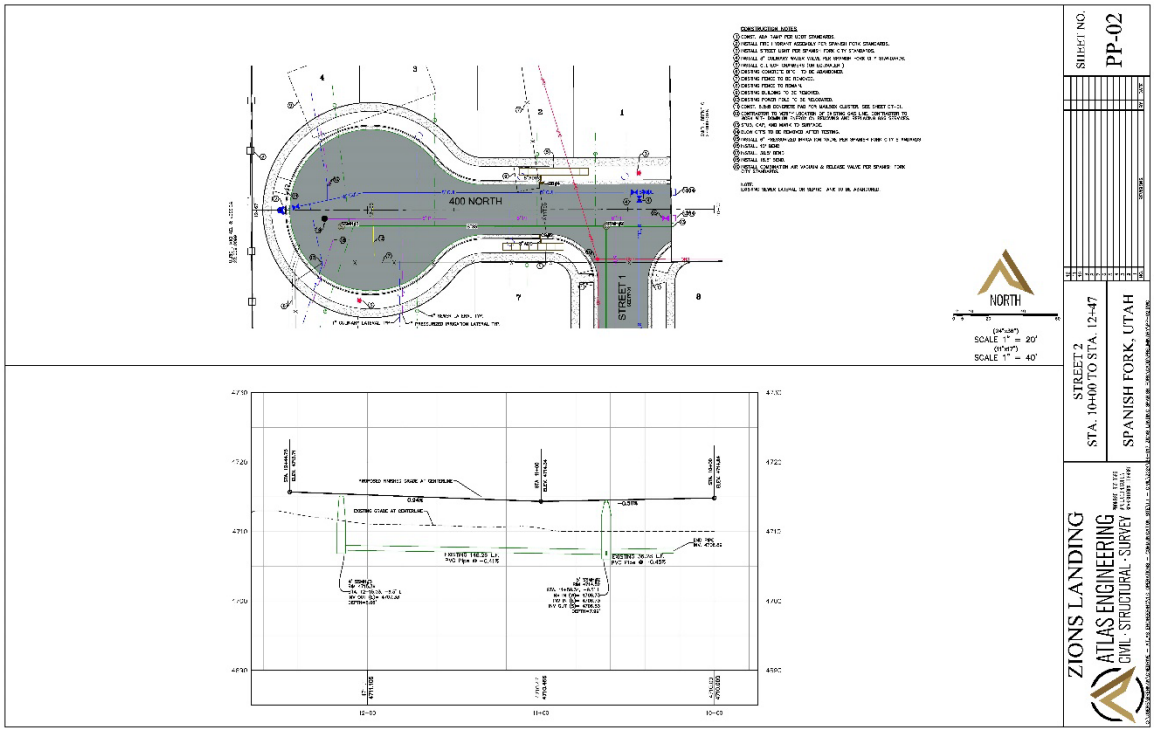

STREET 2
STREET 1
400 NORTH
LEGEND
NORTH
SCALE 1" = 20'
SCALE 1" = 40'
SHEET NO. 4
DRAINAGE PLAN
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY

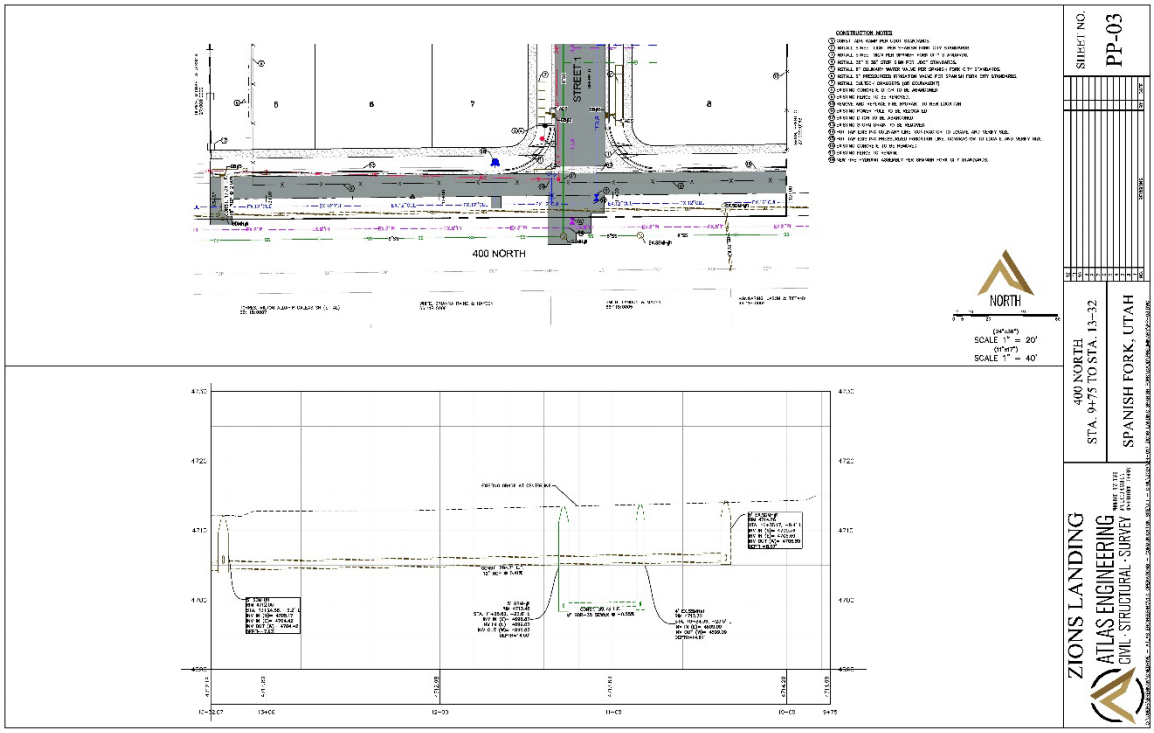

400 NORTH
LEGEND
NORTH
SCALE 1" = 20'
SCALE 1" = 40'
SHEET NO. 5
EXISTING TOPOGRAPHY
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY

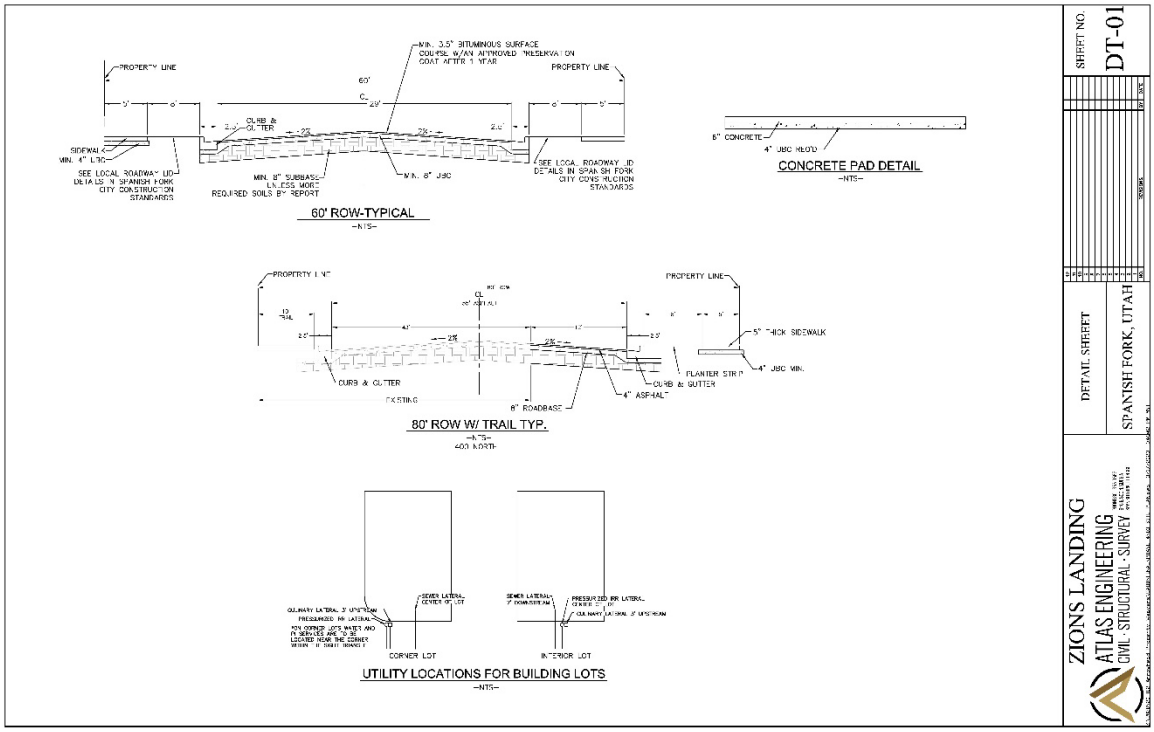

400 NORTH (SR-147)
1430 EAST
STREET 1
UDOT NOTES:
1. ALL CONSTRUCTION WITHIN THE UDOT RIGHT-OF-WAY SHALL CONFORM TO THE MOST CURRENT UDOT STANDARD (INCLUDING SUPPLEMENTAL) DRAWINGS AND SPECIFICATIONS.
2. T.C. CONTRACTORS, S. TO OBTAIN AN ENCROACHMENT PERMIT FROM THE APPLICABLE UDOT REGION PERMIT OFFICE PRIOR TO COMMENCING WORK WITHIN UDOT RIGHT-OF-WAY. WORKING HOUR LIMITATIONS WILL BE LISTED IN THE LIMITATIONS SECTION OF THE ENCROACHMENT PERMIT.
3. UDOT RESERVES THE RIGHT, AT ITS OPTION, TO INSTALL A RAISED MEDIAN ISLAND OR RESTRICT THE ACCESS TO A RIGHT-IN OR RIGHT-OUT AT ANY TIME.
4. OWNER, DEVELOPER, AND/OR CONTRACTOR ARE RESPONSIBLE FOR ANY DAMAGES DIRECTLY OR INDIRECTLY WITHIN THE UDOT ROW AS A RESULT OF DRIP SHIPPIT ACTIVITIES.
5. OWNER, DEVELOPER, AND/OR CONTRACTOR IS REQUIRED TO HIRE AN INDEPENDENT COMPANY FOR ALL TESTING WITHIN THE UDOT RIGHT OF WAY.
6. ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY MUST BE HIGH INTENSITY GRADE (TYPE X (MINIMUM) WITH A 12 SLIP BASE. INSTALL ALL SIGNS PER UDOT MUTCD SERIES STANDARD DRAWINGS.
7. COMPLY WITH THE REQUIREMENTS OF UTAH CODE 17-23-14 (DISTRICT CONTACTS – COUNTY SURVEYOR TO BE NOTIFIED – COORDINATION WITH CERTAIN STATE AGENCIES).
UDOT NOTE:
THE POSTED SPEED LIMIT ON SR 147 IS 45 MPH.
NORTH
SCALE 1" = 50'
SCALE 1" = 100'
SHEET NO. 6
UDOT ACCESS PLAN
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY

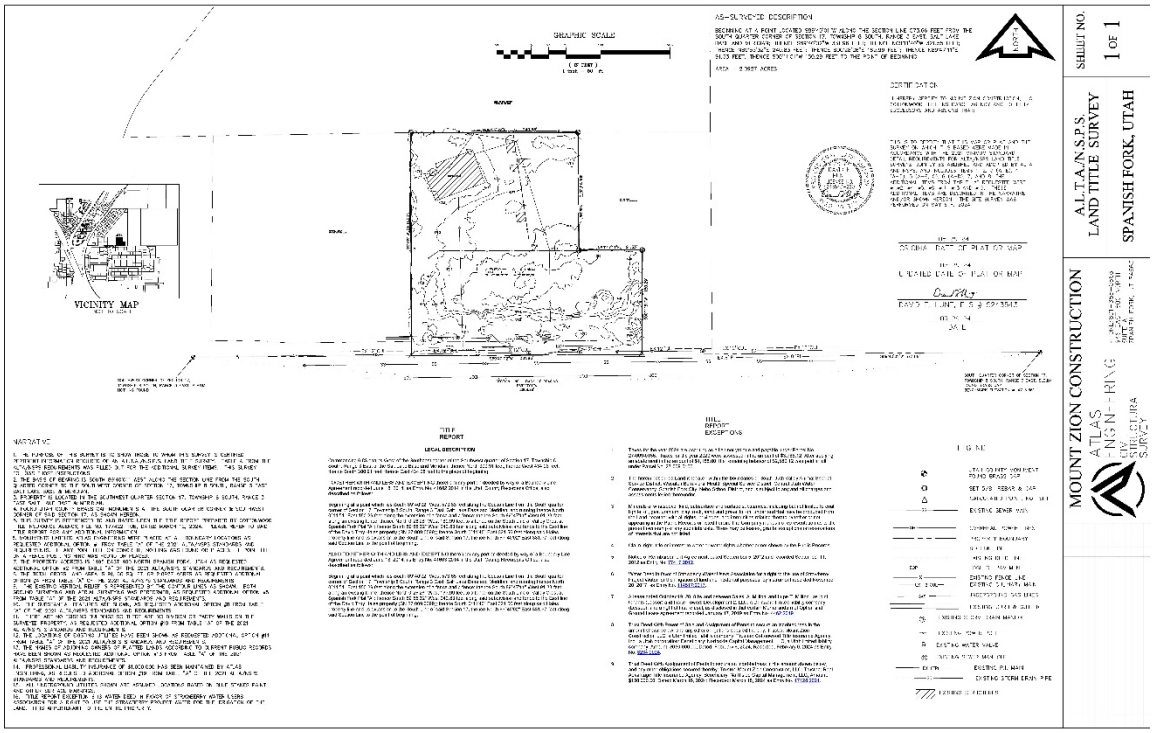

400 NORTH (SR-147)
1430 EAST
STREET 1
NORTH
SCALE 1" = 40'
SCALE 1" = 80'
SHEET NO.
SS-01
STRIPING SET
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY

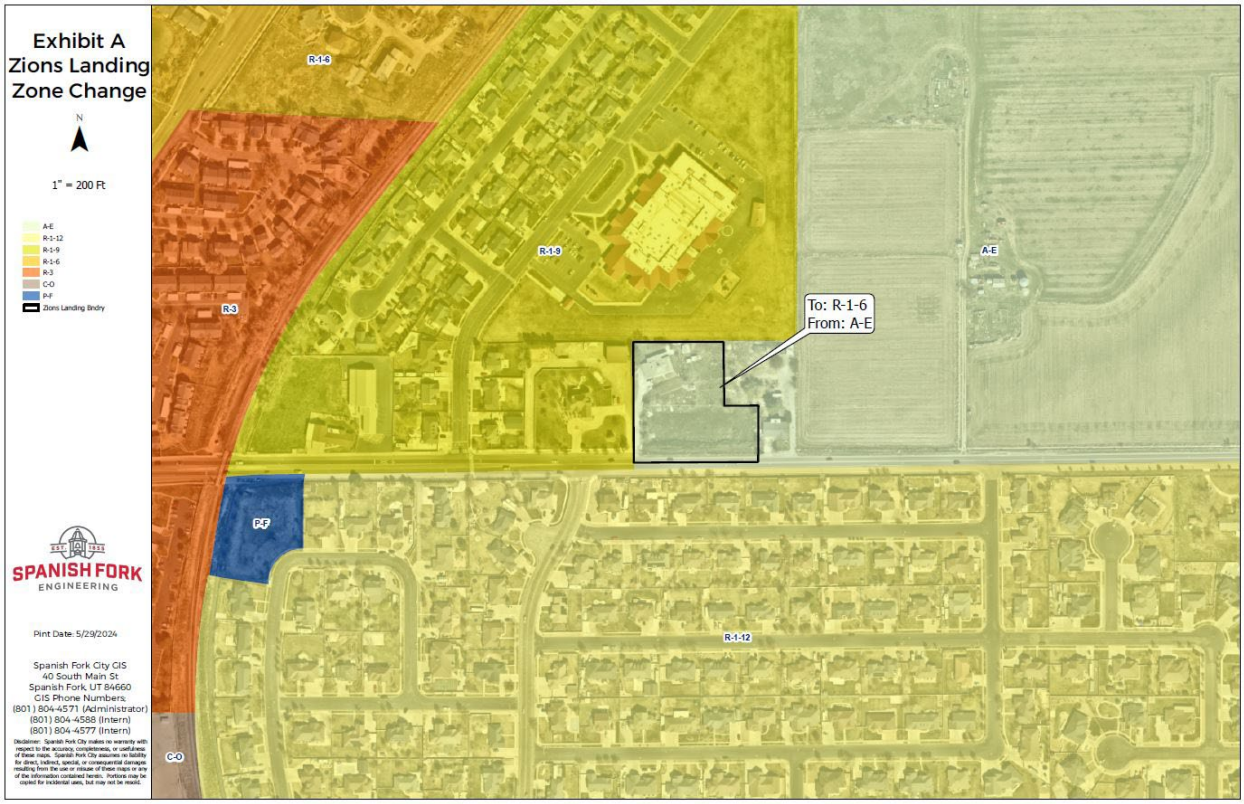

400 NORTH
STREET 1
STREET 2
NORTH
SCALE 1" = 20'
SCALE 1" = 40'
SHEET NO.
PP-01
STREET 1
STA. 9+57 TO STA. 11+83
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY


400 NORTH
STREET 1
NORTH
SCALE 1" = 20'
SCALE 1" = 40'
SHEET NO.
PP-02
STREET 2
STA. 10+40 TO STA. 12+47
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY


400 NORTH
STREET 1
NORTH
SCALE 1" = 20'
SCALE 1" = 40'
SHEET NO.
PP-03
400 NORTH
STA. 9+75 TO STA. 13+32
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY


PROPERTY LINE
MIN. 3.5" BITUMINOUS SURFACE COURSE W/AN APPROVED RESERVATION COAT AFTER 1 YEAR
SIDEWALK MIN. 4" THK.
CURB & GUTTER
MIN. 8" SUBBASE- UNLESS MORE REQUIRED SOILS BY REPORT
MIN. 8" ROAD BASE
60' ROW-TYPICAL
-NTS-
6" CONCRETE
4" JBC MIN.
CONCRETE PAD DETAIL
-NTS-
PROPERTY LINE
5' THICK SIDEWALK
FLANTER STRIP
4" JBC MIN.
CURB & GUTTER
EXISTING
4" ASPHALT
8" ROADBASE
80' ROW W/ TRAIL TYP.
-NTS-
400 NORTH
SEWER LATERAL CENTER OF LOT
CORNER LOT
INTERIOR LOT
UTILITY LOCATIONS FOR BUILDING LOTS
-NTS-
SHEET NO.
DT-01
DETAIL SHEEET
SPANISH FORK, UTAH
ZIONS LANDING
ATLAS ENGINEERING
CIVIL · STRUCTURAL · SURVEY


GRAPHIC SCALE
VICINITY MAP
AS-SURVEYED DESCRIPTION
SURVEYOR'S CERTIFICATE
BASIS OF BEARINGS
LEGEND
SHEET NO.
1 OF 1
A.L.T.A./N.S.P.S.
LAND TITLE SURVEY
SPANISH FORK, UTAH
MOUNT ZION CONSTRUCTION
ATLAS ENGINEERING
SURVEY


Exhibit A
Zions Landing
Zone Change
N
1" = 200 Ft
A-E
R-1-12
R-1-9
R-1-6
R-3
C-O
P-F
Zions Landing Bndry
SPANISH FORK
ENGINEERING
Plnt Date: 5/29/2024
Spanish Fork City GIS
40 South Main St
Spanish Fork, UT 84660
GIS Phone Numbers:
(801) 804-4571 (Administrator)
(801) 804-4588 (Intern)
(801) 804-4577 (Intern)
Disclaimer: Spanish Fork City makes no warranty with respect to the accuracy, completeness, or usefulness of these maps. Spanish Fork City assumes no liability for direct, indirect, special, or consequential damages resulting from the use or misuse of these maps or any of the information contained herein. Portions may be copied for incidental uses, but may not be resold.
R-1-6
R-1-9
A-E
R-3
To: R-1-6
From: A-E
P-F
R-1-12
C-O

May 23, 2024

Attn: Dave Anderson
Spanish Fork City

RE: Zion's Landing
Zone Map Amendment
Letter Request

Dave,

We write you this letter regarding a Zone Map Amendment request to the following property located in Spanish Fork, Utah:

Address: 1495 East 400 North Spanish Fork, Utah
Parcel ID: 27:009:0166

We propose that the subject property mentioned above be changed on the Spanish Fork City zoning map from Exclusive Agriculture (A-E) to R-1-6, a medium density residential zone. The R-1-6 is a designated zone that corresponds with the Spanish Fork City General Plan.

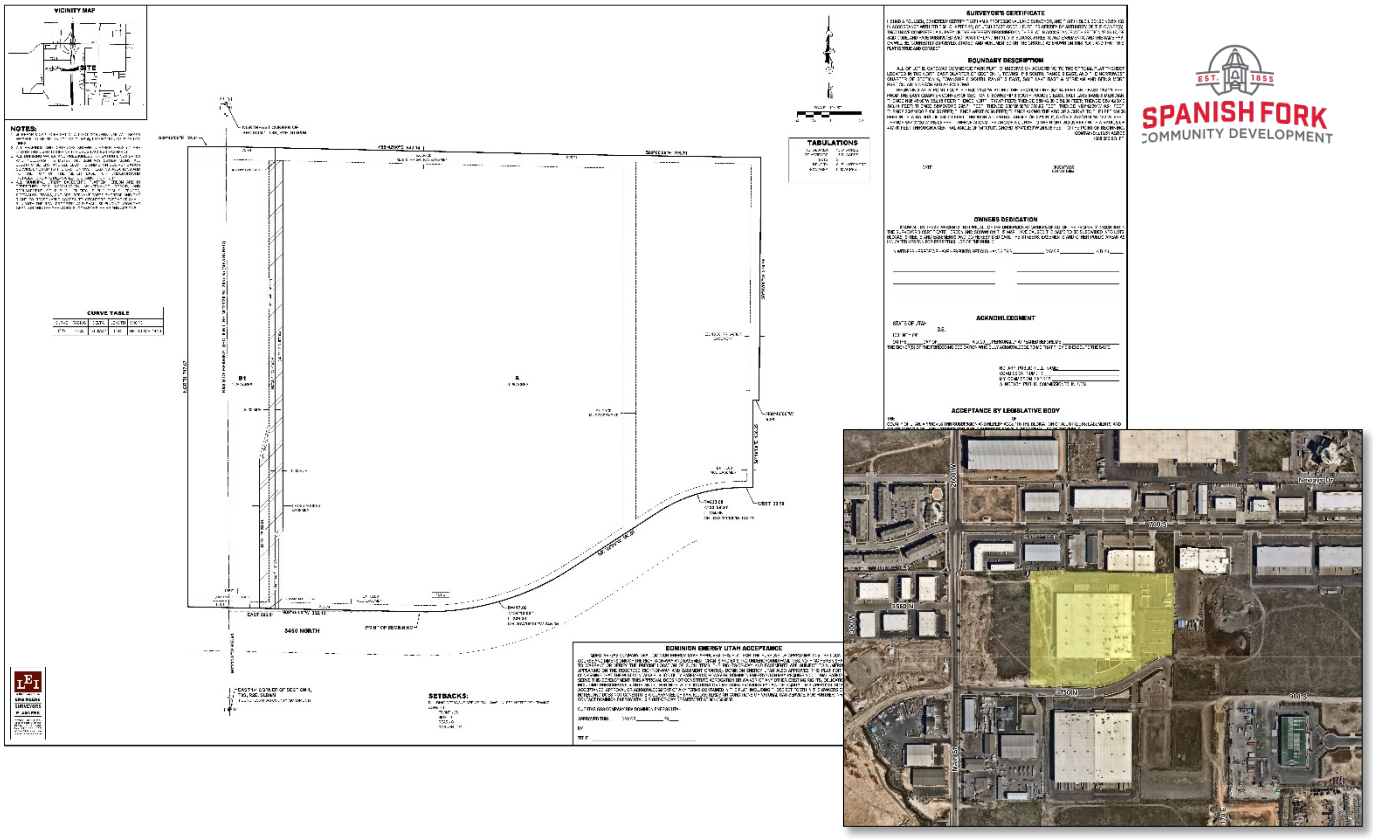
As part of our letter, we want to inform you and the rest of the Spanish Fork City staff that we held a neighborhood meeting on May 21, 2024. We disbursed invitations to all neighbors that live within 500 feet of the subject property. This was an effective meeting with the neighbors to discuss potential issues, concerns, and questions. There was no opposition from any of the neighbors and in fact, the neighbors adjacent to the subject property on the east and west were in full support of a rezone and new subdivision development. In conclusion to the neighborhood meeting, we feel confident that the proposed Zone Map Amendment request will be beneficial to the city and surrounding property owners.

If you have any further questions regarding our letter, please let us know.

Thanks,

Taione Militoni | *Owner*
Mount Zion Construction
taione@builtbyzion.com

Nate Heaps | *Owner's Rep*
Caleta Capital
nate@caletacapital.com



Gateway Commerce Park Plat D Amended Minor Plat Amendment Approval Request

September 11, 2024, Development Review Committee meeting.

Located at 151 East 3450 North, including 13.51 acres.

The subject property is zoned I-1.

The applicant has requested that a Minor Plat Amendment be approved in order to create 2 industrial lots.

Key Issues

1. Easements.

Recommendation

That the proposed Minor Plat Amendment be approved based on the following finding and subject to the following conditions.

Finding

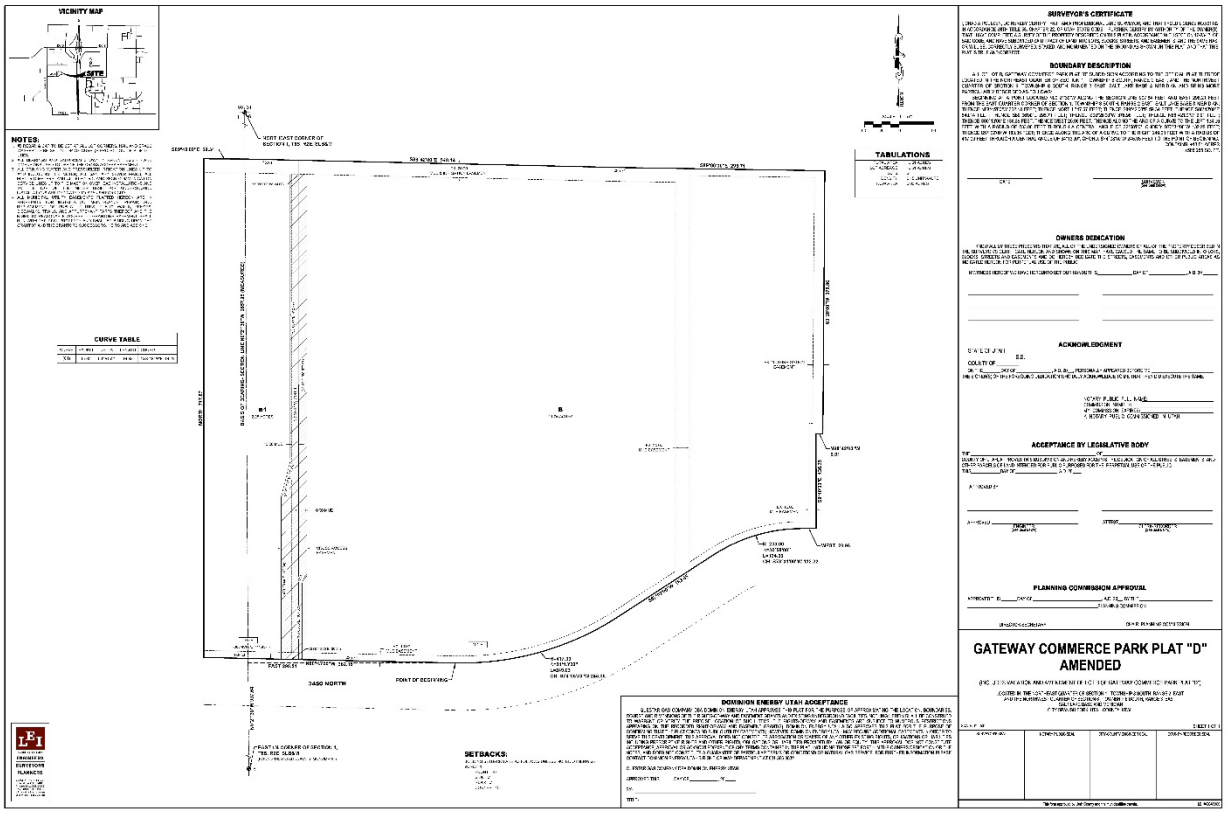
1. That the proposal conforms to the City's General Plan land use designation and Zoning Map.

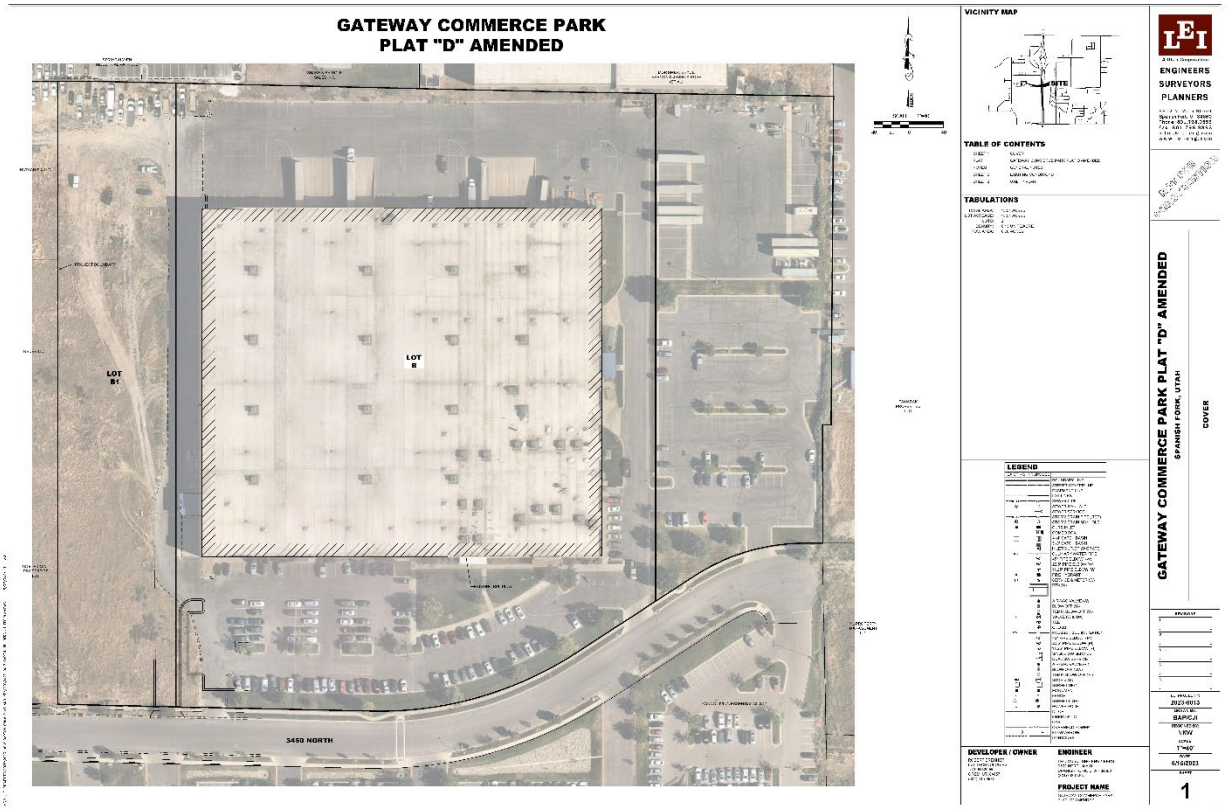
Conditions

1. That the applicant meets the City's Development and Construction standards, zoning requirements, and other applicable City ordinances.
2. That the applicant addresses any red-lines.

Exhibits

1. Plat.


VICINITY MAP
SITE
NOTES:
SURVEYOR'S CERTIFICATE
BOUNDARY DESCRIPTION
TABULATIONS
OWNERS DEDICATION
ACKNOWLEDGMENT
ACCEPTANCE BY LEGISLATIVE BODY
PLANNING COMMISSION APPROVAL
CURVE TABLE
SETBACKS:
DOMINION ENERGY UTAH ACCEPTANCE
GATEWAY COMMERCE PARK PLAT "D" AMENDED
3450 NORTH
POINT OF BEGINNING
ENGINEERS
SURVEYORS
PLANNERS


GATEWAY COMMERCE PARK
PLAT "D" AMENDED
LOT B1
LOT B
3450 NORTH
VICINITY MAP
SITE
TABLE OF CONTENTS
TABULATIONS
LEGEND
DEVELOPER / OWNER
ENGINEER
PROJECT NAME
ENGINEERS
SURVEYORS
PLANNERS
GATEWAY COMMERCE PARK PLAT "D" AMENDED
SPANISH FORK, UTAH
COVER
1

GENERAL NOTES

GENERAL UTILITY NOTES

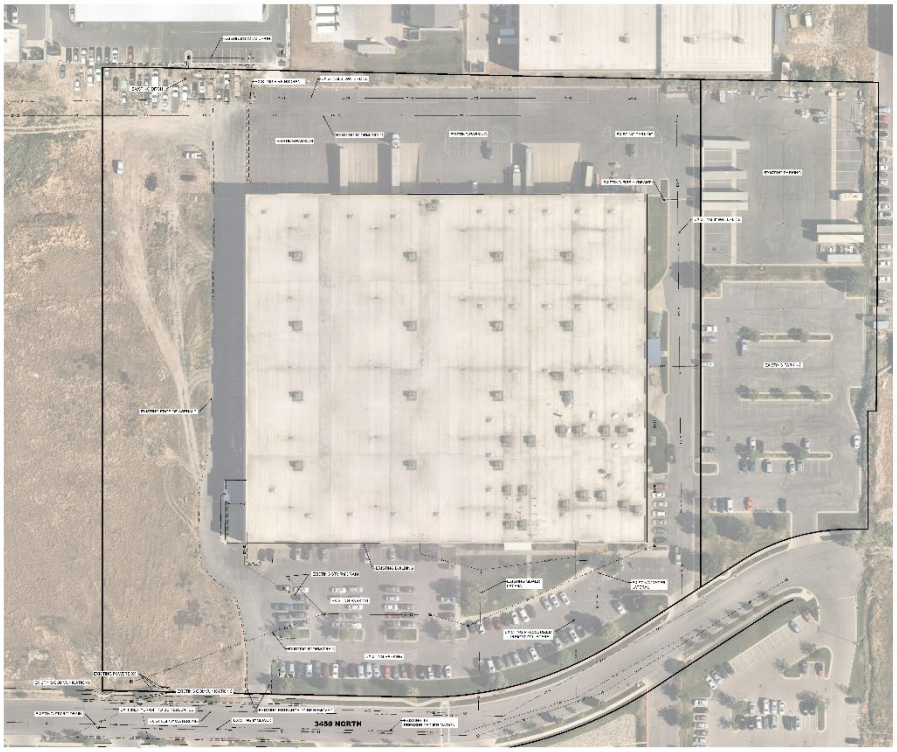
ELECTRONIC FILE NOTES

GENERAL GRADING AND DRAINING NOTES

LEI ENGINEERS SURVEYORS PLANNERS

GATEWAY COMMERCE PARK PLAT "D" AMENDED
SPANISH FORK, UTAH
GENERAL NOTES

NOTES



LEI ENGINEERS SURVEYORS PLANNERS

GATEWAY COMMERCE PARK PLAT "D" AMENDED
SPANISH FORK, UTAH
EXISTING CONDITIONS

2

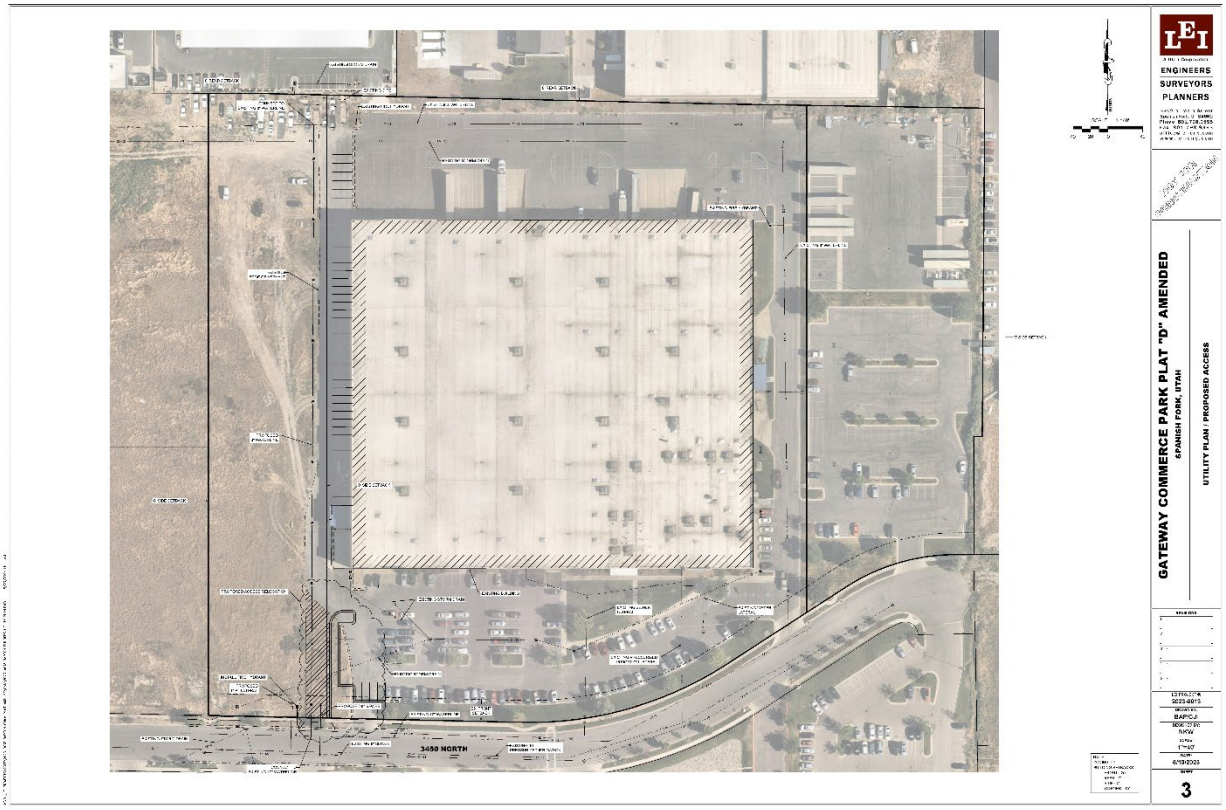

3450 NORTH
LEI
ENGINEERS
SURVEYORS
PLANNERS
GATEWAY COMMERCE PARK PLAT "D" AMENDED
SPANISH FORK, UTAH
UTILITY PLAN / PROPOSED ACCESS
3

Exhibit A
Denali Concrete Zone Change

N

1" = 128 Ft

DenaliConcrete_Bndry
I-1
Spanish Fork Boundary

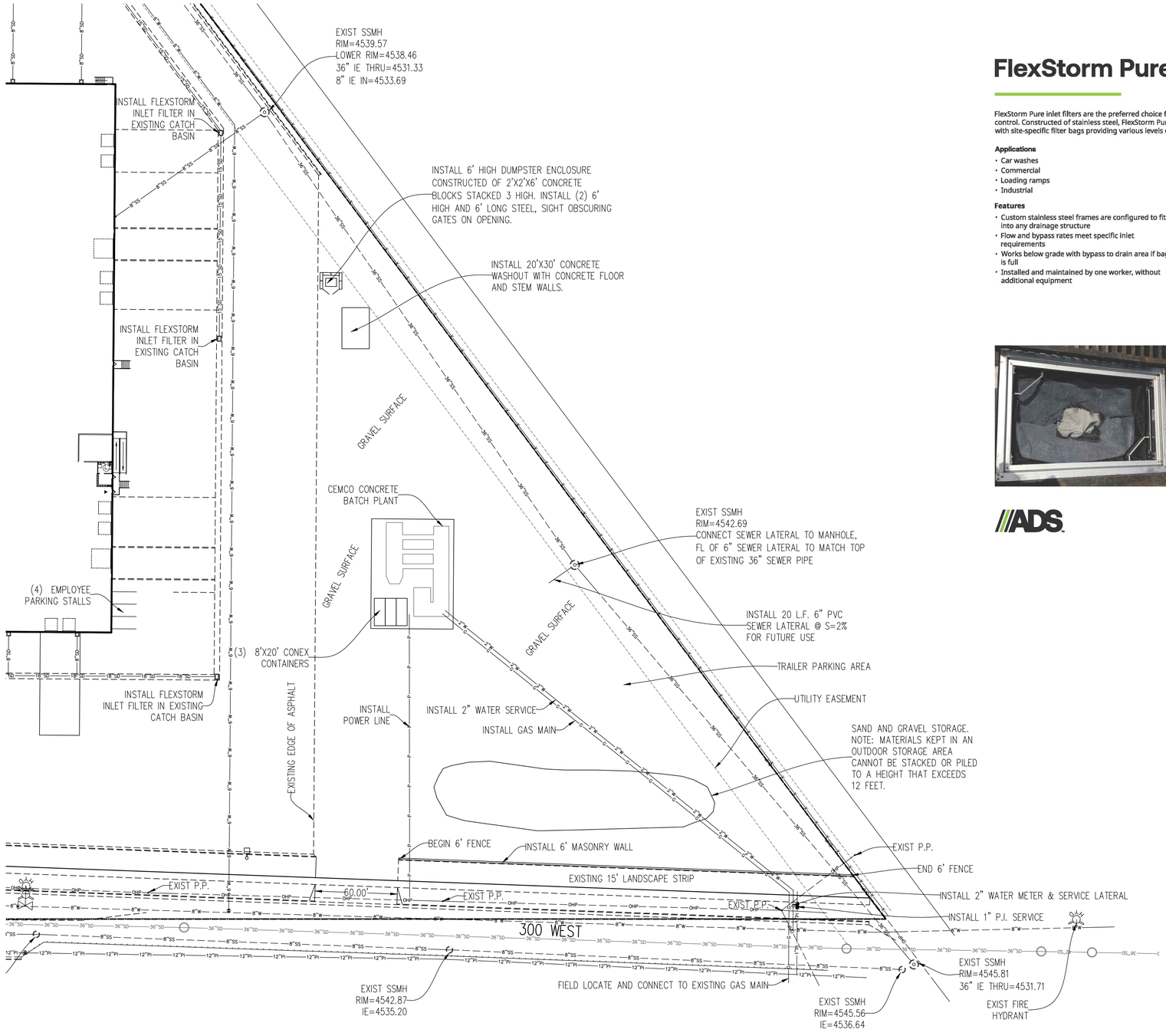


SPANISH FORK ENGINEERING

Pint Date: 3/21/2024

Spanish Fork City GIS
40 South Main St
Spanish Fork, UT 84660
GIS Phone Numbers;
(801) 804-4571 (Administrator)
(801) 804-4588 (Intern)
(801) 804-4577 (Intern)

Disclaimer: Spanish Fork City makes no warranty with respect to the accuracy, completeness, or usefulness of these maps. Spanish Fork City assumes no liability for direct, indirect, special, or consequential damages resulting from the use or misuse of these maps or any of the information contained herein. Portions may be copied for incidental uses, but may not be resold.



FlexStorm Pure™ Inlet Filter

FlexStorm Pure inlet filters are the preferred choice for permanent inlet protection and stormwater runoff control. Constructed of stainless steel, FlexStorm Pure inlet filters will fit any drainage structure and are available with site-specific filter bags providing various levels of filtration.

Applications
- Car washes
- Commercial
- Loading ramps
- Industrial
- Gas stations
- Parking lots
- Dock drains
- Maintenance

Features
- Custom stainless steel frames are configured to fit into any drainage structure
- Flow and bypass rates meet specific inlet requirements
- Works below grade with bypass to drain area if bag is full
- Installed and maintained by one worker, without additional equipment

Benefits
- Stainless steel frame provides extended service life
- Easily replaceable filter bags
- Meets stringent removal requirements:
  - All bags rated >84% removal efficiency
  - Bag styles available to remove hydrocarbon oils when required



//ADS

NOTES TO CONTRACTOR

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE AND ALL UNDERGROUND UTILITIES, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS.

GENERAL NOTES

1. ALL DRINKING WATER AND PRESSURIZED IRRIGATION LINES UP TO AND INCLUDING THE METER, ALL SANITARY SEWER MAINS, ALL ELECTRICAL METERS, AND ALL ELECTRIC AND SFCN COMMUNICATION SERVICE LINES UP TO THE MAST ON OVERHEAD INSTALLATIONS AND TO THE TOP OF THE METER BASE FOR UNDERGROUND INSTALLATIONS ARE DEDICATED TO SPANISH FORK CITY.
2. ALL CONSTRUCTION TO FOLLOW THE LATEST SPANISH FORK CITY STANDARDS AND SPECIFICATIONS.
3. OFFICE SPACE AND MAILING ADDRESS WILL BE LOCATED IN THE EXISTING MOUNTAIN COUNTRY FOODS PLANT 3 OFFICE LOCATED NORTH OF THIS SITE.

PARKING DATA:

FOR THE PROPOSED USE, (3) EMPLOYEES WILL BE ON-SITE DURING THE HIGHEST SHIFT.

DUST CONTROL:

CALCIUM CHLORIDE SOIL STABILIZATION AGENT OR EQUIVALENT WILL BE USED ON-SITE TO CONTROL DUST ON THE GRAVEL SURFACE AND THE MATERIAL STOCKPILES.

TRUCK STORAGE:

(7) CONCRETE TRUCKS AND (3) 53' PNEUMATIC TRAILERS FOR BULK PRODUCT WILL BE STORED ON-SITE.

UTILITY LEGEND

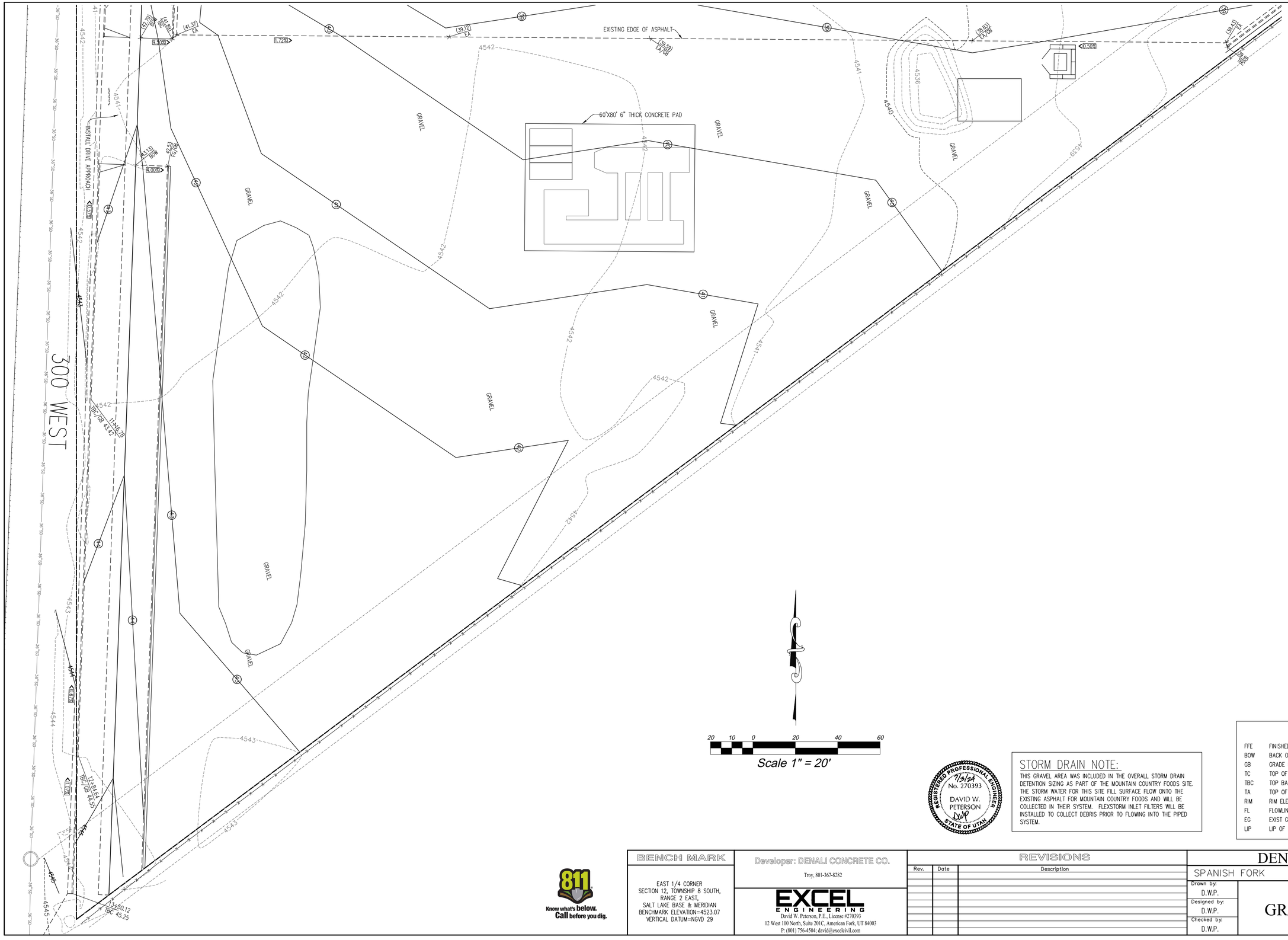
	FIRE HYDRANT
	WATER VALVE
	SECONDARY VALVE
12"PI	NEW SECONDARY WATER
8"W	NEW CULINARY WATER
2"W	NEW CULINARY WATER SERVICE
W	EXIST CULINARY WATER
6"SL	NEW SEWER LATERAL PVC SDR-35
8"SS	EXISTING SEWER MAIN
15"SD	NEW STORM DRAIN PIPE
18"SD	EXISTING STORM DRAIN PIPE
G	NEW GAS LINE
G	EXISTING GAS LINE
TEL	EXISTING COMMUNICATION LINE
P	EXISTING POWER LINE
	EDGE OF ASPHALT

REGISTERED PROFESSIONAL ENGINEER
7/31/24
No. 270393
DAVID W. PETERSON
STATE OF UTAH

40 20 0 40 80 120
Scale 1" = 40'

811 Know what's below. Call before you dig.

BENCH MARK	Developer: DENALI CONCRETE CO.	REVISIONS	DENALI CONCRETE
EAST 1/4 CORNER SECTION 12, TOWNSHIP 8 SOUTH, RANGE 2 EAST, SALT LAKE BASE & MERIDIAN BENCHMARK ELEVATION=4523.07 VERTICAL DATUM=NGVD 29	Troy, 801-367-8282	Rev. 1 — Date 08/13/24 — Description: REVISED FENCE TYPE	SPANISH FORK 1764 N. 300 W. UTAH
	EXCEL ENGINEERING David W. Peterson, P.E. License #270393 12 West 100 North, Suite 201C, American Fork, UT 84003 P: (801) 756-4504; david@excelcivil.com		Drawn by: D.W.P. — Designed by: D.W.P. — Checked by: D.W.P.
			SITE & UTILITY PLAN
			Scale: 1"=40' — Date: 07/03/24 — C1



STORM DRAIN NOTE:

THIS GRAVEL AREA WAS INCLUDED IN THE OVERALL STORM DRAIN DETENTION SIZING AS PART OF THE MOUNTAIN COUNTRY FOODS SITE. THE STORM WATER FOR THIS SITE FILL SURFACE FLOW ONTO THE EXISTING ASPHALT FOR MOUNTAIN COUNTRY FOODS AND WILL BE COLLECTED IN THEIR SYSTEM. FLEXSTORM INLET FILTERS WILL BE INSTALLED TO COLLECT DEBRIS PRIOR TO FLOWING INTO THE PIPED SYSTEM.

GRADING LEGEND

FFE	FINISHED FLOOR ELEV.	FG	FINISHED GRADE
BOW	BACK OF WALK	TW	TOP OF WALL
GB	GRADE BREAK	BW	BOTTOM OF WALL
TC	TOP OF CONCRETE	IE	INVERT ELEVATION
TBC	TOP BACK OF CURB	0.002%	DIRECTION OF DRAINAGE
TA	TOP OF ASPHALT	(00.00)	EXISTING ELEVATION
RIM	RIM ELEVATION	00.00 TBC	PROPOSED ELEVATION
FL	FLOWLINE	4808	EXISTING CONTOUR
EG	EXIST GROUND	08	PROPOSED CONTOUR
LIP	LIP OF CURB		

REGISTERED PROFESSIONAL ENGINEER
11/3/24
No. 270393
DAVID W. PETERSON
STATE OF UTAH

Know what's below. Call before you dig.

BENCH MARK

EAST 1/4 CORNER
SECTION 12, TOWNSHIP 8 SOUTH,
RANGE 2 EAST,
SALT LAKE BASE & MERIDIAN
BENCHMARK ELEVATION=4523.07
VERTICAL DATUM=NGVD 29

Developer: DENALI CONCRETE CO.
Troy, 801-367-8282

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201C, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

REVISIONS

Rev.	Date	Description

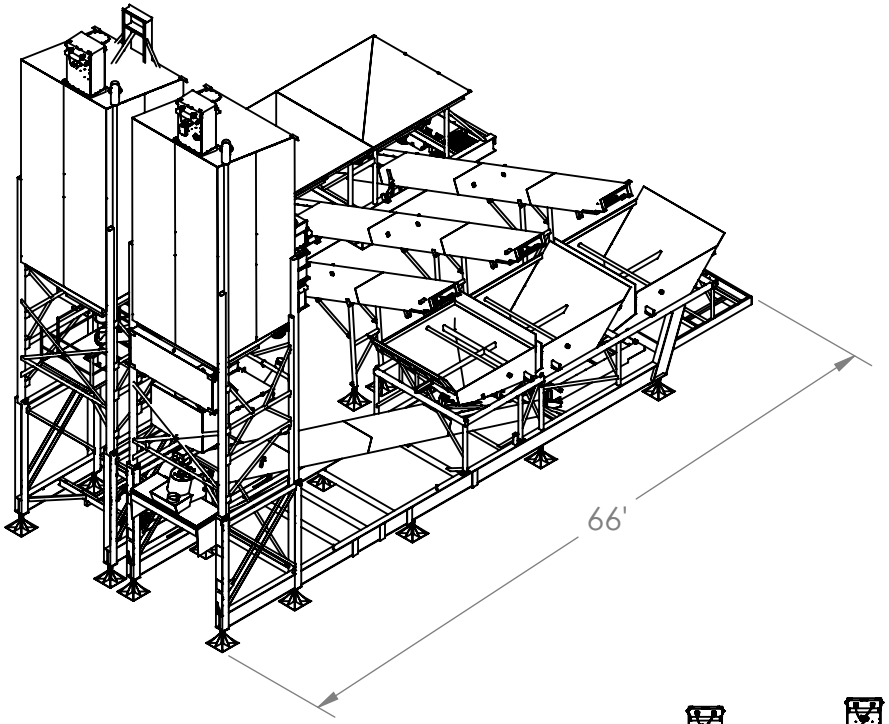
DENALI CONCRETE

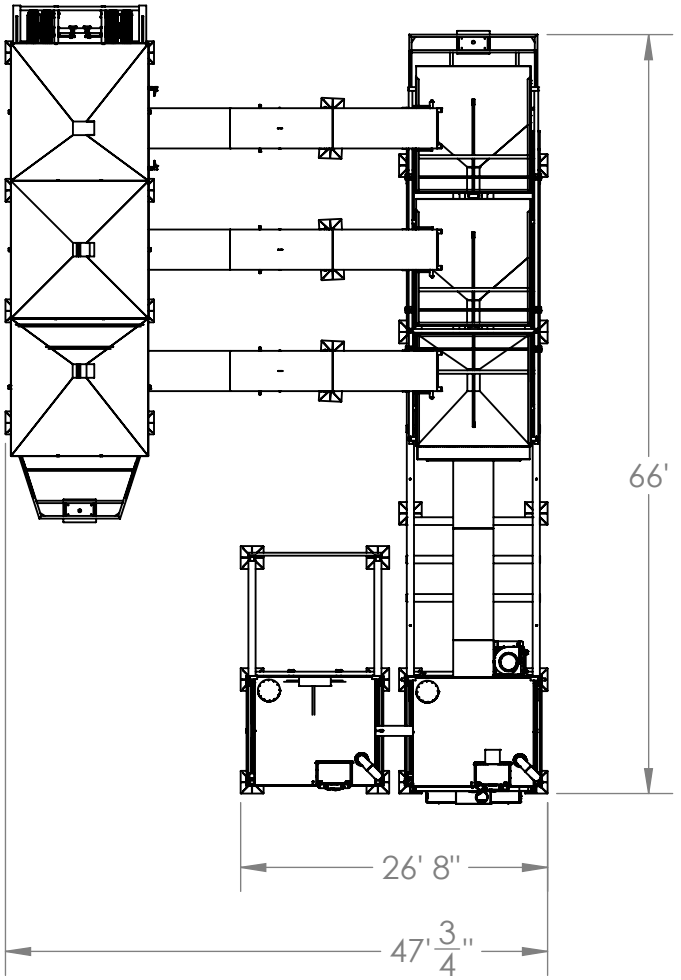
SPANISH FORK 1764 N. 300 W. UTAH

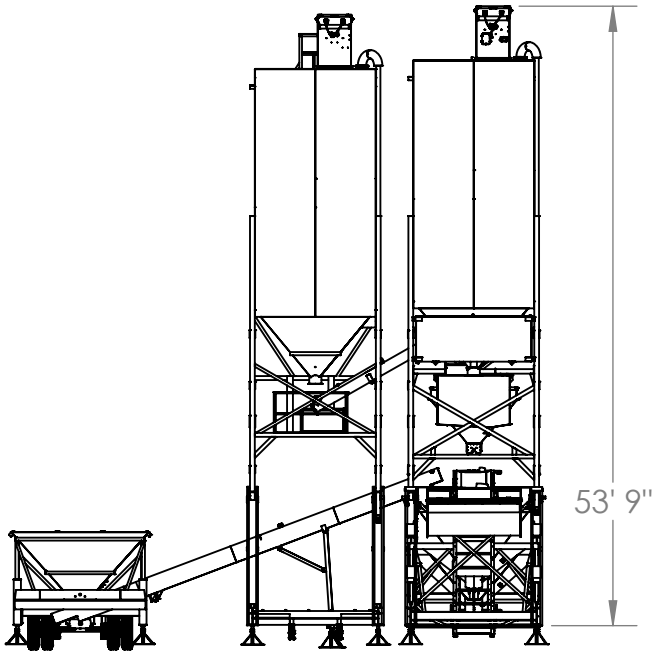
Drawn by: D.W.P.
Designed by: D.W.P.
Checked by: D.W.P.

GRADING PLAN

Scale: 1"=20'
Date: 07/03/24
C2







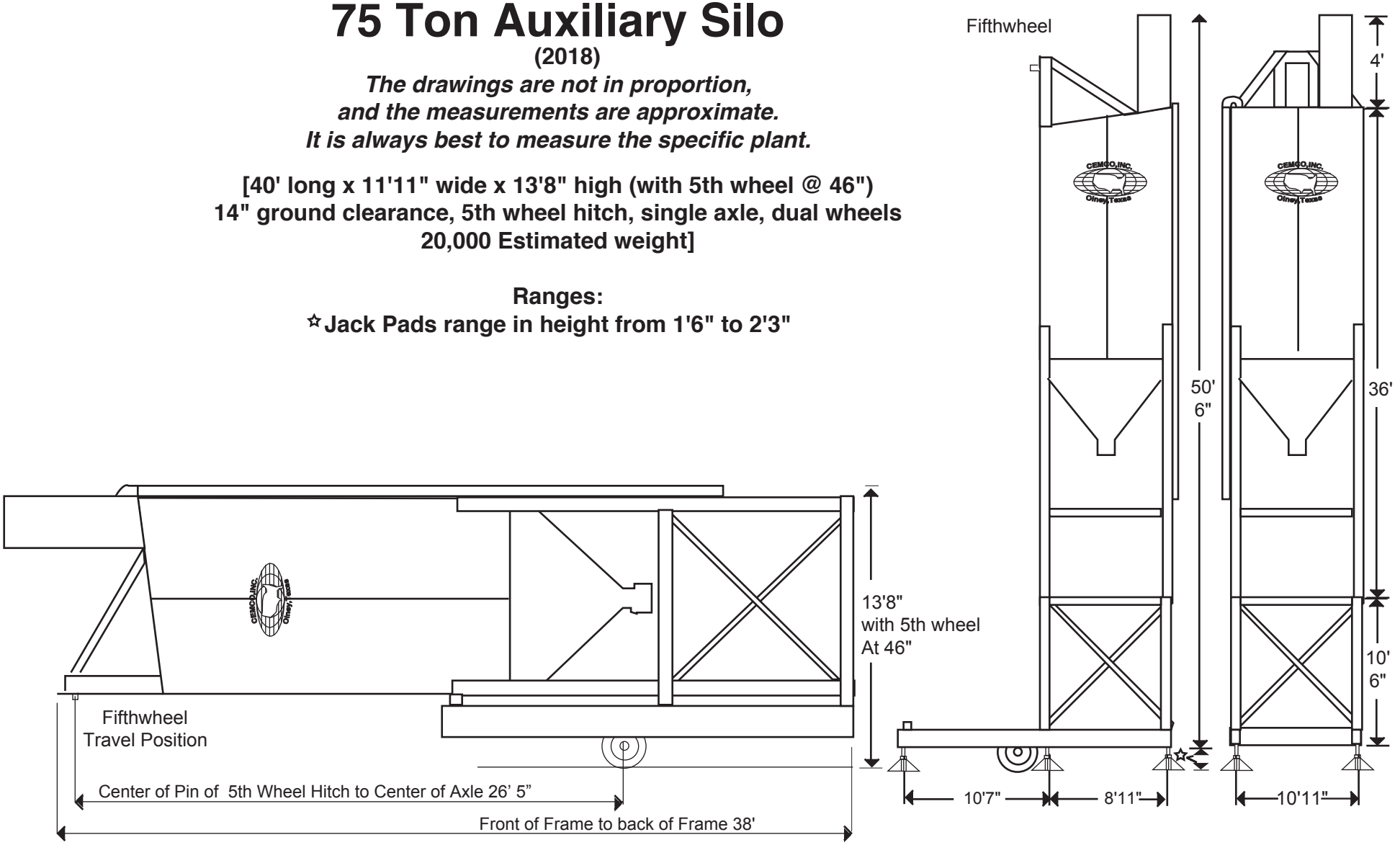
Shown: 2 Bin **extended Silo** with MSS and 3 Bin MAF
3 bin extended/ 4 bin frame length is 77'

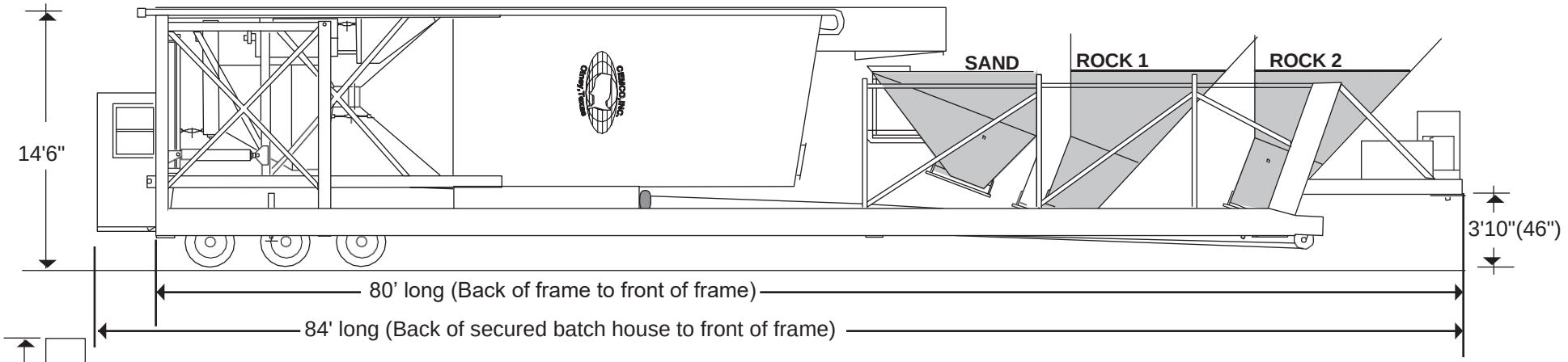
Cemco, Inc.
75 Ton Auxiliary Silo
(2018)

The drawings are not in proportion,
and the measurements are approximate.
It is always best to measure the specific plant.

[40' long x 11'11" wide x 13'8" high (with 5th wheel @ 46")
14" ground clearance, 5th wheel hitch, single axle, dual wheels
20,000 Estimated weight]

Ranges:
☆Jack Pads range in height from 1'6" to 2'3"





Cemco, Inc. 3 Bin Extended Silo Batch Plant

(2021)

The drawings are not in proportion, and the measurements are approximate. It is always best to measure the specific plant.

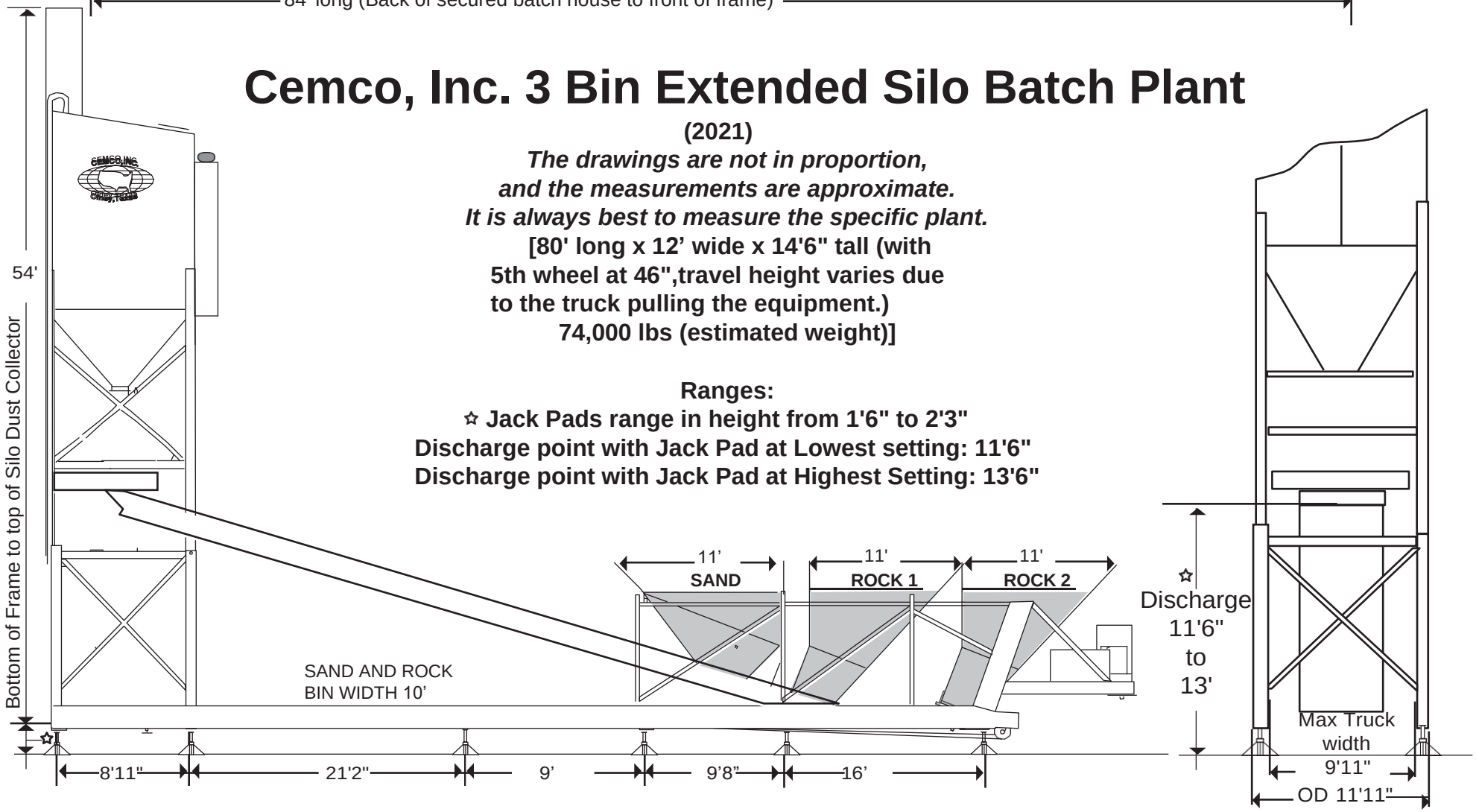
[80' long x 12’ wide x 14'6" tall (with 5th wheel at 46",travel height varies due to the truck pulling the equipment.) 74,000 lbs (estimated weight)]

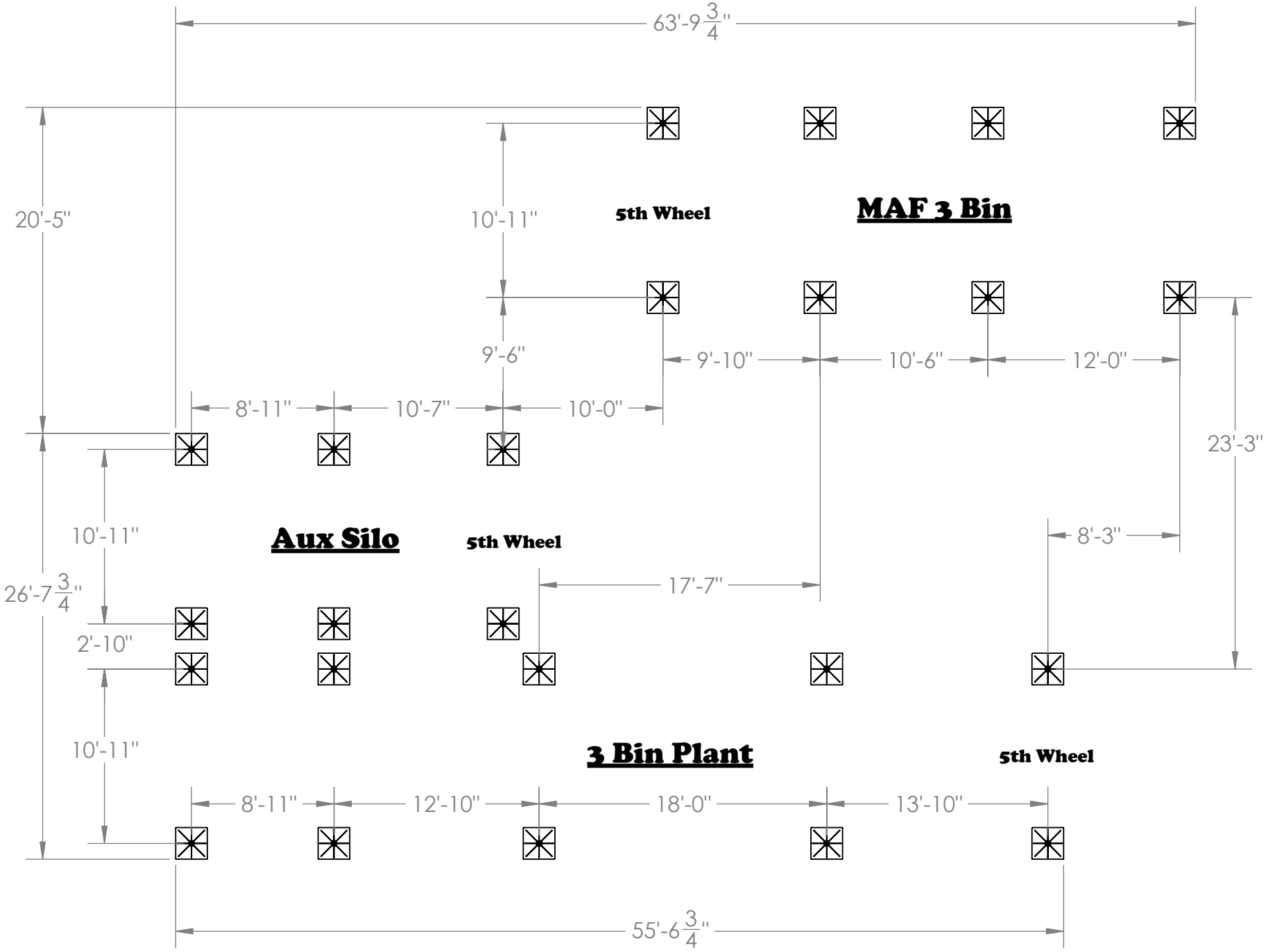
Ranges:

✩ Jack Pads range in height from 1'6" to 2'3"

Discharge point with Jack Pad at Lowest setting: 11'6"

Discharge point with Jack Pad at Highest Setting: 13'6"




63'-9 3/4"
20'-5"
10'-11"
5th Wheel
MAF 3 Bin
9'-6"
9'-10"
10'-6"
12'-0"
8'-11"
10'-7"
10'-0"
23'-3"
10'-11"
Aux Silo
5th Wheel
8'-3"
26'-7 3/4"
17'-7"
2'-10"
10'-11"
3 Bin Plant
5th Wheel
8'-11"
12'-10"
18'-0"
13'-10"
55'-6 3/4"

CEMCO

Technical Data Sheet

Filter Media:	Spunbond
Construction:	100% Polyester spunbond media with point bond finish
Color:	White
Weight (nominal):	7.7 oz/yd² (260 g/m²)
Thickness (nominal):	0.024 inch (0.66 mm)
Permeability:	18 – 26 ft³/ft²/min @ 0.5" H_2O – ASTM D 737 9.1 – 13.2 cm³/cm²/sec @ 125 Pa – ASTM D 737 86 – 125 l/dm²/min @ 200 Pa – DIN 53887
Max. Operating Temperature:	250°F (121°C)
Tensile Strength (nominal):	200 lbs/2-in. strip (91 kg/5 cm strip) – MD 125 lbs/2-in. strip (57 kg/5 cm strip) – CMD
Mullen Strength (nominal):	350 lbs/in² (24.6 kg/cm²)
Dust Release Properties:	Very Good
Filtration Efficiency:	> 99.9% for particle size range between 0.2 µ > 2.0 µ
BGIA-Filter Class:	"M" – pet Test Method: DIN EN 60335-2-69
FDA Conformity:	FDA – 21 CFR 177.1630 30.31 LFGB

This data is to be considered as typical, and for information purposes only. All specifications are subject to change.

California Environmental Protection Agency **Air Resources Board**	**JOHN DEERE POWER SYSTEMS**	**EXECUTIVE ORDER U-R-004-0547** New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2018	JJDXL04.5316	4.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Control Module, Exhaust Gas Recirculation, Selective Catalytic Reduction-Urea, Electronic Direct Injection, Turbocharger, Charge Air Cooler, Oxidation Catalyst, Ammonia Oxidation Catalyst	Crane, Loaders, Tractor, Dozer, Pump, Compressor, Generator Set, Other Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	0.20	--	0.02	0.01	--	--	--

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 10 day of May 2017

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

EO #: U-R-004-0547

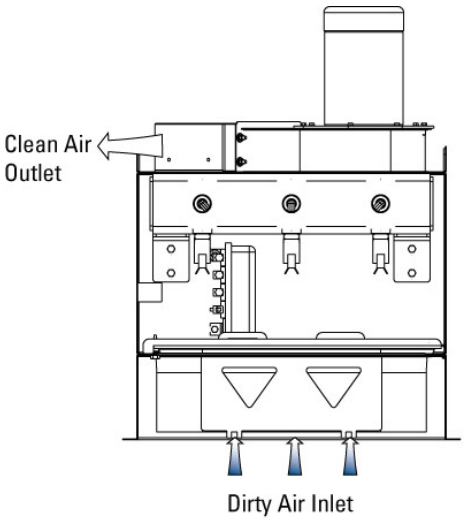
Attachment: Page 1 of 1

5-4-2017

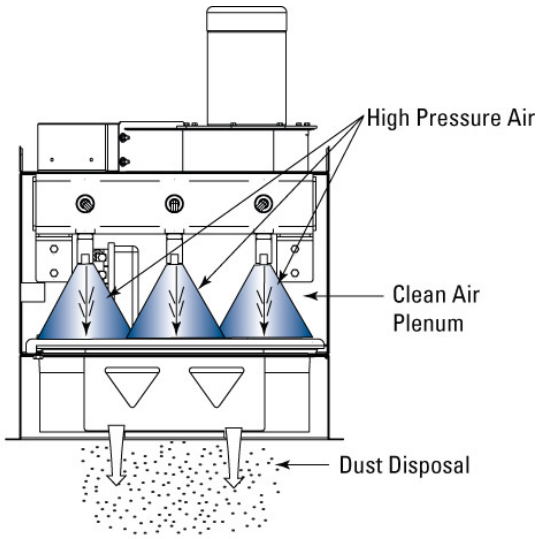
Engine Model Summary Form

Manufacturer: John Deere Power Systems
Engine category: Nonroad CI
EPA Engine Family: JJDXL04.5316
Mfr Family Name: 350HCH
Process Code: New Submission

1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm/stroke@peak kW (for diesel only)	5. Fuel Rate: (kg/hr)@peak kW (for diesels only)	6. Torque (Nm) @RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
4045HFRNT16	4045	129@2400	118@2400	29@2400	694@1600	149@1600	24@1500	EGR OC SCRC NH3OC DFI TC CAC ECM



Normal Operation (1 filter pack unit)



Filter Cleaning Operation (1 filter pack unit)

Access filter packs from clean side through access doors on top of the collector. Filter packs are changed without tools.

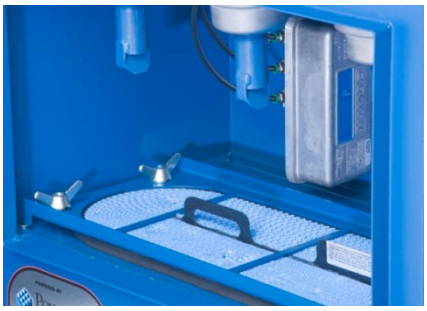
Torit PowerCore CPV-1 - Technical Product Summary

- **PAINT SYSTEM: – STANDARD FINISH:** Exterior surfaces finished with a durable, multi-coat textured liquid or powder finish that meets an ASTM B117 salt spray test of 2,000 hours on standardized test panels. The exterior color will be Torit Blue. The interior shall be primed with a durable liquid or powder primer.
- **FILTER MEDIA:** (1) CP filter packs with 63 sq ft of Ultra-Web® media for 350 cfm airflow. Operating Temperature: 150°F maximum.
- **SOLENOID ENCLOSURE:** NEMA 4
- **WEATHER COVER:** Closes air outlet of unpowered collector for outdoor installation. Protects from rain, snow, birds, and rodents.
-

Unique Features of the Torit PowerCore CPV-1 Bin Vent

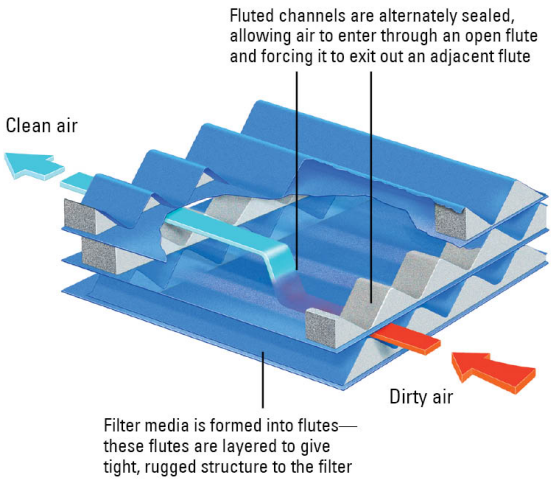


THE CPV-1 POWERCORE FILTER PACK: Is installed and removed from the clean side of the collector. Only one person is needed to perform a filter pack change. No tools are required, and there is no confined space entry. All service components are accessed from the same side.

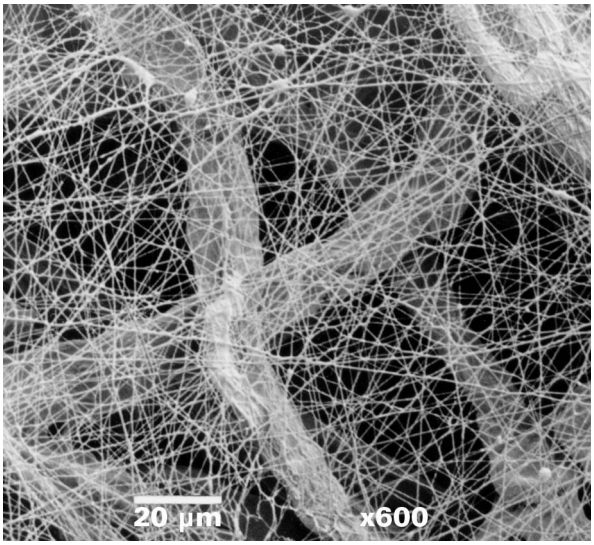


POWERCORE FILTER PACKS: Small, lightweight, and easily handled by one person. Donaldson's PowerCore technology allows more filter material to be packaged in a smaller space: one 7 inch by 22 inch PowerCore filter pack contains as much filtering material as six 8-foot long traditional filter bags. And, the filter media inside PowerCore filter packs is our well-proven Ultra-Web advanced nanofiber technology. There is an integrated gasket that ensures a good seal with every filter change. Ultra-Web media traps more dust on the surface of the fluted channels as compared to conventional filter bag materials like depth-loading 16 oz. polyester. Surface loading greatly promotes filter cleaning. Better pulse cleaning lowers operational pressure drop and energy use.





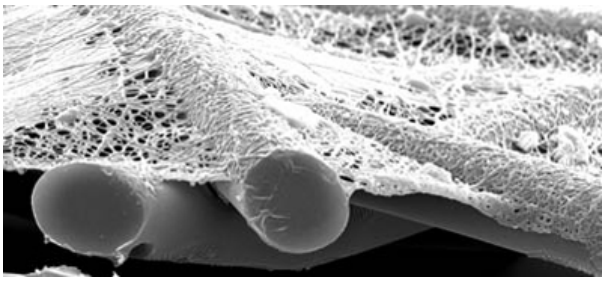
TORIT POWERCORE: Donaldson is leading the way with PowerCore, a very innovative filter technology. PowerCore filter packs combine patented Ultra-Web nanofiber technology with new media "packaging" expertise. As a result, more effective filtration area is packaged into smaller spaces. One CP Series filter pack replaces up to six traditional 8-foot long bag filters.



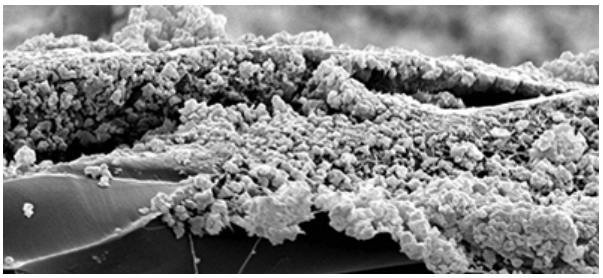
ULTRA-WEB® MEDIA: Donaldson leverages almost 100 years of air filtration experience in the development of filtration media, providing tremendous value to our customers. Ultra-Web media incorporates a durable layer of premium nanofiber, which is designed to intercept the smallest dust particles at the surface of the media. This surface loading capability improves the effectiveness of pulse cleaning which minimizes system pressure differential, thereby conserving compressed air usage and brake horsepower requirements of the system fan.

ULTRA-WEB IS MOST EFFECTIVE: Independent laboratory testing determined that Ultra-Web media has a Minimum Efficiency Reporting Value (MERV) of 15 based on the ASHRAE 52.2-1999 test standard. Ultra-Web media rated MERV 15 is the most optimized, balanced and cost-effective media in the market place, providing higher efficiency without compromising pressure drop and filter life. For more information on Ultra-Web and MERV ratings, please visit http://www2.donaldson.com/torit/corp/pages/products/ultra-webmediatechnology.aspx

SYSTEM ENERGY EFFICIENCY AND SAVINGS: Surface loading is a key characteristic of Donaldson's Ultra-Web media. It provides enhanced dust cake release, allowing particulate to easily pulse free of the filter surface. The result is reduced pressure drop across the filter throughout the entire life of the filter. This unique feature allows the system fan to deliver the required airflow while operating at much lower energy consumption levels.



Clean Ultra-Web Media



Surface Loaded Ultra-Web Media
(substrate still clean)

LOWER EMISSIONS: Independent lab testing showed 78% fewer emissions with PowerCore filter media, compared to 16 oz. polyester felt. These tests were done in accordance with ASTM D6830-02 per EPA PM 2.5. Annual emissions calculated assuming

14,400 cfm airflow rate, 265 working days per year, and 2 shifts per day. Field measurements may vary due to differences in dust contaminant and sensitivity of measurement equipment.



COMPACT PULSE CLEANING SYSTEM: Torit PowerCore CPV-1 includes a compact pulse cleaning system designed to match the pulse energy to the obround shape of the PowerCore filter pack. The resulting pulse flow effectively covers the entire media pack. It easily pulses the dust out of the fluted channels, keeping the pressure drop low and prolonging filter life. Requires 90 PSI clean dry compressed air connection to the air manifold.

Torit PowerCore CPV-1 Bin Vent Service Requirements

- **COMPRESSED AIR CONSUMPTION:** 10 scfm at 90 to 100 psig, clean, dry compressed air based on a 10 second pulse interval.

- **ELECTRIC REQUIREMENTS: :** 110V,Single phase primary electrical supply to control panel (wiring between panel and individual components by others).

- **RECOMMENDED MINIMUM MAINTENANCE CLEARANCES:** 36″ in front of filter access, 18″ at rear of unit.

Donaldson
Torit®

POWERCORE® CP FILTER PACK

ENGINEERED FOR DUST COLLECTION

- Ultra-Web® fine fiber media ensures longer filter life at a significantly lower pressure drop
- Superior particle release due to surface filtration
- Fluted media construction prevents bridging in fibrous or agglomerative applications
- Smaller and lightweight filter pack design with built-in handles
- Easy filter changeout for quicker maintenance — no tools required
- MERV* 13 filtration efficiency rating (standard)
- MERV* 15 filtration efficiency rating (optional)

PowerCore
A Donaldson Filtration Technology



PowerCore® CP Filter Pack
(Also available in Standard, Spunbond and Anti-Static)

PROVEN TECHNOLOGY THAT PERFORMS

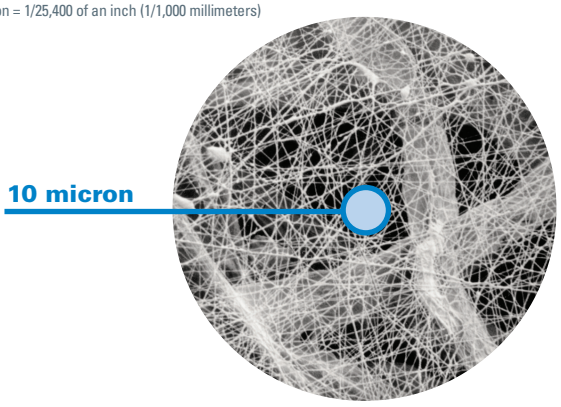
Proven and proprietary Ultra-Web® filter media delivers longer filter life, cleaner air and greater cost savings than other traditional filter media. It is made with an electrospinning process that produces a very fine, continuous, resilient fiber of 0.2-0.3 microns in diameter.

PowerCore filter packs with Ultra-Web media keep dust on the surface of the fluted channels where it is easily cleaned off unlike conventional filter bag material that depth loads, like 16 oz. (453.6 g) polyester.

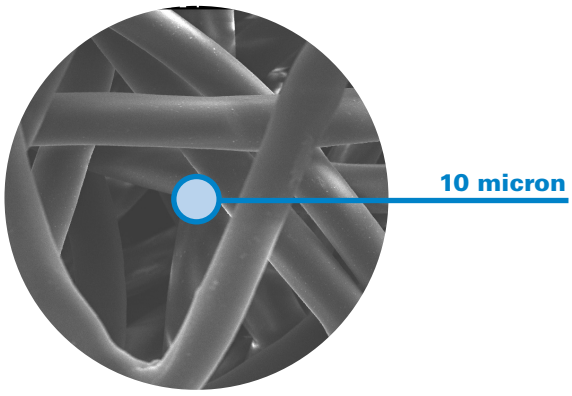
- Surface loading promotes filter cleaning and longer life
- Better pulse cleaning lowers operational pressure drop and energy use

SEM† IMAGES

1 micron = 1/25,400 of an inch (1/1,000 millimeters)



Ultra-Web Fine Fiber Technology (600x)



16 oz. Polyester (600x)

† Scanning Electron Microscope.
* Refer to Technical Information on page 2.

APPLICATIONS

- Premium performance on fine, dry, fibrous and/or abrasive dust
- Longer life in aggressive/challenging applications
- Optional Spunbond or Anti-Static (AS) media available
- Spunbond version has excellent moisture and chemical resistance

MEDIA COMPATIBILITY DATA		
Temperature Resistance	150°F 65°C	
Moisture Absorption**	Maximum 14% @ 70°F (21°C) and 65% RH	
Chemical Tolerance***	Acids: Poor Bases: Fair	Oxidants: Poor Solvents: Fair
Abrasion Resistance	Excellent per TAPPI 476 (Taber Method)	
Moisture Absorption** for Spunbond	0.2–0.5% @ 70°F (21°C) and 65% RH	
Chemical Tolerance*** for Spunbond	Acids: Good Bases: Good	Oxidants: Good Solvents: Good

SPECIFICATIONS

MEDIA COMPOSITION	
Fine Fiber Technology	Durable proprietary synthetic filter media fiber and polymer Mean fiber diameter of 0.2 µm
Substrates	• Proprietary blend of cellulose fibers • Spunbond Polyester • Anti-static (AS) version per ESD STM 11.11-2001 Resistance less than 108 OHM

MEDIA EFFICIENCY	
U.S. Efficiency Rating	MERV* 13 (standard)
U.S. Efficiency Rating	MERV* 15 (optional)

FILTER PACK CONSTRUCTION	
Standard Construction	Obround design Fluted media configuration Urethane gasket Built-in handle

CURRENT AVAILABLE CONFIGURATIONS

Collector Models	Dimensions		PowerCore		
	in	mm	Standard	Spunbond	Anti-Static
CPC	22.3 x 7.5 x 7.0	566.42 x 190.50 x 177.80	•	•	•
CPV	22.3 x 7.5 x 7.0	566.42 x 190.50 x 177.80	•	•	•

* The Minimum Efficiency Reporting Value (MERV) of this filter cartridge has been determined through independent laboratory testing using ASHRAE 52.2 (2007) test standards. The MERV rating was determined at a face velocity of 118 feet per minute (36.0 meters per minute) and loading up to four inches (101.6 millimeters) water gauge. Actual efficiency of any filter cartridge will vary according to the specific application parameters. Dust concentration, airflow, particle characteristics, and pulse cleaning methods all affect filtration efficiency.

** Environmental conditions involving combinations of high temperature, corrosive material, and moisture can reduce media strength. Reduction in media strength may compromise cartridge integrity and performance.

*** A combination of chemicals may alter fiber resistance to the specified performance level. Chemical attack may compromise cartridge integrity and performance.

Important Notice
Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.

Donaldson

Significantly improve the performance of your collector with genuine Donaldson Torit replacement filters and parts. **Call Donaldson Torit today 800-365-1331.**

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Torit
P.O. Box 1299
Minneapolis, MN 55440-1299 U.S.A.

donaldsontorit.com
Tel 800-365-1331 (USA)
Tel 800-343-3639 (within Mexico)
donaldsontorit@donaldson.com

EXACTLY WHAT YOU NEED.™

F118158 ENG (12/16) PowerCore CP Series Filter Pack ©2016 Donaldson Company, Inc.
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CEMCO BATCH PLANT
Process Flow Diagram Information

Fill aggregate weigh bins with belt conveyors (1 each bin) or direct with front loader.

Water surge bin is kept continually full by float switch control.

Cement is in storage in plant silo. Auxiliary silos (as many as 2) may be used if more than one cement is necessary. If more than one cement is used they are weighed up accumulatively one at a time.

Water is weighed up by flow from a surge bin through a 6" valve into a 400-gallon capacity weigh bin.

With the aggregate bins full and the cement and water weighed up, the discharge into the mixer may begin.

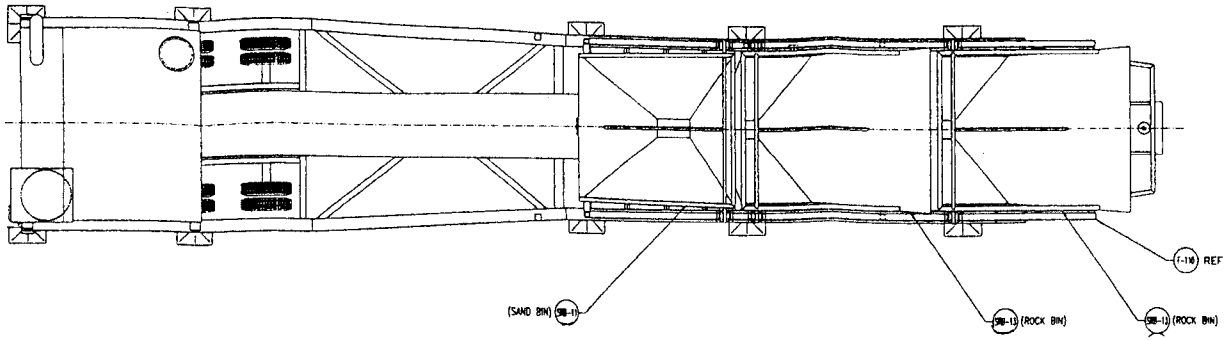
The water begins discharging from the weigh bin into the mixer through a 6" valve. At the same time all aggregates begin discharging onto the belt. The computer controls the flow rate of each individual aggregate bin independently.

Typically, after lead water and a user defined percentage of aggregate has discharged, the cement will discharge @ a user defined flow rate and should finish discharging before the aggregate.

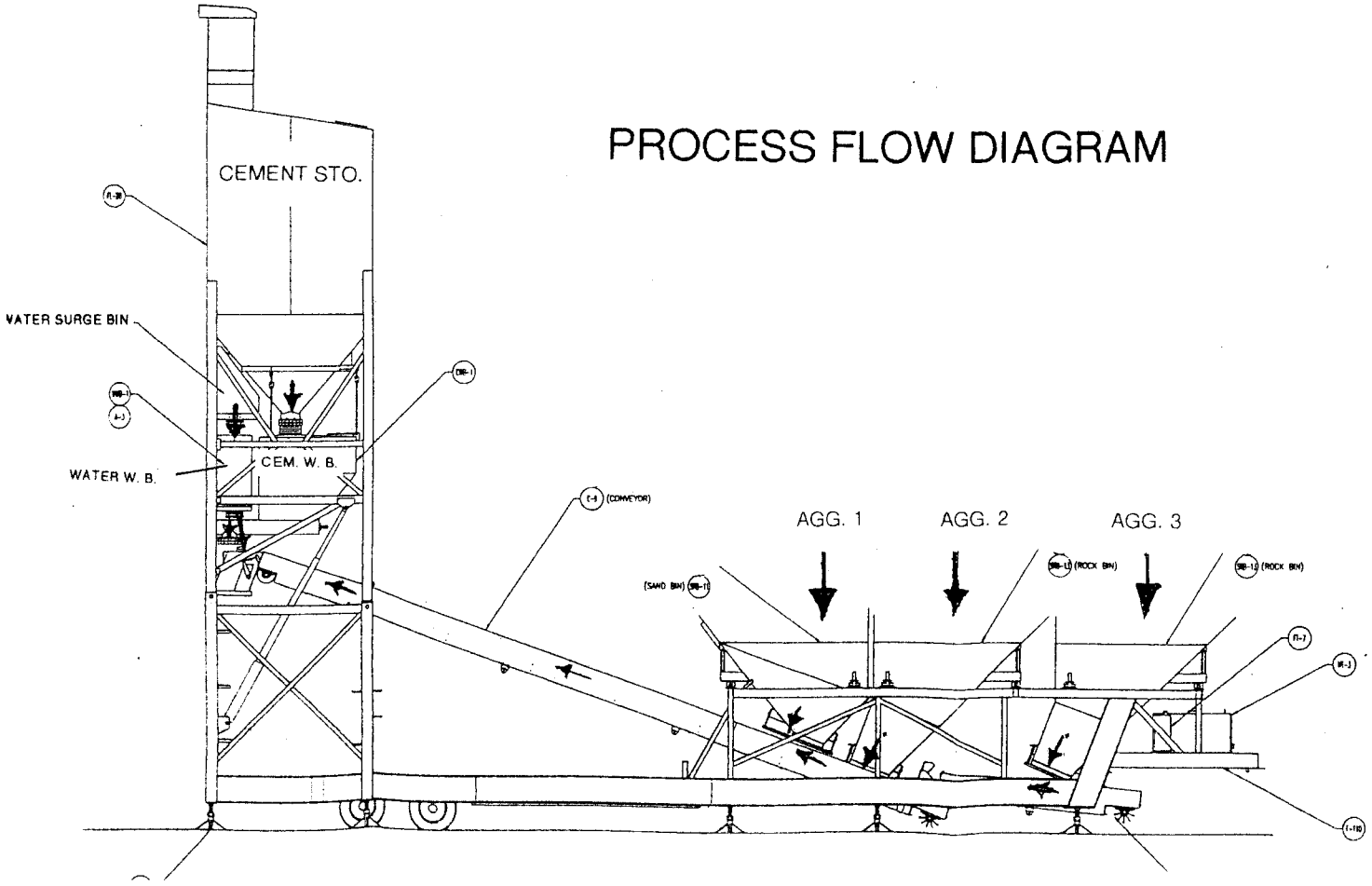
When the cement and aggregate discharge is completed, the remainder of the water is discharged and the batch is complete.

If one has large throat mixers, discharge time is about 2 minutes..

Admix dispensers are not furnished by CEMCO, Inc. but are usually supplied by admix suppliers. However, the controls for admix is in the computer.



PROCESS FLOW DIAGRAM



CEMCO

Model 300

Specification Sheet

Contents

Cemco Model 300 Technical Specifications 1

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3-bin Aggregate Storage 1

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Aggregate Gate Control 1

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Water Pump 2

Water Storage and Transfer 2

Cement Handling 2

Cement Storage and Transfer 2

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Transfer Conveyor Specifications 3

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Donaldson TBV-2 Silo Top Dust Collector 4

Donaldson CPV-1 Cement Weigh Batcher Dust Collector 4

Donaldson 9FS6 Load Point Dust Collector 5

Plant Power 5

Plant Production 5

Cemco Model 300 Technical Specifications

The Cemco Model 300 is completely portable with leveling cylinders on all four corners of the unit and a self-erecting 58 silo. The plant is completely self-contained, powered by an on board 173 Horsepower John Deere Diesel Engine.

Aggregate Handling

The Plant can be configured with 2, 3, or 4 aggregate bins. Additional 12 cubic yard automatic feeder conveyors may be added per aggregate bin.

2-bin Aggregate Storage	
Aggregate Storage Bin	**Storage (cubic yards)**
Sand	13 [35,000 lbs]
Rock	15 [40,000 lbs]
3-bin Aggregate Storage	
Aggregate Storage Bin	**Storage (cubic yards)**
Sand	13 [35,000 lbs]
Rock 1	15 [40,000 lbs]
Rock 2	15 [40,000 lbs]
4-bin Aggregate Storage	
Aggregate Storage Bin	**Storage (cubic yards)**
Sand	13 [35,000 lbs]
Rock 1	15 [40,000 lbs]
Rock 2	15 [40,000 lbs]
Rock 3	15 [40,000 lbs]

Note: An additional 12 cubic yards can be added per aggregate bin by utilizing the automatic aggregate feeder conveyors or a one load multi-agg feeder.

Aggregate Gate Control		
Aggregate Storage Bin	**Gate Area (in^2)**	**Flow Control**
Sand	312	Hydraulic inching clam gate*
Rock 1, 2, or 3	364	Hydraulic inching clam gate

*Sand bin also has a computer controlled vibrator in order to foster flow

Water Handling

The Model 300 Cemco Plant includes a hydraulically driven water pump which pushes water into an overhead water storage bin. The plant is hard wired to keep the storage tank full without operator interference. From the storage tank, water is gravity fed via a 6 inch, pneumatically actuated butterfly valve.

Water Pump	
Brand	**Rated Maximum Flow**
2 inch hydraulically driven water pump	200 GPM (750 LPM)

Water Storage and Transfer		
Water Storage Bin	**Capacity**	**Butterfly Gate size**
Overhead Water Storage Tank	600 Gallons (2300 Liters)	6 inch
Water Weigh Batcher	400 Gallons (1500 Liters)	6 inch

Cement Handling

The Model 300 batch plant includes a self-erecting silo which feeds a cement weigh batcher via a 12-inch butterfly valve. The Cemco cement weigh batcher has a 10 inch flow controlled inching gate as well as a transfer screw and a vibrator in order to create a constant and controllable flow of cement based upon the users desired flow rate. In addition, aerators and a vibrator are included on the silo to increase weigh up speed. In the case of a clump in the cement silo, a guillotine plate and cutout have been provided so that the silo gate may be removed without cement spillage.

Cement Storage and Transfer		
Cement Silo/Weigh batcher	**Capacity**	**Butterfly Gate size**
Silo (self-erecting)	(1300 ft^3) 58 ton	12 inch
Silo EXT (self-erecting)	(1900 ft^3) 75 ton	12 inch
Silo SS (self-erecting)	(1300/864 ft^3) 58/35 ton	10”-40% & 12”-60%
Cement Weigh Batcher	(129 ft^3) 5 tons	10 inch inching gate

*The batch plant comes standard with one 4” fill pipe. Additional fill pipes may be added.

Cement Weigh Batch Auger Specifications	
dimension (length x diameter)	50” x 10”
Max Motor Torque	8300 lbs·in (938 N·m)
Auger RPM (variable speed)	0-320 based upon hydraulic flow

*The auger does not have to be running for cement to flow out of the gate; it simply helps maintain constant flow.

Scale Capacities and Functionality

The Model 300 NTEP Certificate No. is 99-029.

NTEP approved scale capacities			
Scale	**Nominal Capacity (lbs.)**	**Load Cell Capacity (lbs.)**	**Grad Size (lbs.)**
Water	3,500	5,000	1
Cement	10,000	15,000	5
Aggregate	40,000	60,000	10

Scale Weighing Method	
Scale	**Accumulative/Decumulative**
Water	Accumulative
Cement	Accumulative
Aggregate	Decumulative*

*If automatic aggregate feeder conveyors are used, then the Aggregate scales can accumulate

Transfer Conveyors

All transfer conveyors are hydraulically driven. As such, they can start under full load and their speeds are easily adjustable.

Transfer Conveyor Specifications			
Belt Location	**Torque**	**Belt Speed**	**Belt Width**
Plant Conveyor	19560 lbs·in (2210 N·m)	0-400 ft./min	30 inches*
Aggregate Feed Conveyor	10475 lbs·in (1184 N·m)	0-400 ft./min	30 inches

*36 inch plant conveyors are an option

Pneumatic System

The Batch plant has an engine mounted, belt driven 73 CFM screw compressor which supplies air for all pneumatic functions. Air runs from the compressor to an 80-gallon storage tanks mounted ~40’ down the plant frame (distance varies depending on model) in order to cool the air. SMC filtration and water separation devices are installed after the tank in order to treat air that is to be supplied to the primary pneumatic valve bank.

Standard Pneumatic Functions	
Function	**Air Consumption if used continuously**
Silo Dust Collector Pulse Jets	10 CFM @ 87 psi
Cement Weigh Batcher Dust Collector Pulse Jets	5 CFM @ 87 psi
Vibrators	10 CFM @ 87 psi
Vibra-Pad Aerators (pulsing)	10-15 CFM @ 7-15 psi
Central Dust Collector*	5-12 CFM @ 90-100 psi

*The 5,000 CFM Central Dust Collector is an option and comes silo mounted (does not need separate trailer and does not affect the portability of the plant)

Dust Collection

Cemco batch plants come standard with a silo top and cement weigh batcher dust collectors. As an option, a load point dust collector may be purchased. As a standard, Cemco uses the collectors outlined below; however, Cemco may elect to use a different unit and/or supplier as needed. For the specific plant, you must contact Cemco to ensure you have the correct permit information.

Donaldson TBV-2 Silo Top Dust Collector	
Cartridge Area	452 ft.^{2}
Cartridge Material / weave	100% Polyester spunbond
Efficiency	>99.9%
Method of Cleaning	Pulse Jet
Maximum Capacity	2,000 ACFM
Collection Type	Venting

Donaldson CPV-1 Cement Weigh Batcher Dust Collector	
Cartridge Area	63 ft.^{2}
Cartridge Material / weave	100% Polyester spunbond
Efficiency	>99.9%
Method of Cleaning	Pulse Jet
Maximum Capacity	350 ACFM
Collection Type	Venting

Cemco's optional central dust collector is a Donaldson 9FS6. The dust collector does not have any effect on portability as it pulls with the plant and is mounted directly to the silo. When the silo self erects the dust collector rises along with it. The dust collector is mounted on the bottom portion of silo in between the plant frame and the conveyor belt.

The Central Dust Collector is hardwired to collect dust whenever a load is discharging. During the next load's weigh up, dust from the previous load is deposited into the cement weigh batcher. In this manner the central dust collector's filters are cleaned every time a batch is weighed up. In addition, pulse jets should be operating while the unit is collecting in order to fully clean the filters.

Donaldson 9FS6 Load Point Dust Collector	
Cartridge Area	558 ft.^{2}
Cartridge Material / weave	100% Polyester spunbond
Efficiency	>99.9%
Method of Cleaning	Pulse Jet
Normal Air Capacity	5,000 CFM
Collection Type	Blower (Suction)

Plant Power

The Cemco Model 300 utilizes a factory mounted 173 Horsepower John Deere Tier IV Industrial Diesel engine. The engine has a 120-amp alternator which sustains the plant's 12VDC power system. All functions aside from the 120 VAC silo high level indicators and dust collector pulse jets operate via 12 VDC. In order to run the operating system and few 120 VAC functions a dedicated 20 amp 120 VAC circuit is necessary.

As an option, Cemco plants may be purchased with a 100HP electric motor in lieu of the 173HP diesel motor. Also, both power packs may be purchased for the ability to run off electricity or diesel depending on job constraints. Please consult the factory for additional information.

Plant Production

The Cemco model 300 is rated at 300 cubic yards per hour. This rating is based upon a 2:24 cycle time with 12 yard mixer trucks. The plant is fully capable of delivering a load as quickly as any truck can take it, and therefore, plant production is ultimately limited by the maximum truck feed rate and the time it takes for a loaded truck to leave and the next truck to get in place for a load. When continually batching, the plant can have the next load ready while trucks are transferring. On the high end of the production scale, Cemco has customers who routinely dry batch at 220+ cubic yards per hour sustained for many consecutive hours.

Donaldson Company Inc.

P.O. Box 1299, Minneapolis, MN 55440

800.365.1331 Tel / 952.887.3054 Fax

www.donaldsontorit.com

Air Permit Work Sheet for DCI Dust Collector

Dust Collector Model No	9FS6
Type of Collector	Central
Cleaning Mechanism	Pulse Jet w/adjustable timer
Fan Included	Y
Collector Flow Rate	5,000 acfm
Filter Material	Spunbond Polyester
Filter Efficiency	99.99
Filter Media Max Pressure Drop	10 in H20
Total Area of Filter Media	558 sqft
Nominal Filter Diameter	6 in
Nominal Filter Length	78 in
Quantity of Filters	9
Number of Compartments	1
Number of Filters per Compartment	9
Filtering Velocity	8.96 acfm / ft2 of cloth
Maximum concrete production	275 yds/hr
Number of fill lines	0
Application Flow Rate	5,000 acfm
Type of Particulate Controlled	3. cement & flyash
Name of Source(s) or Equipment being Controlled	04. Truck Mix Loading (Shroud)
Total Number of hours of operation per year	0 hr/yr
Outlet Area	1.23 ft2
Outlet Velocity	67.75 ft/s

	PM Inlet	PM Outlet	PM 10 Inlet	PM 10 Outlet	PM 2.5 Inlet	PM 2.5 Outlet	
Particulate Grain Loading **	2.02125	0.000202125	0.56467	0.000056467	ND*	ND*	grains / scf
Particulate Emissions **	86.62500	0.0086625	24.20000	0.0024200	ND*	ND*	lbs / hr
Particulate Emissions **	0.00000	0.000000	0.00000	0.000000	ND*	ND*	tons / yr

**Please see attached DCI Emissions Statement

*ND= No Data

DATA SHEET

Bottom Load Pleated Filter Element for Donaldson FS

Bottom load style pleated filter element .
Fits Donaldson Series FS dust collectors (Models FSD, VSD, RSD) with bottom load venturi connection.
Longer polyurethane top boot accommodates the venturi bell mouth.
Replaces 6.0” nominal diameter bag and cage assembly.

Standard Configuration

- 3.6” (91-mm) inner core diameter
- 1.0” (25-mm) nominal pleat depth
- Standard Pleat Count – 45 Pleats
- Molded top boot and bottom puck made from bright white soft polyurethane rated to 225°F
- Polyurethane, polypropylene and polyester components are safe for food contact

Configuration Options

- Special pleat counts (Available range: 35 – 60 pleats)
- Polypropylene Core – Rated to 180°F
- Galvanized and SS Perforated Metal (Spiral Formed) – For temperatures >180°F and for high pressure / vacuum applications.
- Grounded designs (with conductive media, metal core and stainless steel grounding wire extensions).

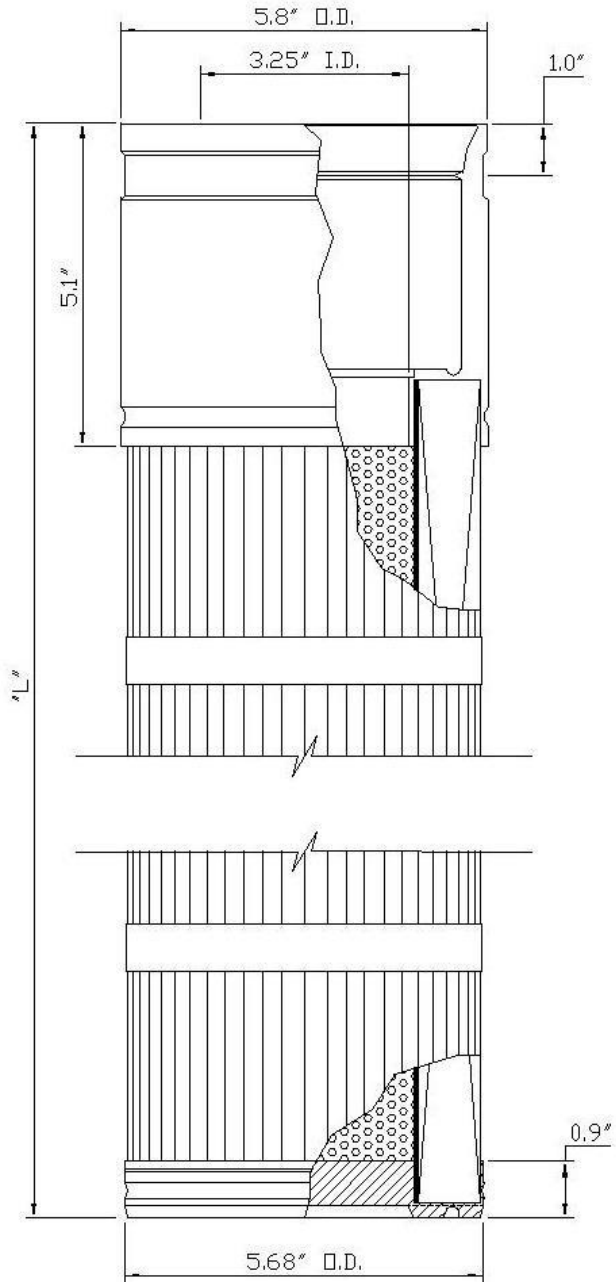
Filter Media

- Base filter media: Ultra-Web on spunbond polyester (UWSB)
- Weight: 8.0 oz/yd2 (260 g/m2)
- Permeability: 15-30 acfm Frazier permeability at 0.5” w.g. dP
- Mullenburst Stength: 350 psi

Media Options

100% spunbond polyester with Ultra-Web (UW SB)
100% spunbond polyester (SB)
100% SB with hydrophobic & oleophobic finish
100% SB with conductive grid
100% SB with ePTFE membrane
100% SB with conductive grid & ePTFE membrane

Nominal Length	Overall Length “L”	Filter Area (sf) @ 45 Pleats	No. of Straps
0.5 m	23.9”	12.3	1
1.0 m	43.6”	24.6	3
1.4 m	59.3”	34.5	4
2.0 m	83.0”	49.2	6



Tel 800-365-1331 (USA)
Tel 800-343-3639 (within Mexico)
DonaldsonTorit@DonaldsonTorit.com
DonaldsonTorit.com

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2018 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: **Deere & Company**
(U.S. Manufacturer or Importer)

Certificate Number: **JJDXL04.5316-002**

Effective Date: 04/28/2017

Expiration Date: 12/31/2018

Byron J. Bunker, Division Director
Compliance Division

Issue Date: 04/28/2017

Revision Date: N/A

Model Year: 2018
Manufacturer Type: Original Engine Manufacturer
Engine Family: JJDXL04.5316

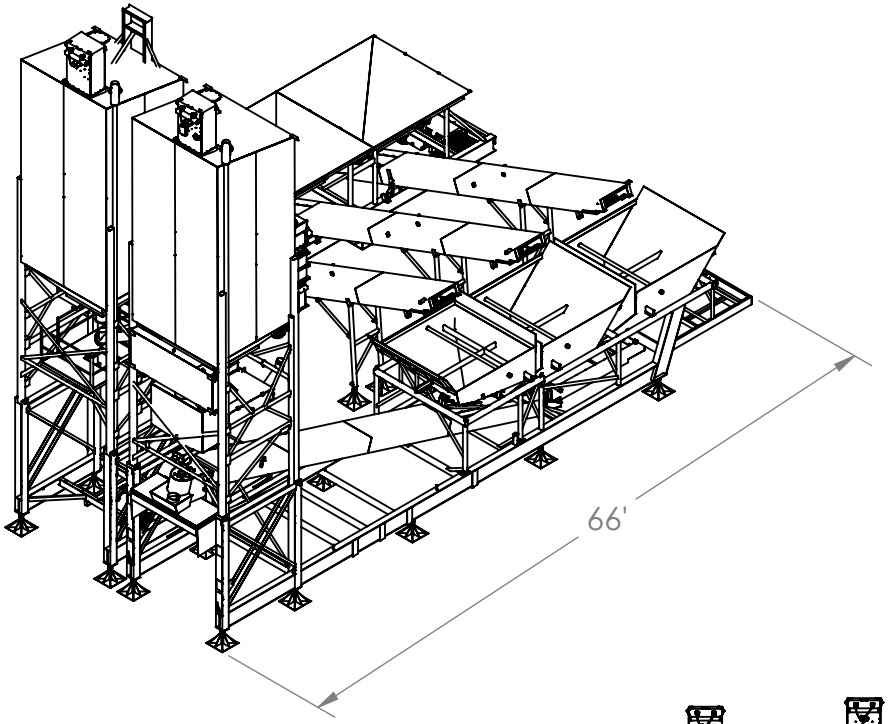
Mobile/Stationary Indicator: Both
Emissions Power Category: 56<=kW<130
Fuel Type: Diesel
After Treatment Devices: Diesel Oxidation Catalyst, Ammonia Slip Catalyst, Selective Catalytic Reduction
Non-after Treatment Devices: Electronic Control, Non-standard Non-After Treatment Device Installed, Electronic/Electric EGR - Cooled

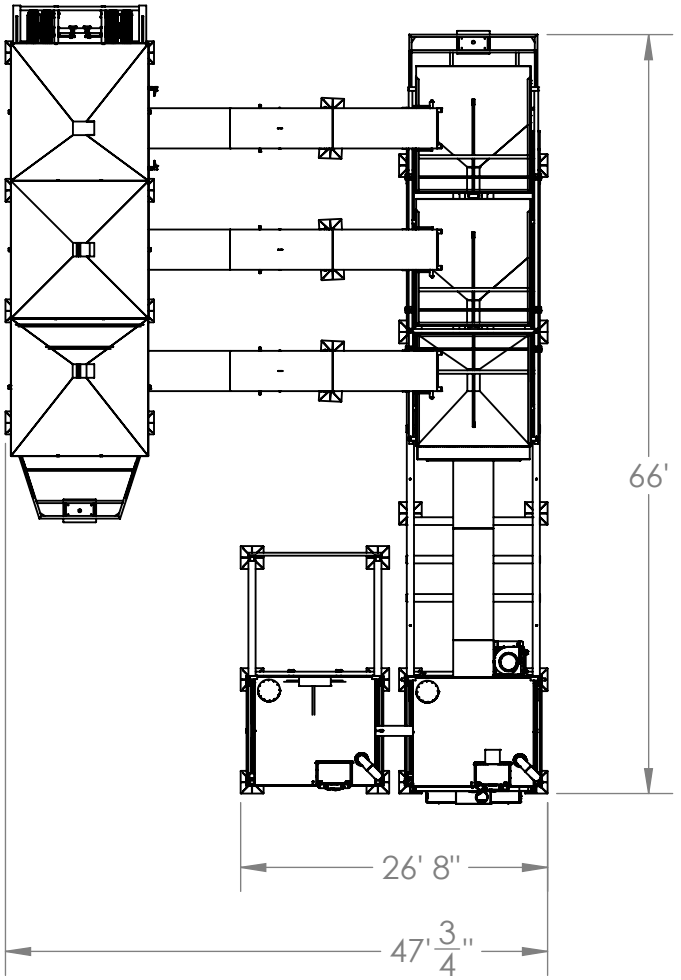
Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Parts 60 and 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Parts 60 and 1039 and produced in the stated model year.

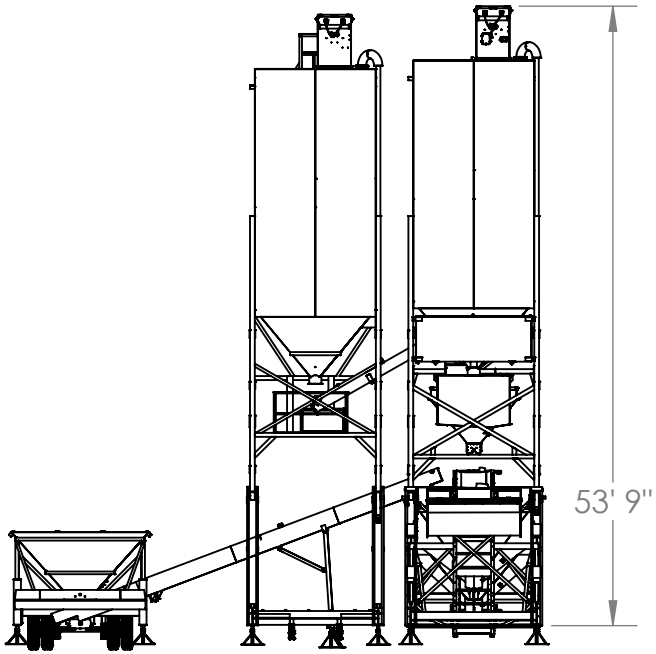
This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Parts 60 and 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Parts 60 and 1039.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Parts 60 and 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Parts 60 and 1039.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.







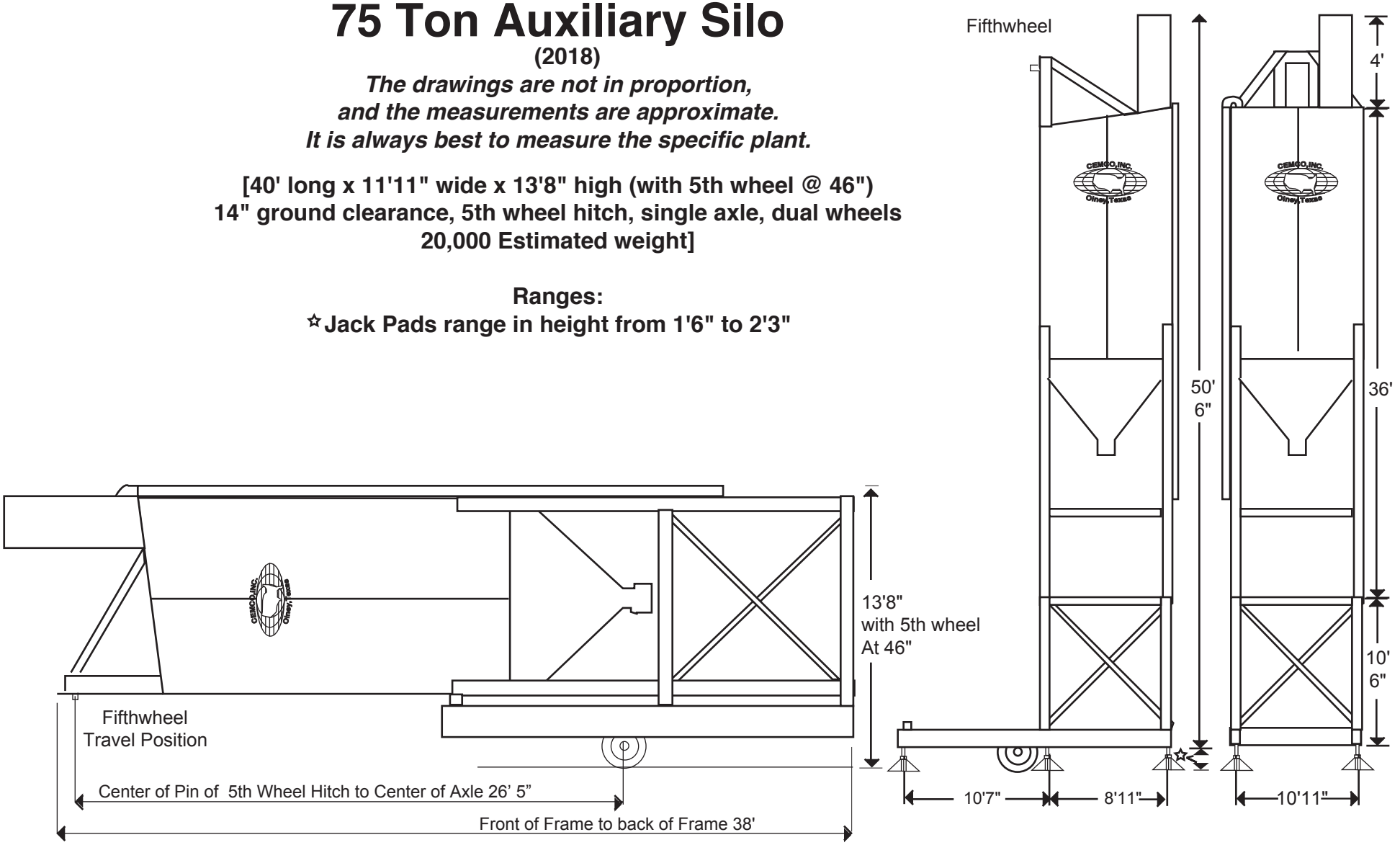
Shown: 2 Bin **extended Silo** with MSS and 3 Bin MAF
3 bin extended/ 4 bin frame length is 77'

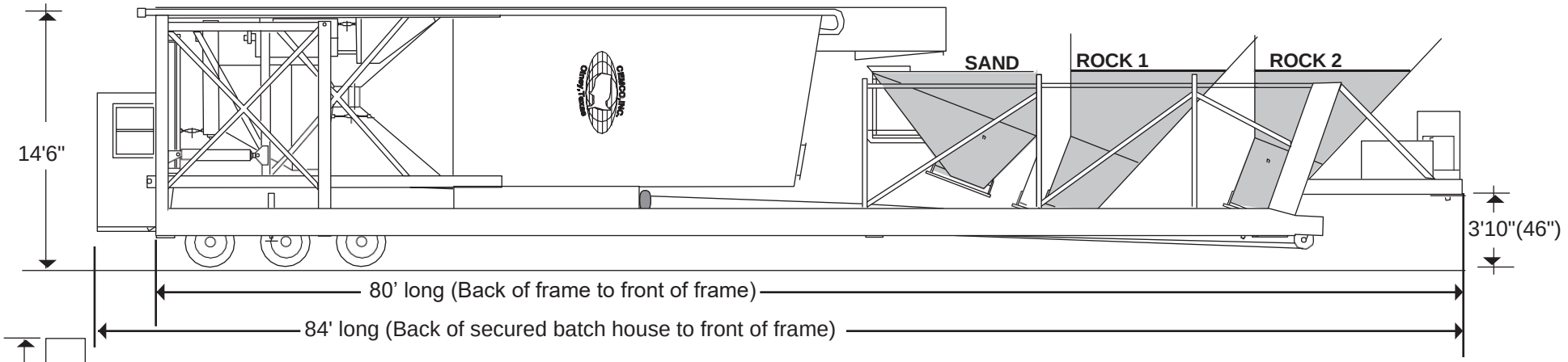
Cemco, Inc.
75 Ton Auxiliary Silo
(2018)

The drawings are not in proportion,
and the measurements are approximate.
It is always best to measure the specific plant.

[40' long x 11'11" wide x 13'8" high (with 5th wheel @ 46")
14" ground clearance, 5th wheel hitch, single axle, dual wheels
20,000 Estimated weight]

Ranges:
☆Jack Pads range in height from 1'6" to 2'3"





Cemco, Inc. 3 Bin Extended Silo Batch Plant

(2021)

The drawings are not in proportion, and the measurements are approximate. It is always best to measure the specific plant.

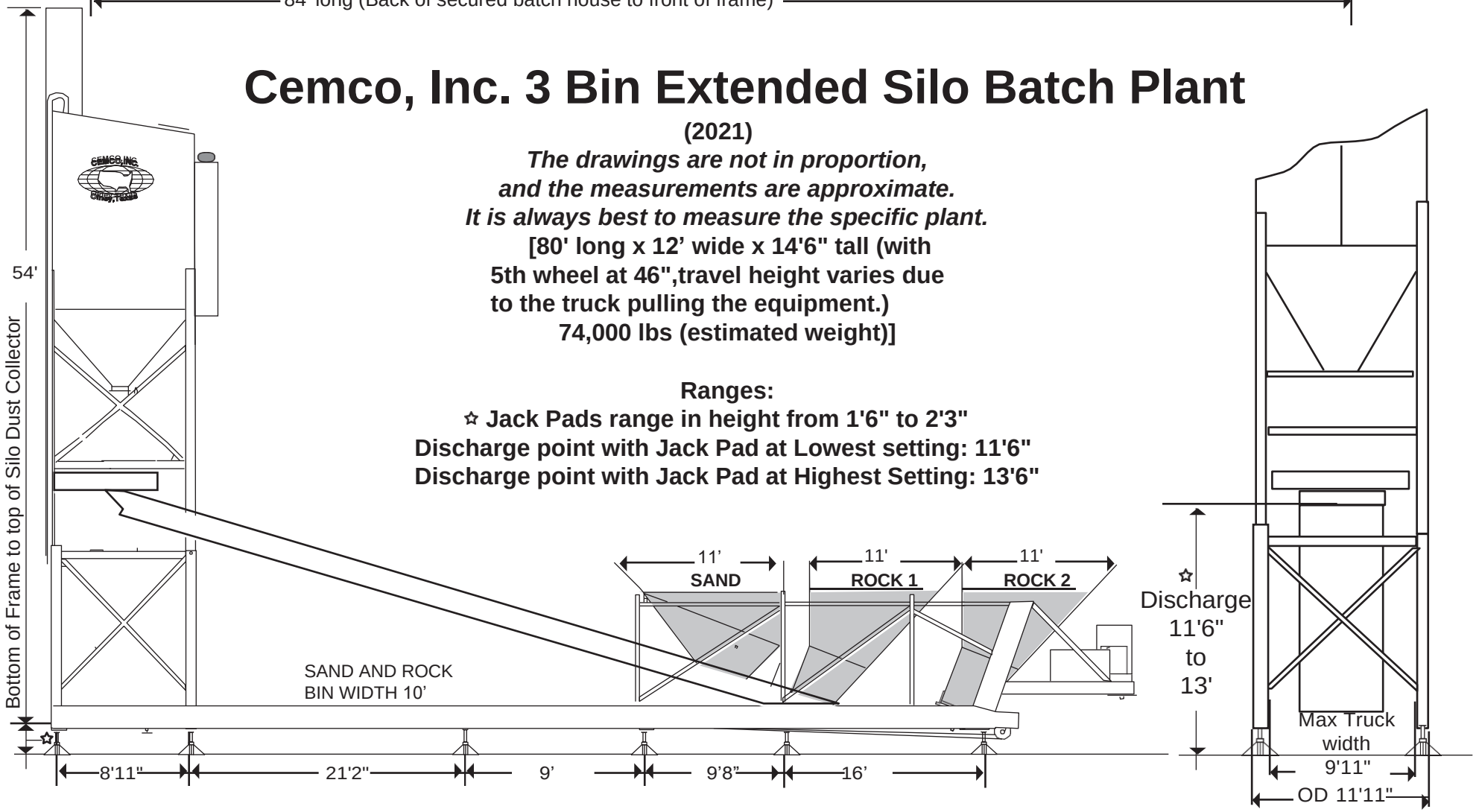
[80' long x 12’ wide x 14'6" tall (with 5th wheel at 46",travel height varies due to the truck pulling the equipment.) 74,000 lbs (estimated weight)]

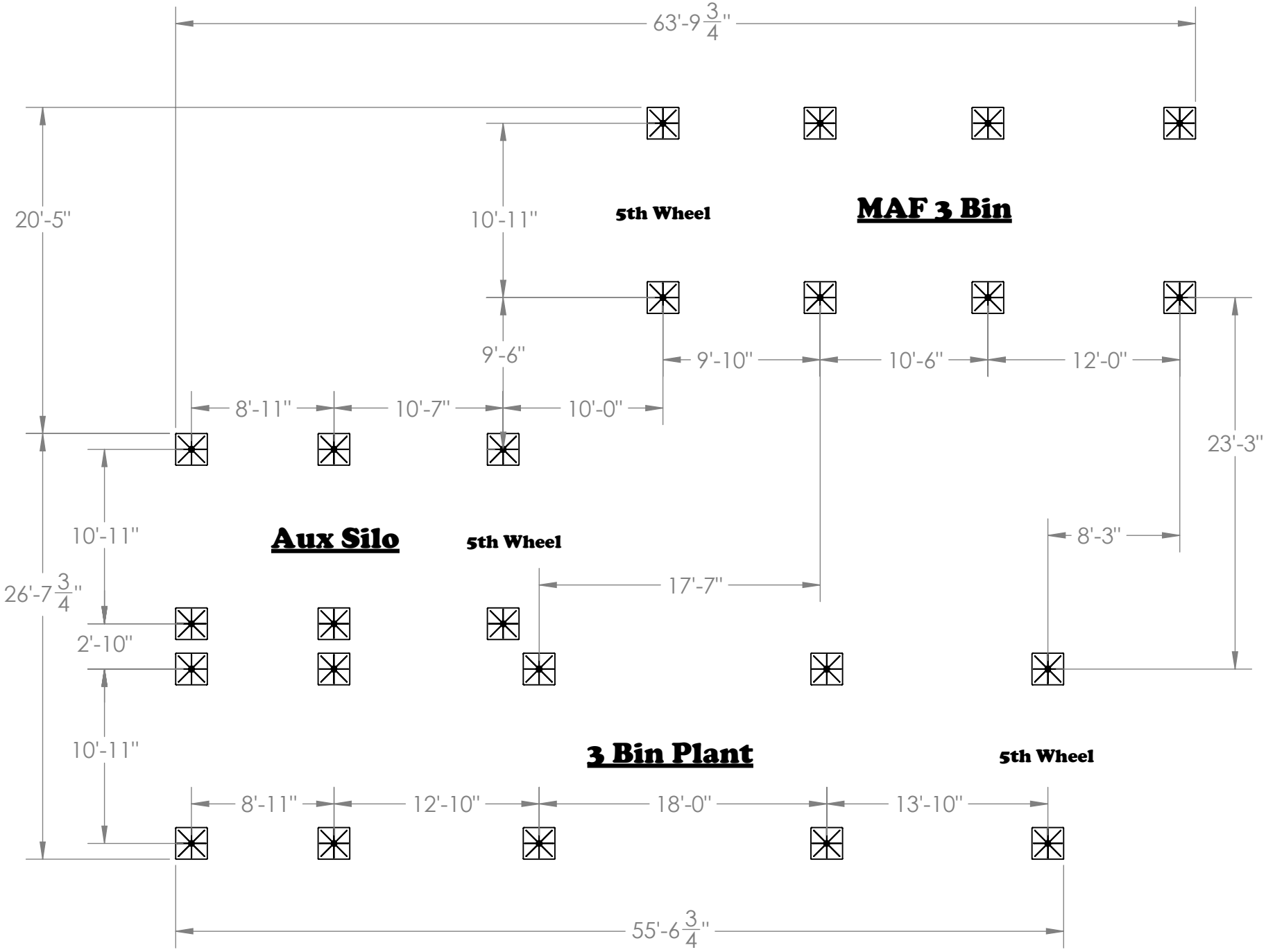
Ranges:

✩ Jack Pads range in height from 1'6" to 2'3"

Discharge point with Jack Pad at Lowest setting: 11'6"

Discharge point with Jack Pad at Highest Setting: 13'6"




63'-9 3/4"
20'-5"
10'-11"
5th Wheel
MAF 3 Bin
9'-6"
9'-10"
10'-6"
12'-0"
8'-11"
10'-7"
10'-0"
23'-3"
10'-11"
Aux Silo
5th Wheel
8'-3"
26'-7 3/4"
17'-7"
2'-10"
10'-11"
3 Bin Plant
5th Wheel
8'-11"
12'-10"
18'-0"
13'-10"
55'-6 3/4"

CEMCO

Technical Data Sheet

Filter Media:	Spunbond
Construction:	100% Polyester spunbond media with point bond finish
Color:	White
Weight (nominal):	7.7 oz/yd² (260 g/m²)
Thickness (nominal):	0.024 inch (0.66 mm)
Permeability:	18 – 26 ft³/ft²/min @ 0.5" H_2O – ASTM D 737 9.1 – 13.2 cm³/cm²/sec @ 125 Pa – ASTM D 737 86 – 125 l/dm²/min @ 200 Pa – DIN 53887
Max. Operating Temperature:	250°F (121°C)
Tensile Strength (nominal):	200 lbs/2-in. strip (91 kg/5 cm strip) – MD 125 lbs/2-in. strip (57 kg/5 cm strip) – CMD
Mullen Strength (nominal):	350 lbs/in² (24.6 kg/cm²)
Dust Release Properties:	Very Good
Filtration Efficiency:	> 99.9% for particle size range between 0.2 µ > 2.0 µ
BGIA-Filter Class:	"M" – pet Test Method: DIN EN 60335-2-69
FDA Conformity:	FDA – 21 CFR 177.1630 30.31 LFGB

This data is to be considered as typical, and for information purposes only. All specifications are subject to change.

California Environmental Protection Agency **Air Resources Board**	**JOHN DEERE POWER SYSTEMS**	**EXECUTIVE ORDER U-R-004-0547** New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2018	JJDXL04.5316	4.5	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Control Module, Exhaust Gas Recirculation, Selective Catalytic Reduction-Urea, Electronic Direct Injection, Turbocharger, Charge Air Cooler, Oxidation Catalyst, Ammonia Oxidation Catalyst	Crane, Loaders, Tractor, Dozer, Pump, Compressor, Generator Set, Other Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.01	0.20	--	0.02	0.01	--	--	--

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 10 day of May 2017

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

EO #: U-R-004-0547

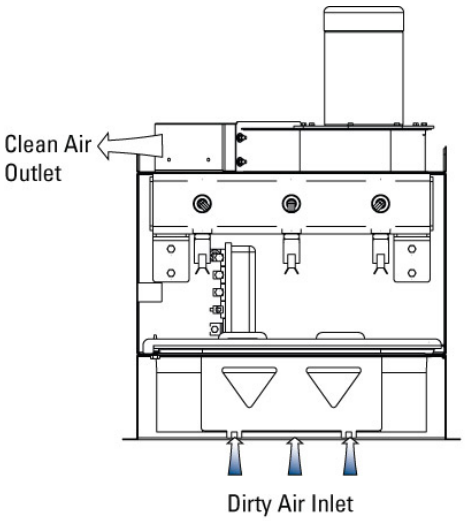
Attachment: Page 1 of 1

5-4-2017

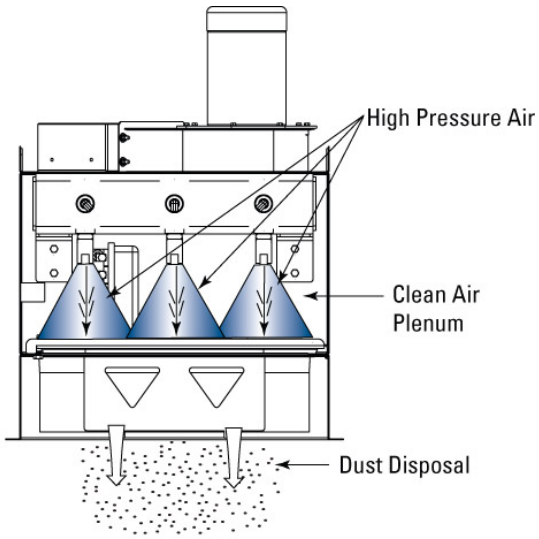
Engine Model Summary Form

Manufacturer: John Deere Power Systems
Engine category: Nonroad CI
EPA Engine Family: JJDXL04.5316
Mfr Family Name: 350HCH
Process Code: New Submission

1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm/stroke@peak kW (for diesel only)	5. Fuel Rate: (kg/hr)@peak kW (for diesels only)	6. Torque (Nm) @RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
4045HFRNT16	4045	129@2400	118@2400	29@2400	694@1600	149@1600	24@1500	EGR OC SCRC NH3OC DFI TC CAC ECM



Normal Operation (1 filter pack unit)



Filter Cleaning Operation (1 filter pack unit)

Access filter packs from clean side through access doors on top of the collector. Filter packs are changed without tools.

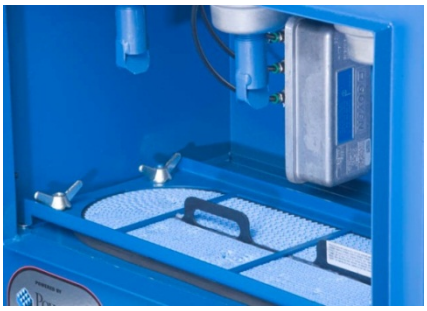
Torit PowerCore CPV-1 - Technical Product Summary

- **PAINT SYSTEM: – STANDARD FINISH:** Exterior surfaces finished with a durable, multi-coat textured liquid or powder finish that meets an ASTM B117 salt spray test of 2,000 hours on standardized test panels. The exterior color will be Torit Blue. The interior shall be primed with a durable liquid or powder primer.
- **FILTER MEDIA:** (1) CP filter packs with 63 sq ft of Ultra-Web® media for 350 cfm airflow. Operating Temperature: 150°F maximum.
- **SOLENOID ENCLOSURE:** NEMA 4
- **WEATHER COVER:** Closes air outlet of unpowered collector for outdoor installation. Protects from rain, snow, birds, and rodents.
-

Unique Features of the Torit PowerCore CPV-1 Bin Vent

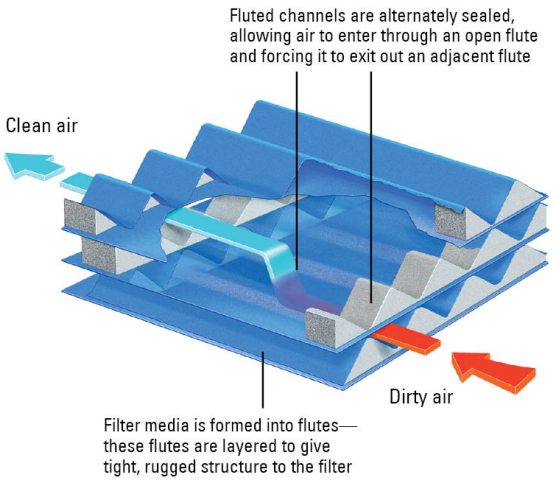


THE CPV-1 POWERCORE FILTER PACK: Is installed and removed from the clean side of the collector. Only one person is needed to perform a filter pack change. No tools are required, and there is no confined space entry. All service components are accessed from the same side.

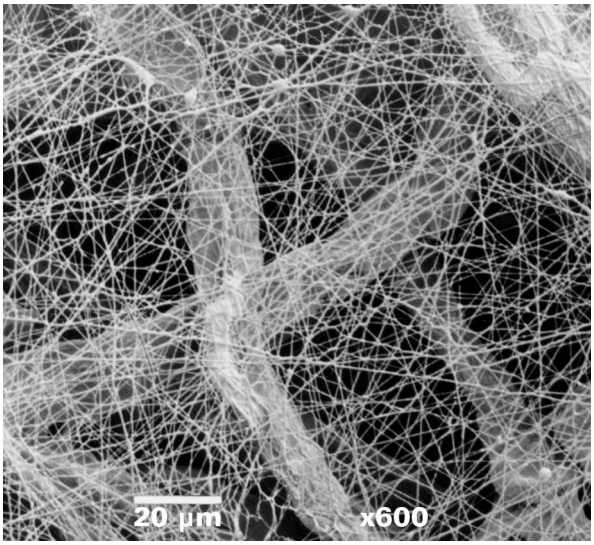


POWERCORE FILTER PACKS: Small, lightweight, and easily handled by one person. Donaldson's PowerCore technology allows more filter material to be packaged in a smaller space: one 7 inch by 22 inch PowerCore filter pack contains as much filtering material as six 8-foot long traditional filter bags. And, the filter media inside PowerCore filter packs is our well-proven Ultra-Web advanced nanofiber technology. There is an integrated gasket that ensures a good seal with every filter change. Ultra-Web media traps more dust on the surface of the fluted channels as compared to conventional filter bag materials like depth-loading 16 oz. polyester. Surface loading greatly promotes filter cleaning. Better pulse cleaning lowers operational pressure drop and energy use.





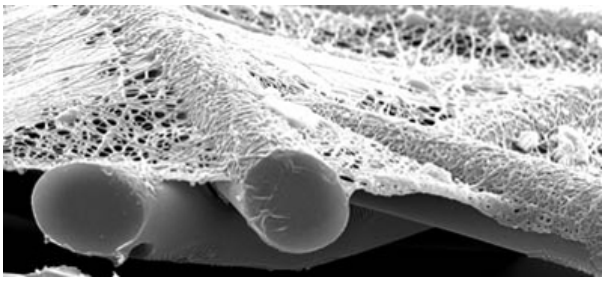
TORIT POWERCORE: Donaldson is leading the way with PowerCore, a very innovative filter technology. PowerCore filter packs combine patented Ultra-Web nanofiber technology with new media "packaging" expertise. As a result, more effective filtration area is packaged into smaller spaces. One CP Series filter pack replaces up to six traditional 8-foot long bag filters.



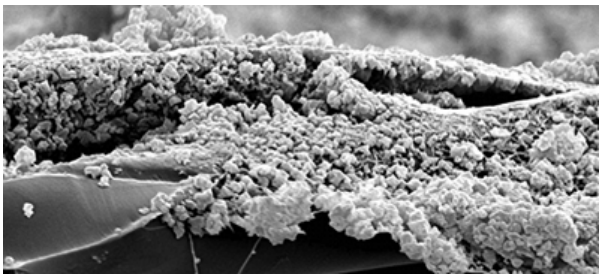
ULTRA-WEB® MEDIA: Donaldson leverages almost 100 years of air filtration experience in the development of filtration media, providing tremendous value to our customers. Ultra-Web media incorporates a durable layer of premium nanofiber, which is designed to intercept the smallest dust particles at the surface of the media. This surface loading capability improves the effectiveness of pulse cleaning which minimizes system pressure differential, thereby conserving compressed air usage and brake horsepower requirements of the system fan.

ULTRA-WEB IS MOST EFFECTIVE: Independent laboratory testing determined that Ultra-Web media has a Minimum Efficiency Reporting Value (MERV) of 15 based on the ASHRAE 52.2-1999 test standard. Ultra-Web media rated MERV 15 is the most optimized, balanced and cost-effective media in the market place, providing higher efficiency without compromising pressure drop and filter life. For more information on Ultra-Web and MERV ratings, please visit http://www2.donaldson.com/torit/corp/pages/products/ultra-webmediatechnology.aspx

SYSTEM ENERGY EFFICIENCY AND SAVINGS: Surface loading is a key characteristic of Donaldson's Ultra-Web media. It provides enhanced dust cake release, allowing particulate to easily pulse free of the filter surface. The result is reduced pressure drop across the filter throughout the entire life of the filter. This unique feature allows the system fan to deliver the required airflow while operating at much lower energy consumption levels.



Clean Ultra-Web Media



Surface Loaded Ultra-Web Media
(substrate still clean)

LOWER EMISSIONS: Independent lab testing showed 78% fewer emissions with PowerCore filter media, compared to 16 oz. polyester felt. These tests were done in accordance with ASTM D6830-02 per EPA PM 2.5. Annual emissions calculated assuming

14,400 cfm airflow rate, 265 working days per year, and 2 shifts per day. Field measurements may vary due to differences in dust contaminant and sensitivity of measurement equipment.



COMPACT PULSE CLEANING SYSTEM: Torit PowerCore CPV-1 includes a compact pulse cleaning system designed to match the pulse energy to the obround shape of the PowerCore filter pack. The resulting pulse flow effectively covers the entire media pack. It easily pulses the dust out of the fluted channels, keeping the pressure drop low and prolonging filter life. Requires 90 PSI clean dry compressed air connection to the air manifold.

Torit PowerCore CPV-1 Bin Vent Service Requirements

- **COMPRESSED AIR CONSUMPTION:** 10 scfm at 90 to 100 psig, clean, dry compressed air based on a 10 second pulse interval.

- **ELECTRIC REQUIREMENTS: :** 110V,Single phase primary electrical supply to control panel (wiring between panel and individual components by others).

- **RECOMMENDED MINIMUM MAINTENANCE CLEARANCES:** 36″ in front of filter access, 18″ at rear of unit.

Donaldson
Torit®

POWERCORE® CP FILTER PACK

ENGINEERED FOR DUST COLLECTION

- Ultra-Web® fine fiber media ensures longer filter life at a significantly lower pressure drop
- Superior particle release due to surface filtration
- Fluted media construction prevents bridging in fibrous or agglomerative applications
- Smaller and lightweight filter pack design with built-in handles
- Easy filter changeout for quicker maintenance — no tools required
- MERV* 13 filtration efficiency rating (standard)
- MERV* 15 filtration efficiency rating (optional)

PowerCore
A Donaldson Filtration Technology



PowerCore® CP Filter Pack
(Also available in Standard, Spunbond and Anti-Static)

PROVEN TECHNOLOGY THAT PERFORMS

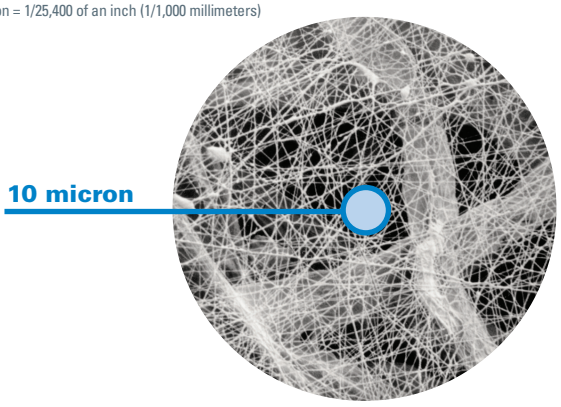
Proven and proprietary Ultra-Web® filter media delivers longer filter life, cleaner air and greater cost savings than other traditional filter media. It is made with an electrospinning process that produces a very fine, continuous, resilient fiber of 0.2-0.3 microns in diameter.

PowerCore filter packs with Ultra-Web media keep dust on the surface of the fluted channels where it is easily cleaned off unlike conventional filter bag material that depth loads, like 16 oz. (453.6 g) polyester.

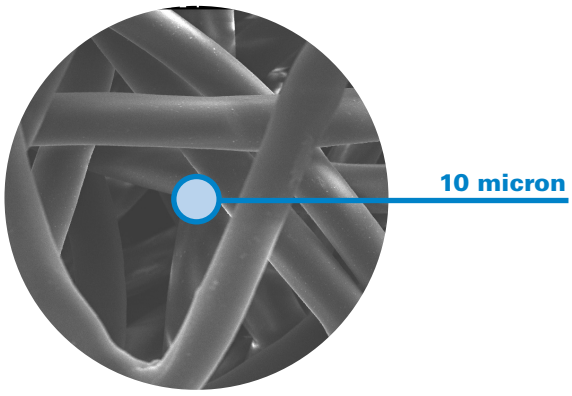
- Surface loading promotes filter cleaning and longer life
- Better pulse cleaning lowers operational pressure drop and energy use

SEM† IMAGES

1 micron = 1/25,400 of an inch (1/1,000 millimeters)



Ultra-Web Fine Fiber Technology (600x)



16 oz. Polyester (600x)

† Scanning Electron Microscope.
* Refer to Technical Information on page 2.

APPLICATIONS

- Premium performance on fine, dry, fibrous and/or abrasive dust
- Longer life in aggressive/challenging applications
- Optional Spunbond or Anti-Static (AS) media available
- Spunbond version has excellent moisture and chemical resistance

MEDIA COMPATIBILITY DATA		
Temperature Resistance	150°F 65°C	
Moisture Absorption**	Maximum 14% @ 70°F (21°C) and 65% RH	
Chemical Tolerance***	Acids: Poor Bases: Fair	Oxidants: Poor Solvents: Fair
Abrasion Resistance	Excellent per TAPPI 476 (Taber Method)	
Moisture Absorption** for Spunbond	0.2–0.5% @ 70°F (21°C) and 65% RH	
Chemical Tolerance*** for Spunbond	Acids: Good Bases: Good	Oxidants: Good Solvents: Good

SPECIFICATIONS

MEDIA COMPOSITION	
Fine Fiber Technology	Durable proprietary synthetic filter media fiber and polymer Mean fiber diameter of 0.2 µm
Substrates	• Proprietary blend of cellulose fibers • Spunbond Polyester • Anti-static (AS) version per ESD STM 11.11-2001 Resistance less than 108 OHM

MEDIA EFFICIENCY	
U.S. Efficiency Rating	MERV* 13 (standard)
U.S. Efficiency Rating	MERV* 15 (optional)

FILTER PACK CONSTRUCTION	
Standard Construction	Obround design Fluted media configuration Urethane gasket Built-in handle

CURRENT AVAILABLE CONFIGURATIONS

Collector Models	Dimensions		PowerCore		
	in	mm	Standard	Spunbond	Anti-Static
CPC	22.3 x 7.5 x 7.0	566.42 x 190.50 x 177.80	•	•	•
CPV	22.3 x 7.5 x 7.0	566.42 x 190.50 x 177.80	•	•	•

* The Minimum Efficiency Reporting Value (MERV) of this filter cartridge has been determined through independent laboratory testing using ASHRAE 52.2 (2007) test standards. The MERV rating was determined at a face velocity of 118 feet per minute (36.0 meters per minute) and loading up to four inches (101.6 millimeters) water gauge. Actual efficiency of any filter cartridge will vary according to the specific application parameters. Dust concentration, airflow, particle characteristics, and pulse cleaning methods all affect filtration efficiency.

** Environmental conditions involving combinations of high temperature, corrosive material, and moisture can reduce media strength. Reduction in media strength may compromise cartridge integrity and performance.

*** A combination of chemicals may alter fiber resistance to the specified performance level. Chemical attack may compromise cartridge integrity and performance.

Important Notice
Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.

Donaldson

Significantly improve the performance of your collector with genuine Donaldson Torit replacement filters and parts. **Call Donaldson Torit today 800-365-1331.**

Donaldson Company, Inc.
Torit
P.O. Box 1299
Minneapolis, MN 55440-1299 U.S.A.

donaldsontorit.com
Tel 800-365-1331 (USA)
Tel 800-343-3639 (within Mexico)
donaldsontorit@donaldson.com

EXACTLY WHAT YOU NEED.™

F118158 ENG (12/16) PowerCore CP Series Filter Pack ©2016 Donaldson Company, Inc.
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CEMCO BATCH PLANT
Process Flow Diagram Information

Fill aggregate weigh bins with belt conveyors (1 each bin) or direct with front loader.

Water surge bin is kept continually full by float switch control.

Cement is in storage in plant silo. Auxiliary silos (as many as 2) may be used if more than one cement is necessary. If more than one cement is used they are weighed up accumulatively one at a time.

Water is weighed up by flow from a surge bin through a 6" valve into a 400-gallon capacity weigh bin.

With the aggregate bins full and the cement and water weighed up, the discharge into the mixer may begin.

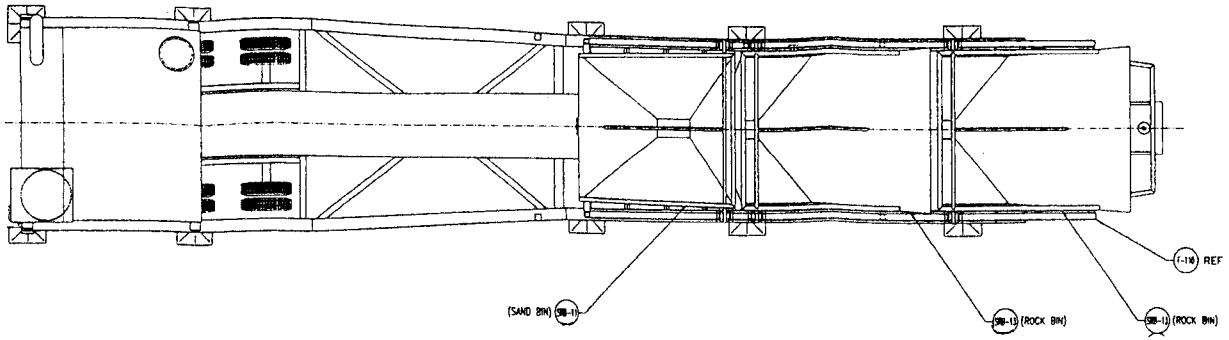
The water begins discharging from the weigh bin into the mixer through a 6" valve. At the same time all aggregates begin discharging onto the belt. The computer controls the flow rate of each individual aggregate bin independently.

Typically, after lead water and a user defined percentage of aggregate has discharged, the cement will discharge @ a user defined flow rate and should finish discharging before the aggregate.

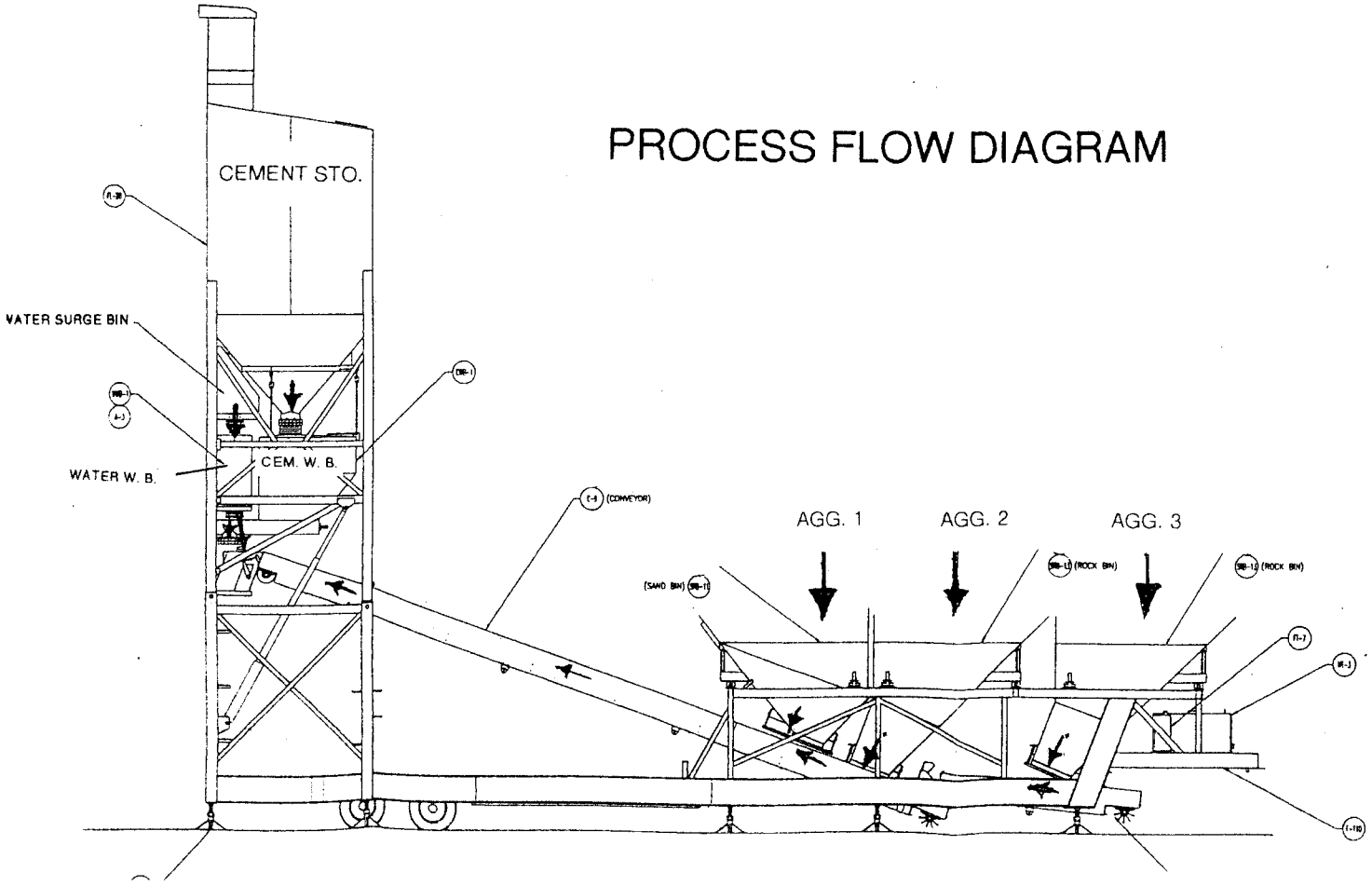
When the cement and aggregate discharge is completed, the remainder of the water is discharged and the batch is complete.

If one has large throat mixers, discharge time is about 2 minutes..

Admix dispensers are not furnished by CEMCO, Inc. but are usually supplied by admix suppliers. However, the controls for admix is in the computer.



PROCESS FLOW DIAGRAM



CEMCO

Model 300

Specification Sheet

Contents

Cemco Model 300 Technical Specifications 1

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3-bin Aggregate Storage 1

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Aggregate Gate Control 1

Water Handling 2

Water Pump 2

Water Storage and Transfer 2

Cement Handling 2

Cement Storage and Transfer 2

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NTEP approved scale capacities 3

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Dust Collection 4

Donaldson TBV-2 Silo Top Dust Collector 4

Donaldson CPV-1 Cement Weigh Batcher Dust Collector 4

Donaldson 9FS6 Load Point Dust Collector 5

Plant Power 5

Plant Production 5

Cemco Model 300 Technical Specifications

The Cemco Model 300 is completely portable with leveling cylinders on all four corners of the unit and a self-erecting 58 silo. The plant is completely self-contained, powered by an on board 173 Horsepower John Deere Diesel Engine.

Aggregate Handling

The Plant can be configured with 2, 3, or 4 aggregate bins. Additional 12 cubic yard automatic feeder conveyors may be added per aggregate bin.

2-bin Aggregate Storage	
Aggregate Storage Bin	**Storage (cubic yards)**
Sand	13 [35,000 lbs]
Rock	15 [40,000 lbs]
3-bin Aggregate Storage	
Aggregate Storage Bin	**Storage (cubic yards)**
Sand	13 [35,000 lbs]
Rock 1	15 [40,000 lbs]
Rock 2	15 [40,000 lbs]
4-bin Aggregate Storage	
Aggregate Storage Bin	**Storage (cubic yards)**
Sand	13 [35,000 lbs]
Rock 1	15 [40,000 lbs]
Rock 2	15 [40,000 lbs]
Rock 3	15 [40,000 lbs]

Note: An additional 12 cubic yards can be added per aggregate bin by utilizing the automatic aggregate feeder conveyors or a one load multi-agg feeder.

Aggregate Gate Control		
Aggregate Storage Bin	**Gate Area (in^2)**	**Flow Control**
Sand	312	Hydraulic inching clam gate*
Rock 1, 2, or 3	364	Hydraulic inching clam gate

*Sand bin also has a computer controlled vibrator in order to foster flow

Water Handling

The Model 300 Cemco Plant includes a hydraulically driven water pump which pushes water into an overhead water storage bin. The plant is hard wired to keep the storage tank full without operator interference. From the storage tank, water is gravity fed via a 6 inch, pneumatically actuated butterfly valve.

Water Pump	
Brand	**Rated Maximum Flow**
2 inch hydraulically driven water pump	200 GPM (750 LPM)

Water Storage and Transfer		
Water Storage Bin	**Capacity**	**Butterfly Gate size**
Overhead Water Storage Tank	600 Gallons (2300 Liters)	6 inch
Water Weigh Batcher	400 Gallons (1500 Liters)	6 inch

Cement Handling

The Model 300 batch plant includes a self-erecting silo which feeds a cement weigh batcher via a 12-inch butterfly valve. The Cemco cement weigh batcher has a 10 inch flow controlled inching gate as well as a transfer screw and a vibrator in order to create a constant and controllable flow of cement based upon the users desired flow rate. In addition, aerators and a vibrator are included on the silo to increase weigh up speed. In the case of a clump in the cement silo, a guillotine plate and cutout have been provided so that the silo gate may be removed without cement spillage.

Cement Storage and Transfer		
Cement Silo/Weigh batcher	**Capacity**	**Butterfly Gate size**
Silo (self-erecting)	(1300 ft^3) 58 ton	12 inch
Silo EXT (self-erecting)	(1900 ft^3) 75 ton	12 inch
Silo SS (self-erecting)	(1300/864 ft^3) 58/35 ton	10”-40% & 12”-60%
Cement Weigh Batcher	(129 ft^3) 5 tons	10 inch inching gate

*The batch plant comes standard with one 4” fill pipe. Additional fill pipes may be added.

Cement Weigh Batch Auger Specifications	
dimension (length x diameter)	50” x 10”
Max Motor Torque	8300 lbs·in (938 N·m)
Auger RPM (variable speed)	0-320 based upon hydraulic flow

*The auger does not have to be running for cement to flow out of the gate; it simply helps maintain constant flow.

Scale Capacities and Functionality

The Model 300 NTEP Certificate No. is 99-029.

NTEP approved scale capacities			
Scale	**Nominal Capacity (lbs.)**	**Load Cell Capacity (lbs.)**	**Grad Size (lbs.)**
Water	3,500	5,000	1
Cement	10,000	15,000	5
Aggregate	40,000	60,000	10

Scale Weighing Method	
Scale	**Accumulative/Decumulative**
Water	Accumulative
Cement	Accumulative
Aggregate	Decumulative*

*If automatic aggregate feeder conveyors are used, then the Aggregate scales can accumulate

Transfer Conveyors

All transfer conveyors are hydraulically driven. As such, they can start under full load and their speeds are easily adjustable.

Transfer Conveyor Specifications			
Belt Location	**Torque**	**Belt Speed**	**Belt Width**
Plant Conveyor	19560 lbs·in (2210 N·m)	0-400 ft./min	30 inches*
Aggregate Feed Conveyor	10475 lbs·in (1184 N·m)	0-400 ft./min	30 inches

*36 inch plant conveyors are an option

Pneumatic System

The Batch plant has an engine mounted, belt driven 73 CFM screw compressor which supplies air for all pneumatic functions. Air runs from the compressor to an 80-gallon storage tanks mounted ~40’ down the plant frame (distance varies depending on model) in order to cool the air. SMC filtration and water separation devices are installed after the tank in order to treat air that is to be supplied to the primary pneumatic valve bank.

Standard Pneumatic Functions	
Function	**Air Consumption if used continuously**
Silo Dust Collector Pulse Jets	10 CFM @ 87 psi
Cement Weigh Batcher Dust Collector Pulse Jets	5 CFM @ 87 psi
Vibrators	10 CFM @ 87 psi
Vibra-Pad Aerators (pulsing)	10-15 CFM @ 7-15 psi
Central Dust Collector*	5-12 CFM @ 90-100 psi

*The 5,000 CFM Central Dust Collector is an option and comes silo mounted (does not need separate trailer and does not affect the portability of the plant)

Dust Collection

Cemco batch plants come standard with a silo top and cement weigh batcher dust collectors. As an option, a load point dust collector may be purchased. As a standard, Cemco uses the collectors outlined below; however, Cemco may elect to use a different unit and/or supplier as needed. For the specific plant, you must contact Cemco to ensure you have the correct permit information.

Donaldson TBV-2 Silo Top Dust Collector	
Cartridge Area	452 ft.^{2}
Cartridge Material / weave	100% Polyester spunbond
Efficiency	>99.9%
Method of Cleaning	Pulse Jet
Maximum Capacity	2,000 ACFM
Collection Type	Venting

Donaldson CPV-1 Cement Weigh Batcher Dust Collector	
Cartridge Area	63 ft.^{2}
Cartridge Material / weave	100% Polyester spunbond
Efficiency	>99.9%
Method of Cleaning	Pulse Jet
Maximum Capacity	350 ACFM
Collection Type	Venting

Cemco's optional central dust collector is a Donaldson 9FS6. The dust collector does not have any effect on portability as it pulls with the plant and is mounted directly to the silo. When the silo self erects the dust collector rises along with it. The dust collector is mounted on the bottom portion of silo in between the plant frame and the conveyor belt.

The Central Dust Collector is hardwired to collect dust whenever a load is discharging. During the next load's weigh up, dust from the previous load is deposited into the cement weigh batcher. In this manner the central dust collector's filters are cleaned every time a batch is weighed up. In addition, pulse jets should be operating while the unit is collecting in order to fully clean the filters.

Donaldson 9FS6 Load Point Dust Collector	
Cartridge Area	558 ft.^{2}
Cartridge Material / weave	100% Polyester spunbond
Efficiency	>99.9%
Method of Cleaning	Pulse Jet
Normal Air Capacity	5,000 CFM
Collection Type	Blower (Suction)

Plant Power

The Cemco Model 300 utilizes a factory mounted 173 Horsepower John Deere Tier IV Industrial Diesel engine. The engine has a 120-amp alternator which sustains the plant's 12VDC power system. All functions aside from the 120 VAC silo high level indicators and dust collector pulse jets operate via 12 VDC. In order to run the operating system and few 120 VAC functions a dedicated 20 amp 120 VAC circuit is necessary.

As an option, Cemco plants may be purchased with a 100HP electric motor in lieu of the 173HP diesel motor. Also, both power packs may be purchased for the ability to run off electricity or diesel depending on job constraints. Please consult the factory for additional information.

Plant Production

The Cemco model 300 is rated at 300 cubic yards per hour. This rating is based upon a 2:24 cycle time with 12 yard mixer trucks. The plant is fully capable of delivering a load as quickly as any truck can take it, and therefore, plant production is ultimately limited by the maximum truck feed rate and the time it takes for a loaded truck to leave and the next truck to get in place for a load. When continually batching, the plant can have the next load ready while trucks are transferring. On the high end of the production scale, Cemco has customers who routinely dry batch at 220+ cubic yards per hour sustained for many consecutive hours.

Donaldson Company Inc.

P.O. Box 1299, Minneapolis, MN 55440

800.365.1331 Tel / 952.887.3054 Fax

www.donaldsontorit.com

Air Permit Work Sheet for DCI Dust Collector

Dust Collector Model No	9FS6
Type of Collector	Central
Cleaning Mechanism	Pulse Jet w/adjustable timer
Fan Included	Y
Collector Flow Rate	5,000 acfm
Filter Material	Spunbond Polyester
Filter Efficiency	99.99
Filter Media Max Pressure Drop	10 in H20
Total Area of Filter Media	558 sqft
Nominal Filter Diameter	6 in
Nominal Filter Length	78 in
Quantity of Filters	9
Number of Compartments	1
Number of Filters per Compartment	9
Filtering Velocity	8.96 acfm / ft2 of cloth
Maximum concrete production	275 yds/hr
Number of fill lines	0
Application Flow Rate	5,000 acfm
Type of Particulate Controlled	3. cement & flyash
Name of Source(s) or Equipment being Controlled	04. Truck Mix Loading (Shroud)
Total Number of hours of operation per year	0 hr/yr
Outlet Area	1.23 ft2
Outlet Velocity	67.75 ft/s

	PM Inlet	PM Outlet	PM 10 Inlet	PM 10 Outlet	PM 2.5 Inlet	PM 2.5 Outlet	
Particulate Grain Loading **	2.02125	0.000202125	0.56467	0.000056467	ND*	ND*	grains / scf
Particulate Emissions **	86.62500	0.0086625	24.20000	0.0024200	ND*	ND*	lbs / hr
Particulate Emissions **	0.00000	0.000000	0.00000	0.000000	ND*	ND*	tons / yr

**Please see attached DCI Emissions Statement

*ND= No Data

DATA SHEET

Bottom Load Pleated Filter Element for Donaldson FS

Bottom load style pleated filter element .
Fits Donaldson Series FS dust collectors (Models FSD, VSD, RSD) with bottom load venturi connection.
Longer polyurethane top boot accommodates the venturi bell mouth.
Replaces 6.0” nominal diameter bag and cage assembly.

Standard Configuration

- 3.6” (91-mm) inner core diameter
- 1.0” (25-mm) nominal pleat depth
- Standard Pleat Count – 45 Pleats
- Molded top boot and bottom puck made from bright white soft polyurethane rated to 225°F
- Polyurethane, polypropylene and polyester components are safe for food contact

Configuration Options

- Special pleat counts (Available range: 35 – 60 pleats)
- Polypropylene Core – Rated to 180°F
- Galvanized and SS Perforated Metal (Spiral Formed) – For temperatures >180°F and for high pressure / vacuum applications.
- Grounded designs (with conductive media, metal core and stainless steel grounding wire extensions).

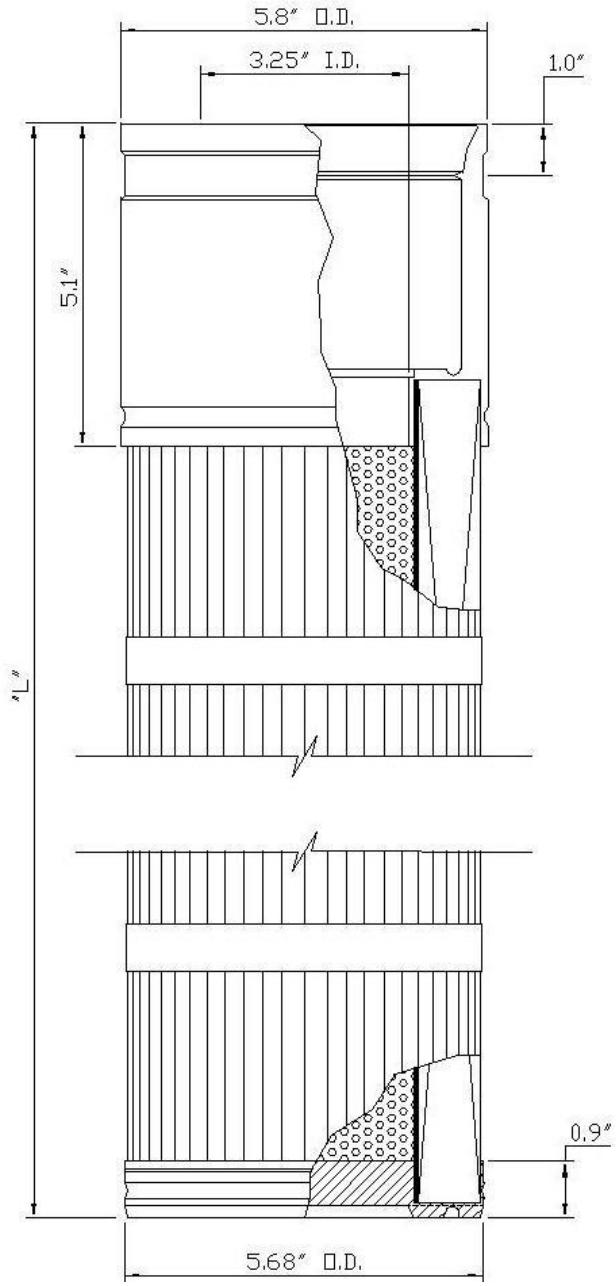
Filter Media

- Base filter media: Ultra-Web on spunbond polyester (UWSB)
- Weight: 8.0 oz/yd2 (260 g/m2)
- Permeability: 15-30 acfm Frazier permeability at 0.5” w.g. dP
- Mullenburst Stength: 350 psi

Media Options

100% spunbond polyester with Ultra-Web (UW SB)
100% spunbond polyester (SB)
100% SB with hydrophobic & oleophobic finish
100% SB with conductive grid
100% SB with ePTFE membrane
100% SB with conductive grid & ePTFE membrane

Nominal Length	Overall Length “L”	Filter Area (sf) @ 45 Pleats	No. of Straps
0.5 m	23.9”	12.3	1
1.0 m	43.6”	24.6	3
1.4 m	59.3”	34.5	4
2.0 m	83.0”	49.2	6



Tel 800-365-1331 (USA)
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DonaldsonTorit@DonaldsonTorit.com
DonaldsonTorit.com

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2018 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: **Deere & Company**
(U.S. Manufacturer or Importer)

Certificate Number: **JJDXL04.5316-002**

Effective Date: 04/28/2017

Expiration Date: 12/31/2018

Byron J. Bunker, Division Director
Compliance Division

Issue Date: 04/28/2017

Revision Date: N/A

Model Year: 2018
Manufacturer Type: Original Engine Manufacturer
Engine Family: JJDXL04.5316

Mobile/Stationary Indicator: Both
Emissions Power Category: 56<=kW<130
Fuel Type: Diesel
After Treatment Devices: Diesel Oxidation Catalyst, Ammonia Slip Catalyst, Selective Catalytic Reduction
Non-after Treatment Devices: Electronic Control, Non-standard Non-After Treatment Device Installed, Electronic/Electric EGR - Cooled

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Parts 60 and 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Parts 60 and 1039 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Parts 60 and 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Parts 60 and 1039.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Parts 60 and 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Parts 60 and 1039.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

Municipal Code 5.40 Home Occupations.
5.40.040 Conditions
A. # 2. The business must be conducted only by a resident or residents who reside on the site.

Would like to changed that to.
The business must be conducted only by a resident or residents who reside on the site and an additional immediate relation whose vehicle can be parked on the resident's property.

Suggested Revision:
2. The business must be conducted by individuals who reside on the property. Up to one additional employee may perform their work on the property, with the following conditions:

a. the employee is related to the resident or residents.
b. the employee will have access to a dedicated off street parking spot that is not required for the residential use.

SPANISH FORK
PRIDE & PROGRESS

TO: file

FROM: Dave Anderson, AICP

DATE: September 10, 2024

RE: Proposed Changes to Permit Artificial Turf

15.4.16.130 Landscaping, Buffering Walls, And Fences

A. Purpose: It is in the public interest to enhance, conserve, and stabilize property values by encouraging pleasant and attractive landscapes and surroundings, providing proper separations between uses, conserving public water resources and promoting water efficient landscapes. The purpose of this chapter is to protect and enhance the environmental, economic, recreational, and aesthetic resources in Spanish Fork by promoting attractive properties by establishing standards and practices for the design, installation and maintenance of water efficient landscapes throughout the City.

B. Landscape Requirements for Single-family and Twin Home Residential Uses.

1. Application. The landscape requirements that follow shall apply to all new single-family and twin home residential landscapes. The following describes the general landscape design requirements for single-family and twin home residential uses.

a. All single-family and twin home residential lots shall have the front yard, side-street yards for corner lots and park strips landscaped within one (1) year of receiving a Certificate of Occupancy. Interior side and back yards must be landscaped within two (2) years of receiving a Certificate of Occupancy.

b. All portions of a lot that are not improved with impervious materials must be landscaped within the above-described timelines. Weeds do not qualify as required landscaping. Landscaped areas shall be maintained in a neat, clean, and orderly condition. This includes the removal of litter, proper pruning, lawn mowing, weeding, dead-heading of perennial plants, fertilizing, replacement of dead plants, and regular watering of all landscaped areas.

c. Required landscaping in the park strips, front yards and side yards that are visible from the street shall be comprised of live plant material with an automated irrigation system. Zero-scape may only be used in back yards that are not visible from the street. Water-conserving designs are encouraged (see §15.4.16.130(C) Water-Conserving Landscape Design Recommendations for Single-family and Twin Home Residential Uses).

d. Artificial turf is a lawn substitute composed of individual artificial blades of grass that attempt to emulate natural turf in look and color. **Artificial turf is a synthetic ground cover designed to mimic the appearance of natural grass. It consists of fibers made from polypropylene, polyethylene, or a blend of these materials, tufted onto a backing material such as polypropylene or polyurethane. The turf features lifelike blades with a minimum pile height of 1.5 inches and includes a mix of at least two shades of green and a thatch layer of beige or tan. Artificial turf must not use indoor or outdoor plastic or nylon carpeting and should be installed to ensure proper drainage and stability. It is prohibited to use crumb rubber as infill material.** ~~**The use of artificial turf in park strips, front yards and side yards that are visible from the street is not permitted.**~~ **The use of artificial turf in front yards and side yards that are visible from the street is subject to the same area limitations that apply to the use of lawn.**

e. No more than 70% of a lot shall be surfaced with impervious materials. No more than 60% of the front and side-street setback areas can be improved with impervious surfaces.

f. Where park strips are sufficiently wide, street trees are required in accordance with the provisions found in 12.08.

g. Lawn shall not be less than eight (8) feet wide at its narrowest point.

h. Lawn and **artificial turf** shall not exceed 35% of the front and side-yard landscape area. The landscape area does not include footprints of buildings or structures, sidewalks, typical driveways, and other non-irrigated areas intentionally left undeveloped.

i. Lawn **and artificial turf** shall not be installed in park strips. **Lawn shall not be installed on paths** or on slopes greater than 25% or 4:1 grade.

C. Water-Conserving Landscape Design Recommendations for Single-family and Twin Home Residential Uses.

1. Water-conserving Landscape Design is encouraged. The Localscapes® Program, the Salt Lake City Plant List and Hydrozone Schedule 2013 prepared by Salt Lake City Public Utilities, and the Utah State University Center for Water-efficient Landscaping, shall be primary references for the design and installation of water-conserving plants and landscapes in Spanish Fork City (see Spanish Fork Water-Conserving Landscape Online Resource List at www.spanishfork.org). These and other resources included in the list offer user-friendly design ideas, recommendations, programs, examples and inspiration for the implementation of water-conserving landscapes for single-family and twin home uses, as well as those for developer/contractor installed projects.

2. The landscaped areas of the front yard, side and rear yards should follow Localscapes® five-step process as follows and as detailed in the Spanish Fork City Water-wise Landscape Design Elements & Principles Guidebook (2022) and the Localscapes® Program (see Spanish Fork Water-Conserving Landscape Online Resource List at www.spanishfork.org).

a. Create a central open space in the front and rear yards consisting of lawn, hardscape, groundcover, gravel or compacted mulch.

b. Create smaller gathering areas constructed of hardscape shall be placed outside of the central open shape. In a landscape without lawn, gathering areas may function as the central open shape.

c. Fill remaining areas with planting beds composed of water-conserving plants and water-efficient irrigation systems.

d. Locate activity zones outside of the central open shape that are surfaced with materials other than lawn.

e. Provide paths and walkways to link the different areas of the yard together. These should be constructed of hardscape, mulch, other groundcover or non-lawn materials.

D. Landscape Requirements for Multi-family, Professional Office, Commercial and Industrial Uses.

1. The following standards shall be required for all new developer and contractor installed landscapes for the following project types:

a. Multi-family residential uses;

b. Professional Office and Non-residential or Non-commercial uses;

c. Commercial uses; and

d. Industrial uses.

2. The standards do not apply to single-family, twin home and similar residential uses (see Section C. General Landscape Requirements for Single-family and Twin Home Residential Uses).

3. The standards are not intended to conflict with other landscape requirements as defined by Utah law, including stormwater retention requirements and low-impact development guidelines. Notwithstanding these outdoor standards, whenever any requirement may conflict with Utah law, such conflicting requirements shall not apply.

4. At maturity, all applicable landscapes are required to have enough plant material (perennials, decorative grasses, shrubs, groundcovers and similar) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.

5. General design requirements, the following describes the general landscape design requirements for each type of use.

a. Multi-family Residential Uses.

(1) Minimum of 25% on-site landscaping as a percentage of total site area, except in the R-5 Zone where 20% on-site landscaping is required.

(2) Minimum one (1) tree provided for every 1,000 square feet of required landscaping area.

(3) Parking lots shall include landscape islands within the parking lot, with a minimum 108 square foot planter island separating every 10 parking spaces in a row. Required landscape islands shall be at least six (6) feet wide, and shall be individual islands in single-loaded parking lots or merged with the required island on the opposite side of a double-loaded configuration. Each required landscape island shall include a single shade tree as identified on the City's approved list of Street and Shade Trees (one (1) tree for single loaded, and two (2) trees for each merged double-loaded island). These trees shall count toward meeting the minimum required trees for the site.

(4) Minimum 15-foot wide planting area adjacent to all public streets, which shall include trees with a maximum spacing of 30 feet, which shall count toward meeting the minimum required trees for the site. The planting areas may be partially or completely within the street right-of-way area. The specific trees used shall be selected from the City's approved Street and Shade Tree List. On streets included in the Shade Tree Master Plan, the trees selected shall include the mix of trees as prescribed by the Plan. Street and Shade trees must be planted within 30 feet of the public street curb, and wherever possible, 50% of the required Street and Shade Trees must be planted in the park strip. These trees shall count toward meeting up to 50% of the minimum number of required trees for the site based on the amount of required landscaping.

(5) A minimum 10-foot wide planting buffer and a six (6) foot wall are required where any multi-family use abuts another property. These trees shall count toward meeting the minimum required trees for the site. An exception to the six (6) foot wall requirement may be granted if the Development Review Committee finds that the multi-family use and adjacent uses are designed to create an integrated campus-like environment. In such cases, the planter area shall include shade trees are spaced a maximum of 30 feet apart.

(6) In cases where it is determined that the tree species in the approved Street and Shade Tree List (see Appendix X) would adversely impact utility lines and public infrastructure, the use of substitute tree species may be approved by the Community Development Director.

(7) In cases where it is determined that the tree species in the approved Street and Shade Tree List (see Appendix X) would adversely impact utility lines and public infrastructure, the use of substitute tree species may be approved by the Community Development Director.

(8) Lawn **and artificial turf** shall not be installed in park strips. **Lawn shall not be installed on paths** or on slopes greater than 25% or 4:1 grade.

b. Professional Office and Non-residential or Non-commercial Uses.

(1) Minimum of 20% on-site landscaping as a percentage of total site area.

(2) Minimum one (1) tree provided for every 1,000 square feet of required landscaping area.

(3) Parking lots shall include landscape islands within the parking lot, with a minimum of 108 square feet of planter area for every 10 parking spaces. Required landscape islands shall be individual islands of landscaping and shall be at least six (6) feet wide. Required planter areas shall include Street and Shade Trees, as identified on the City's approved Street and Shade Tree List, with a maximum spacing of 30 feet (see Section 12.08 Street Trees and Park Strip Design for details).

(4) Minimum 15-foot wide planting area adjacent to all public streets, which shall include trees with a maximum spacing of 30 feet. The planter area may be partially or completely within the street right-of-way area. The specific trees used shall be selected from the City's approved Street and Shade Tree List. In locations included in the Shade Tree Master Plan, the selected trees shall include the mix of trees as prescribed by the Plan. Street and Shade Trees must be planted within 30 feet of the public street curb wherever possible, with 50% of the required Street and Shade Trees required to be planted in the park strip. These trees shall count toward meeting up to 50% of the minimum number of required trees for the site based on the amount of required landscaping.

(5) A minimum 10-foot wide planting buffer is required where the site abuts a re.sidential use or district. The planting buffer shall include trees with a maximum spacing of 30 feet. A six (6) foot wall shall be constructed where the site abuts a residential district. Where the use of the adjacent property is residential but zoned Commercial Office, Commercial 1, Commercial 2, Commercial Downtown, Urban Village Commercial, Business Park or Shopping Center, a solid fence (not chain link with slats or similar) may be constructed in place of the wall. In situations where adjacent sites are designed to function as an integrated campus, the Development Review Committee may consider alternatives to the six (6) foot wall.

(6) In cases where it is determined that utilizing tree species found in the approved Street and Shade Tree List would adversely impact utility lines, the use of substitute tree species may be approved by the Community Development Director.

(7) No more than 20% of the required landscaping shall be irrigated turf grass outside of active recreation areas, and no turf area shall be less than eight (8) feet in width. At maturity, multi-family and non-residential landscapes are required to have enough plant material (perennials and shrubs) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.

(8) Lawn **and artificial turf** shall not be installed in park strips. **Lawn shall not be installed on paths** or on slopes greater than 25% or 4:1 grade.

c. Commercial Uses.

(1) Minimum of 15% on-site landscaping as a percentage of total site area.

(2) Minimum one (1) tree provided for every 1,000 square feet of required landscaping area.

(3) Parking lots shall include landscape islands within the parking lot, with a minimum 108 square foot planter island separating every 10 parking spaces in a row. Required landscape islands shall be at least six (6) feet wide, and shall be individual islands in single-loaded parking lots or merged with the required island on the opposite side of a double-loaded configuration. Each required landscape island shall include a single shade tree as identified on the City's approved list of Street and Shade Trees (one (1) tree for single loaded, and two (2) trees for each merged double-loaded island). These trees shall count toward meeting the minimum required trees for the site.

(4) Minimum of 15-foot wide planter area adjacent to all public streets, which shall include one (1) Street Tree for each 30 feet of frontage along all public streets. The specific trees used shall be selected from the City's approved Street and Shade Tree List. For sites included in the Shade Tree Master Plan, the trees selected shall include the mix of trees as prescribed by the Plan. Street and Shade Trees must be planted within 30 feet of the public street curb, and wherever possible 50% of the required Street and Shade Trees must be planted in the park strip. These trees shall count toward meeting up to 50% of the minimum number of required trees for the site based on the amount of required landscaping.

(5) A minimum 10-foot wide planting buffer where the site abuts a residential use or district. The planting buffer shall include trees with a maximum spacing of 30 feet, which shall count toward meeting the minimum required trees for the site. A six (6) foot high wall shall be constructed where the site abuts a residential district. Where the use of the adjacent property is residential but zoned Commercial Office, Commercial 1, Commercial 2, Commercial Downtown, Urban Village Commercial, Business Park or Shopping Center, a solid Fence (not chain link with slats or similar) may be constructed in place of the Wall. Also, in situations where adjacent sites

are designed to function as an integrated campus, the Development Review Committee may consider alternatives to the six (6) foot high wall.

(6) In cases where it is determined that utilizing tree species found in the approved Street and Shade Tree List would adversely impact utility lines, the use of substitute tree species may be approved by the Community Development Director.

(7) In order to ensure construction requirements are met and City utilities are not damaged, Spanish Fork City shall require applicants to provide a deposit with the construction of each non-residential project valued at $50,000 or more. The deposit amount shall be determined in the City budget and will be refunded to whomever paid the application fees containing that line item. If the required landscape cannot be installed prior to the issuance of the Certificate of Occupancy, a landscaping deposit will be required for the estimated cost of installing the required landscape. Once the landscaping is complete and approved, the landscaping deposit will be refunded to whomever paid it.

(8) No more than 20% of the required landscaping shall be irrigated turf grass outside of active recreation areas, and no turf area shall be less than eight (8) feet in width. At maturity, multi-family and non-residential landscapes are required to have enough plant material (perennials and shrubs) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.

(9) Lawn **and artificial turf** shall not be installed in park strips. **Lawn shall not be installed on paths** or on slopes greater than 25% or 4:1 grade.

d. Industrial Uses.

(1) Minimum of 10% on-site landscaping as a percentage of total site area.

(2) Minimum one tree provided for every 1,000 square feet of required landscaping area.

(3) Parking lots shall include landscape islands within the parking lot, with a minimum 108 square foot planter island separating every 10 parking spaces in a row. Required landscape islands shall be at least six (6) feet wide, and shall be individual islands in single-loaded parking lots or merged with the required island on the opposite side of a double-loaded configuration. Each required landscape island shall include a single shade tree as identified on the City's approved list of Street and Shade Trees (one (1) tree for single loaded, and two (2) trees for each merged double-loaded island). These trees shall count toward meeting the minimum required trees for the site.

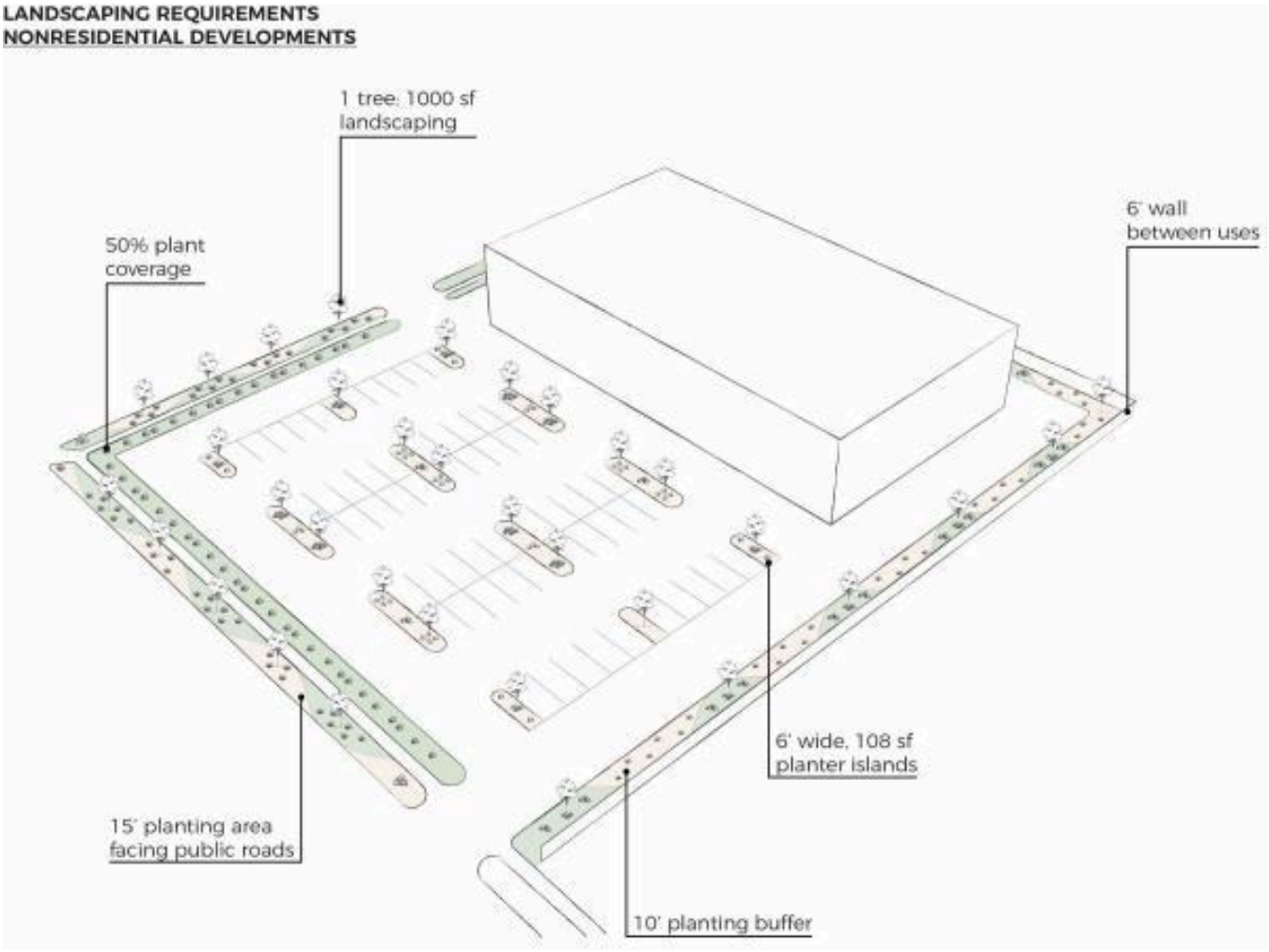
(4) A minimum 15-foot wide planting area shall be located adjacent to all public streets, which shall include trees with a maximum spacing of 30 feet. The specific trees used shall be selected from the City's approved Street and Shade Tree List. On streets included in the Street and Shade Tree Master Plan, the selected trees shall include the mix of trees as prescribed by the Plan. Street and Shade Trees must be planted within 30 feet of the public street curb and wherever possible, and 50% of the required Street and Shade Trees must be planted in the park strip. These trees shall count toward meeting up to 50% of the minimum number of required trees for the site based on the amount of required landscaping.

(5) A minimum of 10-foot wide planting area and six (6) foot high wall are required where a site abuts a residential use or district. The planter area shall include trees with a maximum spacing of 30 feet. These trees shall count toward meeting the minimum number of required trees for the site based on the amount of required landscaping.

(6) In cases where it is determined that utilizing tree species found in the approved Street and Shade Tree List would adversely impact utility lines, the use of substitute tree species can be approved by the Community Development Director.

(7) No more than 15% of the required landscaping shall be irrigated turf grass outside of active recreation areas, and no turf area shall be less than eight (8) feet in width. At maturity, multi-family and non-residential landscapes are required to have enough plant material (perennials and shrubs) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.

(8) Lawn **and artificial turf** shall not be installed in park strips. **Lawn shall not be installed on paths** or on slopes greater than 25% or 4:1 grade.



6. Water-Conserving Landscape Design Requirements for Multi-family, Professional Office, Public, Commercial and Industrial uses.

   a. General Water-conserving Design.

      i. Plants selected for landscape areas shall be well-suited to the microclimate and soil conditions at the project site. Plants with similar water needs shall be grouped together as much as possible.

      ii. Areas with slopes greater than 25% shall be landscaped with deep-rooting, water-conserving plants for erosion control and soil stabilization. No turf grasses or overhead irrigation is allowed on slopes greater than 25%.

      iii. Exemptions. Sports fields, turf play areas within parks, school grounds, golf courses and cemeteries may be deemed exempt from the landscape water allowance limitations of this chapter with approval by the Community Development Director. All other portions of this chapter shall apply.

      iv. Mulch. After the completion of planting, all irrigated non-turf areas shall be covered with a minimum three (3) inch to four (4) inch layer of mulch to retain water, inhibit weed growth, and moderate soil temperature. Nonporous material shall not be placed under the mulch. Drip irrigation is required where turf grasses are not being utilized.

v. Soil Preparation. Soil preparation will be suitable to provide healthy growing conditions for the plants and to encourage water infiltration and penetration. Soil preparation shall include scarifying the soil to a minimum depth of six inches (6") and amending the soil with organic material as per recommendations of the landscape designer/ landscape architect based on the required soils report.

b. Plant Selection. The Localscapes® Program, the Salt Lake City Plant List and Hydrozone Schedule 2013 prepared by Salt Lake City Public Utilities, and the Utah State University Center for Water-efficient Landscaping shall be primary references for the design and installation of water-conserving plants and landscapes in Spanish Fork City (see Spanish Fork Water-Conserving Landscape Online Resource List at www.spanishfork.org).

c. Documentation.

i. Landscape Plan Documentation Package. A copy of a landscape plan documentation package shall be submitted to and approved by the City prior to issuance of any permit. The landscape plan documentation package shall be prepared by a professional landscape architect.

ii. The landscape plan documentation package shall consist of the following items:

a. Project Data Sheet. The project data sheet shall contain:

- project name and address;
- applicant or applicant agent's name, address,
- phone and email;
- landscape architects name, address, phone and
- email; and
- landscape contractor's name, address, phone.

b. Planting Plan: A detailed planting plan shall be drawn at an appropriate scale suitable for identifying the location of all plant materials. The plan shall include a summary table indicating the following.

- zoning classification;
- proposed development type/use;
- adjacent development zones and uses;
- project/lot size in acres and square feet;
- landscape requirement in square feet;
- percentage of landscape provided in square feet;
- landscape coverage required in square feet;
- total number parking spaces proposed;
- parking landscape island area required in square feet;
- total number of landscape islands required at 108 square feet minimum area, 6’ minimum width;
- number of trees provided at one (1) tree per 1,000 square feet;
- number of frontage trees required at 30' on center;
- number of buffer trees required at 30' on center; and
- number of frontage trees provided at 30' on center.

c. Irrigation Plan: A detailed irrigation plan shall be drawn at the same scale as the planting plan and shall contain:

- layout of the irrigation system
- a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers;
- inclusion of a WaterSense labeled smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions. All controllers shall be equipped with automatic rain delay or rain shut-off capabilities.
- static water pressure in pounds per square inch (psi) at the point of connection to the public water supply;

- flow rate in gallons per minute and design operating pressure in psi for each valve and precipitation rate in inches per hour for each valve with sprinklers;
- EPA Water Allowance Table; and
- installation details for irrigation components.

d. Grading Plan: A grading plan shall be included in the application drawing set at the same scale as the planting plan. The plan shall contain:

- property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements, and
- existing and finished contour lines and spot elevations for the proposed site improvements.

e. Topsoil Report: A topsoil report shall be provided describing the required depth, composition, and bulk density of the topsoil, in addition to recommendations for soil amendments. The planting plan shall incorporate the recommendations of the topsoil report into the planting specifications.

f. Landscape Water Allowance: Use the WaterSense Water Budget Tool provided by the US Environmental Protection Agency to calculate the water allowance for the site.

- The Water Budget Tool is available as a MS Excel spreadsheet (xlsx).
- The spreadsheet and instructions are available at https://www.epa.gov/watersense/water-budget-tool

E. Landscape Requirements for Multi-family and Non-residential Uses.

1. General Requirements

a. All irrigation systems shall be appropriate for the designated plant material to achieve the highest water efficiency. Drip irrigation and bubbler systems shall be used in all landscape areas except those that contain lawn. Drip irrigation systems shall be equipped with a pressure regulator, filter, flush-end assembly, and any other appropriate components.

b. Each irrigation valve shall irrigate landscaping with similar site, slope and soil conditions, and plant materials with similar watering needs. Lawn and planting beds shall be irrigated on separate irrigation valves. In addition, drip emitters and sprinklers shall be placed on separate irrigation valves.

c. At least three to four (3-4) inches of mulch, permeable to air and water, shall be used in planting beds to control weeds and improve the appearance of the landscaping.

d. At maturity, single-family landscapes are recommended to have enough plant material (perennials and shrubs) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.

e. At maturity, multi-family and non-residential landscapes are required to have enough plant material (perennials and shrubs) to create at least 50% living plant cover at maturity at the ground plane, not including tree canopies.

f. Lawn **and artificial turf** should not be installed in park strips. **Lawn should not be installed on** paths less than eight (8) feet in width, or on slopes greater than 25% or 4:1 gradient.

2. Trees.

a. Purpose. The planting and growth of healthy trees contribute to making Spanish Fork an attractive and healthy community. Planting the correct type of tree in the right setting is an important factor for ensuring Spanish Fork will continue to be an attractive and resilient city in the future. Landscape design and implementation practices are therefore required to ensure

existing trees are preserved to the greatest degree possible, and that newly planted trees survive and thrive. This is particularly important for street trees and trees located in the highly-visible front yards of all properties in the city. The purpose of this section is to define permitted and prohibited trees for use in Spanish Fork and to identify the standards that apply to the selection and planting of correct trees in different locations.

b. Tree Selection and Standards

Planting the right type of tree in the correct setting is an important factor for ensuring that Spanish Fork will continue to be an attractive and resilient city in the future. This is a function of the specific location where the tree is planted, and the size of the soil/planting area, as described below and detailed in the Spanish Fork Approved Street and Shade Tree List. In addition to those requirements, tree restrictions may be subject to requirements of other government agencies (UDOT, for example) and utilities with below and above-ground electrical, gas and cable services. In order to accomplish this, the following standards and practices shall be required.

i. Selection and planting of street trees contained in the Spanish Fork Approved Street and Shade Tree List.

ii. Existing trees should be preserved whenever possible.

iii. When removing vegetation and plantings around the trunks and bases of existing trees when installing water efficient landscapes, special care should be taken to not damage the roots of existing trees.

iv. Newly planted trees need additional water during the first years of planting in order to become established. In addition to properly designed irrigation systems, other methods such as drip hoses and “gator bags” should be used to provide more water for new trees, particularly when irrigation water is unavailable.

v. Street trees shall be selected based on a combination of their approximate size at maturity, Tree Size at maturity as follow:

Large Trees –45 feet tall or greater at maturity;
Medium Trees –30-45 feet tall at maturity;
Small Trees – less than 30 feet tall at maturity.

vi. Nursery Stock Specifications - trees should be grown in a recognized nursery in accordance with good horticultural practice (American Association of Nurseryman Standards, ANSI Z60.1, as amended, or similar). Trees should be healthy, vigorous stock grown under climatic conditions similar to the locality of the project and free of disease, insects, eggs, larvae, and defects such as knots, sun-scale, injuries, abrasions, or disfigurement.

vii. Minimum Tree Size: the minimum size of all deciduous trees shall be two (2) inch caliper minimum, measured as provided in the American Association of Nurseryman Standards, ANSI Z60.1, as amended, or similar. Evergreen trees shall be not less than six (6) feet in height, measured from ground level, unless approved in writing by the Community Development Director.

viii. Permitted Trees - General

Large Planting Areas: Select from the Large Tree List. Planting area width shall be a minimum of 10 feet wide, which is generally sufficient to accommodate large trees with maximum size, shade and energy conservation benefits, while providing space for root and branch growth that will not conflict with site features;
Medium Planting Areas: Select from the Medium Tree List. Planting area width shall be a minimum of eight (8) feet wide, which is generally sufficient to accommodate medium size trees while providing space for root and branch growth that will not conflict with site features;
Small Planting Areas: Select trees from the Small Tree List. Planting area width shall be no smaller than six (6) feet, which is considered the absolute minimum space necessary to accommodate small size trees.

c. Prohibited Tree List

See Prohibited Tree List.

d. Street Trees and Park Strip Design

See Spanish Fork Approved Street and Shade Tree List and other requirements. Park strips shall be designed as part of the adjacent use and landscape treatment.

3. Other Standards, Requirements and Maintenance Considerations

a. Artificial turf is a lawn substitute composed of individual artificial blades of grass that attempt to emulate natural turf in look and color. The use of artificial turf in park strips, front yards, and side yards that are visible from the street is not permitted. **Artificial turf is a synthetic ground cover designed to mimic the appearance of natural grass. It consists of fibers made from polypropylene, polyethylene, or a blend of these materials, tufted onto a backing material such as polypropylene or polyurethane. The turf features lifelike blades with a minimum pile height of 1.5 inches and includes a mix of at least two shades of green and a thatch layer of beige or tan. Artificial turf must not use indoor or outdoor plastic or nylon carpeting and should be installed to ensure proper drainage and stability. It is prohibited to use crumb rubber as infill material.**

b. Zero-scape is a landscape design method that eliminates the need for irrigation water by eliminating plants from the landscape. Zero-scape landscapes are typified by yards and landscape areas covered with pavement, other paving and hardscape materials, gravel, rock and stone. Zero-scape landscapes treatments in park strips, front yards and side yards that are visible from the street do not meet the goals of creating an attractive and livable city and are not permitted in Spanish Fork City.

c. Shrubs over five feet in height and/or-width at maturity shall be five (5) gallons minimum when planted. Smaller shrubs, ground covers, perennials, forbs and decorative grasses shall be one (1) gallon size minimum when planted.

d. Planting areas shall be separated from parking areas and driveways by a raised six (6) inch concrete curb.

e. Landscaped areas shall be maintained in a neat, clean, and orderly condition. This includes the removal of litter, proper pruning, lawn mowing, weeding, deadheading for perennial plants, fertilizing, replacement of dead plants, and regular watering of all landscaped areas.

f. The Community Development Director may waive, at their discretion, the size requirements for required landscaping provided that the developer provides financial assurance that the landscaping will survive or be replaced after the first two (2) growing seasons. Trees and bushes shall be replaced after the first two (2) growing seasons if they die or fail to reach the minimum required size by October 15 of the second year after the landscaping was installed and inspected by the City

F. Plan Review, Construction Inspection and Post-Construction Monitoring

1. As part of the site plan or subdivision application, a copy of the required landscape plan documentation package shall be submitted to the city for review and approval before a permit shall be issued and construction begins.

2. All landscape plan documentation packages submitted must be stamped by a professionally licensed landscape architect (PLA).

3. All installers, designers and auditors shall meet State and local license, insurance, and bonding requirements, and be able to show proof of such.

4. During construction, site inspection may be performed by the Community Development Department.

5. A guarantee of the installation of required improvements shall be made to the City in the form of a deposit for the estimated cost of required work at the time of building permit issuance.

6. Spanish Fork City reserves the right to perform site inspections at any time before, during or after the irrigation system and landscape installation, and to require corrective measures if requirements of this chapter are not satisfied.

G. Links and References. www.spanishfork.org/waterwise.