# PLANNING COMMISSION
# Meeting Agenda
# Monday – April 14, 2014
# 7:00 PM
## City Council Chambers – 155 NW 2nd Avenue

**Commissioner Tyler Smith (Chair)**

**Commissioner John Savory (Vice Chair)** | **Commissioner Shawn Hensley**
**Commissioner John Serlet** | **Commissioner Larry Boatright**
**Commissioner (Vacant)** | **Commissioner (Vacant)**

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**1. CALL TO ORDER**

**2. CITIZEN INPUT ON NON-AGENDA ITEMS**

**3. MINUTES**

a. *February 10, 2014 Planning Commission Minutes*
b. *February 24, 2014 Planning Commission Minutes*

**4. NEW BUSINESS**

**5. PUBLIC HEARING – *Trend Business/VLMK***

a. *The applicant is proposing to construct a 34,205 sf speculative lease building and parking lot at the Trend Business Center.* ***(DR 14-01)***

***6.*** **FINAL DECISIONS**
(*Note: These are final, written versions of previous oral decisions. No public testimony.)*

a. *Site and Design Review, Trend Business/VLMK* ***(DR 14-01)***

**7. ITEMS OF INTEREST/REPORT FROM STAFF**

a. *April 28, 2014 Planning Commission meeting will include:* ***TA 14-01*** *Code Streamlining Industrial Development****; PUD 14-01/SUB 14-01*** *Emerald Green Townhomes, and* ***SUB 14-02*** *Dinsmore Estates.*

**8. ITEMS OF INTEREST/GUIDANCE FROM PLANNING COMMISSION**

**9. ADJOURNMENT**

*The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for person with disabilities should be made at least 48 hours before the meeting at 503-266-7001.*
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**PLANNING COMMISSION MINUTES**
February 10, 2014, 7:00 PM
City Council Chambers – 155 NW 2nd Avenue

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**PRESENT:** Commissioners Tyler Smith (Chair), John Savory, Shawn Hensley, John Serlet

**ABSENT:** Commissioner John Proctor

**STAFF:** Bryan Brown, Planning Director, Angie Lehnert, Associate Planner, and Laney Fouse, Planning Staff

## 1. CALL TO ORDER

Chair Smith called the meeting to order at 7 pm.

## 2. NEW BUSINESS

a. Select a Vice Chair

***Motion:*** *Commissioner Hensley nominated Commissioner John Savory as Vice-Chair; Commissioner Serlet seconded the nomination. Motion passed 4/0.*

b. Provide staff direction for proposed Text Amendment changes to the code for downtown landscaping and two-story building requirements.

Mr. Brown gave a brief update on the previous discussions regarding the landscaping and the two-story building requirements for the downtown core commercial area. He said the focus had been whether or not the code needed to undergo some changes. The current two-story requirement only applied to the C-1 zoned area in the core commercial subarea downtown. There was discussion whether there was a need for the 7.5% requirement for landscaping downtown. Research had not been done on the landscaping yet. Canby's downtown was predominately one story, but two stories fits in well allowing a higher intensity of use and allowing for greater height was common in downtowns. There was also adequate public parking downtown. The City Council could not agree on a specific direction, but did provide some general statements that the Planning Commission and staff could respond to. They wanted the regulations to reflect what modern zoning theory would require for a downtown area in terms of having the right landscaping ratio and whether to require two story buildings and if there should be any exceptions to the two story requirements.

Chair Smith thought the Commission should take into account setting up the system so that it was enforceable. The Code needed to be crafted in a way that avoided those situations where requirements were not checked.

Commissioner Hensley questioned just looking at only these two issues, and thought the Commission should do an overall assessment of Chapter 16 because each piece was relative to other pieces.

Mr. Brown said it was possible to make suggestions on these two areas without unintended consequences.

Chair Smith suggested the following code changes to be made:

- 16.49.070E – considering solar access conditions
- 16.49.080B- reducing the amount of carbon dioxide in the air, 16.49.080C2 exception to the 7.5% downtown commercial landscaping for zero lot lines, and 16.49.080J – not having a list of approved tree species
- Removing the Sunset Western Garden Book
- 16.49.090E - Keeping lawns weed free

Mr. Brown discussed 16.49.030. Street trees must be on the required Street Tree List, but the City did not regulate trees on private property except if a street tree was planted on a property owner's front yard.

There was further discussion regarding what 16.49.080J and 16.49.030 meant in regard to tree and landscaping requirements and what percentage of remodeling or changing of the site required review by the new standards.

Chair Smith clarified the solar access meant not blocking out the sun by too many trees and it might not need to be deleted. There was consensus to take it off the review list.

Chair Smith discussed 16.49.080B, promoting urban wildlife habitats and reducing the amount of carbon dioxide in the air and 16.49.080C2, zero lot lines.

Commissioner Savory thought they could encourage and incentivize some of these items instead of require them. The language needed to be cleared up so developers and citizens could say with some degree of certainty what was required and what was not required.

Mr. Brown said the Code needed to be clear and objective. They also needed to clarify the two-story requirement because it could be interpreted differently.

Chair Smith suggested not prohibiting the City Hall or old fashioned library building look, but also not allowing those to dominate for landscaping or two stories.

Mr. Brown replied multiple story gave more room for landscaping. The more they went up, the more likely they could do landscaping. Providing landscaping would make it more expensive to develop.

There was discussion regarding whether any non-house put in a residential district needed 30% landscaping, such as churches. Mr. Brown did not think it was out of bounds with what other communities required. The question was if the downtown core business district percentage was higher than normal, and he thought it was.

Chair Smith discussed 16.49.080J, street tree list. Commissioner Hensley thought the list needed to be more specific.

Chair Smith then discussed 16.49.090E, weed free lawn provision. Commissioner Savory said to get rid of weeds, herbicides were used and there was a danger of those going into the groundwater.

Mr. Brown stated this was for a situation for businesses with really poor landscaping with high grass and weeds and allowed enforcement action. He cautioned the Commission to think of the administration and if they had the staff to enforce it and if it was needed community wide.

Chair Smith said the Commission could either direct staff to work on a draft of changes or accumulate them for an annual cumulative change or table the topic. If staff made a draft of changes, he suggested reviewing them in a work session before there was a public hearing.

There was discussion regarding a Code Improvement Package for changes to the Code that were not controversial. Those that were controversial would be dealt with separately.

Chair Smith suggested accumulating tentatively approved changes by the Planning Commission that would eventually be public noticed. When it was time for the annual changes, they would review the list and then officially public notice them. Mr. Brown did not think text amendment reviews could be brought before the Commission every meeting especially as applications came through. He wanted to be prepared if the Civic building downtown moved forward and if the Code needed to be changed regarding two story requirements and landscaping, and wait for the other changes until the annual package could be brought back to the Commission.

Chair Smith recommended staff draft changes to the landscaping and that the two story requirement be discussed at the next Commission Work Session.

Commissioner Hensley thought the landscaping was the biggest issue. He did not think landscaping needed to be required in downtown as they wanted the buildings out to the sidewalk.

Commissioner Serlet thought there should be some landscaping requirements. He thought it could be conservatively done and easy to maintain as landscaping and greenery would add to community livability.

Chair Smith said there was no landscaping in the downtown core now except in the Railroad parking lot and Wait Park and the few planter boxes.

Commissioner Hensley said what landscaping there was currently was public, not private.

Chair Smith said there should be an ordinance change regarding the two story requirements.

Mr. Brown replied staff could clarify the two story requirement if there was agreement to require two stories.

Chair Smith could support either two stories or a landscaping requirement for a one story and an exception that if it could be demonstrated that it was a traditional format for that type of business to be one story. He used the example of Parsons because pharmacies were not typically two stories.

Commissioner Savory said Canby Rental was a good example of a business which was not conducive to a two story building. Although he supported two story buildings in the past he would like to see some sort of flexibility to have both.

Chair Smith took a straw poll, and three were in favor of a second story requirement with some exceptions.

Mr. Brown thought an exception could be if a building's general appearance was similar to a two story as had been proposed for the previous library project. Another exception could be a certain percentage of the second story met the two stories, such as one room upstairs or the same square footage as the first floor or 50% of the upper floor.

Commissioner Savory thought there should be some flexibility especially where it did not make sense to have a second story.

Commissioner Serlet stated to him a second story was more for residential such as apartments or condos as more people were cramming in the same area and the only thing left to do was go up.

Chair Smith asked if a two story requirement created a lot of extra cost for someone, particularly in the area of ADA compliance and did it warrant having to pay for the expense of an elevator.

Commissioner Savory asked what if they eliminated the requirement altogether.

Mr. Brown replied the requirement could be eliminated altogether and still have the potential of a unique downtown in that you allow a higher floor count than anywhere else in town but you were not mandating that they have a higher floor count. It's really the market and the price of land that determined whether developers were going to build up or not.

Chair Smith said that was why he didn't want to have a two-story requirement in order to have some flexibility.

Commissioner Savory wanted some time to think about this issue because these were some really good points he hadn't considered previously.

***Motion:*** *Commissioner Savory made a motion to table the discussion; Commissioner Hensley seconded the motion. Motion passed 4/0.*

Chair Smith asked staff to draft some text on the landscape provisions. If staff had too much on the next agenda, it could be pushed to next month.

**3. PUBLIC HEARING** - None

**4. CITIZEN INPUT ON NON-AGENDA ITEMS** - None

**5. FINAL DECISIONS** - None

**6. MINUTES**

a. Planning Commission Minutes, December 9, 2013

***Motion:*** *Commissioner Savory made a motion to approve the December 9, 2013 minutes as written; Commissioner Hensley seconded the motion. Motion passed 4/0.*

**7. ITEMS OF INTEREST/REPORT FROM STAFF**

a. **Next Planning Commission Meeting, Monday, February 24, 2014**

Mr. Brown said the items for the next meeting were the Northwoods Estates Phase 2 subdivision application and an economic development idea proposal.

**8. ITEMS OF INTEREST/GUIDANCE FROM PLANNING COMMISSION**

**9. ADJOURNMENT**

***Motion:*** *Commissioner Savory made a motion to adjourn; Commissioner Hensley seconded the motion. Motion passed 4/0. Meeting adjourned at 9:15 pm.*

Assisted with Preparation of Minutes – Susan Wood

**MINUTES**
PLANNING COMMISSION
February 24, 2014 7:00 PM
City Council Chambers – 155 NW 2nd Avenue

**PRESENT:** Commissioners Tyler Smith, Shawn Hensley, John Savory, and John Serlet

**ABSENT:** Commissioner John Proctor

**STAFF:** Bryan Brown, Planning Director, Angie Lehnert, Associate Planner, and Laney Fouse, Planning Staff

**OTHERS**:

## 1. CALL TO ORDER

Commissioner Smith called the meeting to order at 7 pm.

## 2. CITIZEN INPUT ON NON-AGENDA ITEMS

## 3. PUBLIC HEARING

a. Approval of a 10.3 acre subdivision for 33 single family home lots. This is the second phase of the four phase development of the Northwoods Estates subdivision. (SUB 13-01)

Commissioner Smith opened the public hearing and read the public hearing format.

Commissioner Serlet indicated he had no exparte contact and no conflicts.
Chair Smith, Commissioners Savory and Hensley said they had no conflicts but disclosed they had ex parte contact of a February 19, 2014, email from Bob Backstrom and they drove by the site on a daily basis and attended church nearby.

Staff Report: Angie Lehnert, Associate Planner, entered her staff report into the record. This was an application for a subdivision located at 9th Avenue between Birch and Grant. It was a 10.3 acre site which would be developed into 33 R-1 single family homes. She explained the major issues for the Commission's consideration. The traffic study evaluated the speed along Birch and found no major issues. Residents wanted a marked and signed crosswalk at Birch and 10th. The applicant had discussed putting in some traffic calming measures in the area in exchange for SDC credits, but that decision needed to be deferred to the City Council. The applicant requested transportation SDC credits for the sizing of 10th Avenue to 40 feet instead of the required 36 feet and full width improvement by St. Patrick's Church, however the Planning Commission could not waive fees. Regarding driveways, there was conflict between the Public Works design standards and the Code and a Code amendment was needed. Staff proposed a condition for residential driveway widths to specify a minimum of 12 feet, maximum of 24 feet. There were comments regarding infill homes in the neighborhood meeting minutes about

the homes not being two story but only one story. She explained how the Code defined infill lots in 16.04.255 which had to gently slope up so a two story was not at the setback line, but it still could be a two story. The conditions listed which lots would be defined as infill lots and the infill standards would be enforced on those lots. The Planning Commission could consider conditioning those lots to be single story. There also might be some height restrictions required by the CC&Rs. The Code stated any street lights should be fully shielded. The proposed lights looked like partially shielded lights and could be discussed further.

Mr. Brown said there were new lighting requirements, which could be in conflict with Canby Utility who was in charge of deciding what types of lights were allowed.

There was discussion regarding the intent of the shielded lights and what was being proposed.

Ms. Lehnert stated the Code also required lumen limits not wattage limits for a maximum of 2600 lumens for fully shielded and 800 for shielded lighting. The applicant stated the lighting would be 30,000 lumens for the local street lights and on 10th would be 5200 which exceeded the limits in the Code. Staff did not propose any lighting conditions. Regarding streets and parking, Elm Street adjacent to the park tract was proposed to be 20 feet wide. The applicant planned to have no parking along Elm and the Fire Department preferred no parking. There was a no parking condition along the one way portions of Elm although it was not required. The Code said all the local streets were 28 foot streets and would be restricted to parking on one side, however the TSP stated parking could be on both sides. Staff did not propose a parking restriction on those streets. Parking could be restricted in the future if there was a problem. Tract B would be a City park and dedicated to the City. Regarding street right of way widths and street layout, the TSP designated all the streets in the subdivision as local streets and 10th Avenue was a neighborhood collector. The Commission could require street widths to accommodate with the lot sizes. The proposal was for 4.5 foot sidewalks with a six inch curb, although 6 foot sidewalks were required. The Commission could require the 6 feet. The master plan showed planter strips along 12th Avenue, but the applicant proposed not putting them in. She explained the street extensions in the subdivision. Public Works design standards required the cul-de-sac radius to be much larger than what the applicant proposed, however the Fire Department approved it with the condition that the houses on the end would have sprinkler systems. No pedestrian ways were proposed. There was a Code provision for lots fronted by a collector and a local street, access should be taken off the lower street classification. It was not currently a condition, but the Commission could discuss it. There was a new street tree ordinance which required plantings along 10th and the lessor classification streets. Park staff would have final say on the park design.

Ms. Lehnert then reviewed the citizen comments that had been received and questions that staff needed more direction on from the Planning Commission.

Applicant: Curt McLeod, representing Northwood Investment, clarified his firm that provided the City engineering services had nothing to do with this application or review of this project. A different engineer had been hired to review it. Regarding the infill lot designation, they agreed to several lots as infill though they did not meet the need for infill requirements and many of the lots had been committed to be single story. He requested lots 52 and 54 not be designated as infill. He said this was the first subdivision

to do street lights outside of Canby Utility. They were proposing to do all LED lights that were all classified as fully shielded. The lumen limits were currently changing monthly and the lights they had selected were what Canby Utility recommended. He thought this would meet the requirement of being fully shielded and finding a good lighting level that Canby Utility would accept. Regarding parking, the Fire Department preferred no parking along Elm Street. He was concerned, however, that a few of the lots would have no guest parking. The parks department also requested places to park for maintenance. He proposed having some designated areas along the 20 foot width that allowed two or three parking spots in two or three locations or alternatively have eight foot parallel parking where it cut into the park. The plan for the area was done in 2005 and called out the footage of the cul-de-sac radius and how it would work and they planned to equip those homes with fire sprinklers. He hoped no change would be made to the radius because it would have substantial impact on the lot layouts. The entire first phase of this subdivision had 4.5 foot plus six inch curb sidewalks and he hoped they could maintain the same for the second phase to match. That was the sidewalk standard in Canby a couple of years ago. If anyone had a planter strip in front of their house, the private property owner was required to maintain it. He was proposing a planter strip along 10th Avenue for a consistent look. He preferred not to do the stamped concrete for the bump outs. He thought it made sense to have access for lots 70 and 71 off of Douglas. For lots 57 and 67 he requested they not be required to face Elm, but to face 10th as the other lots. In this subdivision, there was no HOA and everyone was responsible to enforce the CC&Rs. He was in general agreement with staff's conditions.

Proponents:

Derek Colby, PO Box 3432, Tualatin, OR 97062, was a realtor and a builder previously. Many people wanted to live in Northwoods Estates because of the quality of the development. He would hate to see a requirement for single story homes on the infill lots because it would be difficult to meet the required square footage if they didn't have the option for a second story. There could also be a problem with the infill requirements if there was development this year, and there was another economic downturn, it might make other lots infill if it was five years before anything else was built. He also thought the sidewalks should be consistent in the subdivision. If there was parking at the park, one or two could be restricted to parks maintenance vehicles and the others used for residents.

Councilor Clint Coleman, 221 N. Pine, was Council liaison to the Traffic safety Commission. He thought this was a first class development and appreciated the condition where the applicant would negotiate with the City Council for possible Transportation SDC credits for installation of traffic calming measures on Birch and Territorial.

Opponents:

Susan Sessions, 646 NW 12th Ave, was concerned about accountability since there was no HOA for enforcement of the CC&Rs. The developers said once they sold the plot, they had no control over what the builder did. She was concerned that the builders would not follow what was planned and what the City approved. Numerous builders would come in and with no one watching, the good faith agreements might go by the wayside.

Barbara Carmel, 219 NW Territorial, discussed the traffic impacts of this subdivision. She requested traffic counts and speed counts be taken at the intersection of Elm and

Territorial. If that intersection became a safety problem, and before subsequent subdivisions were approved, she requested the Planning Commission ask for before and after traffic counts and speed management. There might need to be some mitigation such as traffic calming or signals. She supported HOAs as they gave structure and accountability for neighbors after the developers left.

Logan Sessions, 646 NW 12th Ave., liked having a dead end street and wanted to delay the development until it was absolutely needed.

Neutral:

Allison Etzel, 400 NW 9th Ave., was concerned the power lines on 10th were not going to be underground. She thought it should be reconsidered as it would detract from the aesthetics of the development. Mr. Brown responded they were main feeders and too expensive to place underground.

Rebuttal:

Mr. McLeod stated there was a clause in the CC&Rs that any homeowner could call an attorney and the attorney could enforce the CC&Rs and recover the cost of the attorney's fees. He did not think an HOA would change anything. The restrictions in the CC&Rs were over and above what was required by the City. They were a legal document that bound anyone who lived in the subdivision to those requirements and anyone could enforce them. Regarding traffic and speed on Birch and Territorial, they were proposing to do traffic calming improvements for SDC credits. Three traffic studies had been done already and it was concluded that this development did not increase traffic beyond acceptable limits.

Commissioner Savory asked if they were willing to do the traffic calming. Mr. McLeod said yes, in exchange for SDC credits.

Commissioner Savory asked what would be the most effective form of calming devices.

Mr. McLeod replied bump-outs on 10th and 12th or 10th and 13th. Emergency services did not like the humps and bumps on streets which was the reason for other options.

Chair Smith closed the public hearing at 8:50 pm.

Commissioner Hensley asked if there were any bike paths in the development. Ms. Lehnert said no, they were not required. There should be a shared one on 10th, but it did not require striping.

Commissioner Hensley said if they stifled parking around the park, there would be an issue with the lots that did not have guest parking.

Commissioner Savory suggested angled parking near lots 65 and 49.

Mr. Brown said staff was against the idea of using dedicated open space for parking. It was lessening what the public had negotiated to get as a public benefit for private use.

Commissioner Serlet thought the maintenance staff parking could be used for residents when it was not needed by staff. Mr. Brown thought that would be a good compromise.

Chair Smith was in favor of having no parking on the one-way street except for a few carve outs that could be used for City staff or public parking. Condition 22 could be modified to address the issue. He questioned whether the Planning Commission had the authority to force an HOA on the neighborhood. He thought lot 52 should not be designated infill and 54 be deemed as infill. The sidewalks also needed to align and be consistent block to block. He had no concern about the sidewalk widths. Regarding the lumen lighting, the discussion had been about residential property not official street lighting. The Fire Department did not have a problem with the cul-de-sac radius, and neither did he. He questioned whether requiring the sprinklers would make a difference if the fire trucks were able to get in and out of the street.

Mr. Brown clarified it was the Fire Department that was requiring the sprinkler systems because the access wasn't adequate for normal standards. They would be opposed to the design of the subdivision if the sprinklers were not required.

Chair Smith thought the Commission should allow a flexible direction on lots 57 & 67 to be able to face 10th instead of Elm. Lot 67 would need to be taken out of Condition 75.

Commissioner Hensley suggested striking Condition 22 regarding no parking on Elm.

Chair Smith recommended no parking unless there was a cut out adjacent to the park.

Mr. Brown thought if they allowed parking on one side, the residential side, it met the TSP cross section standard, however it did not meet the Fire Department's requirements.

There was discussion regarding the pros and cons of allowing parking on one side of Elm.

Commissioner Hensley thought there should be parking on the residential side that would give the parking back to the people who were living there.

Chair Smith suggested Condition 22 be changed to state, "parking was prohibited along the park side of the one way street."

***Motion:*** *Commissioner Hensley moved to approve Sub 13-01 pursuant to conditions approved with an amendment to Condition 22 for no parking along the park side of Elm, amendment to Condition 75 to take out lot 67, it was the interpretation of the Planning commission that the lighting ordinance did not apply to city streets, and to remove lot 52 from the infill designation; Commissioner Savory seconded the motion. Motion passed 4/0.*

Staff would prepare findings for the next meeting.

## 4. NEW BUSINESS

a. Approval of a one-year extension of the Development Agreement for the Northwoods Master Plan

***Motion:*** *Commissioner Savory moved to approve the one-year extension of the Development Agreement for the Northwoods Master Plan; Commissioner Hensley seconded the motion. Motion passed 4/0.*

**5. CITIZEN INPUT ON NON-AGENDA ITEMS - None**

**6. FINAL DECISIONS - None**

**7. MINUTES - None**

**8. ITEMS OF INTEREST/REPORT FROM STAFF**

a. Next Regularly Scheduled Planning Commission – March 10, 2014

Mr. Brown said a proposed text amendment for expediting development in the Industrial Park would be discussed at the March 10 meeting.

b. Need legal counsel on interpretation of two-story requirement

Commissioner Savory wanted to revisit the discussion regarding a second story requirement for the downtown area. He proposed eliminating the requirement.

Chair Smith said to make this change it would have to be noticed and opened for public testimony.

Mr. Brown suggested bringing several text amendments back to the Commission at the same time in one package.

**9. ITEMS OF INTEREST/GUIDANCE FROM PLANNING COMMISSION**

**10. ADJOURNMENT**

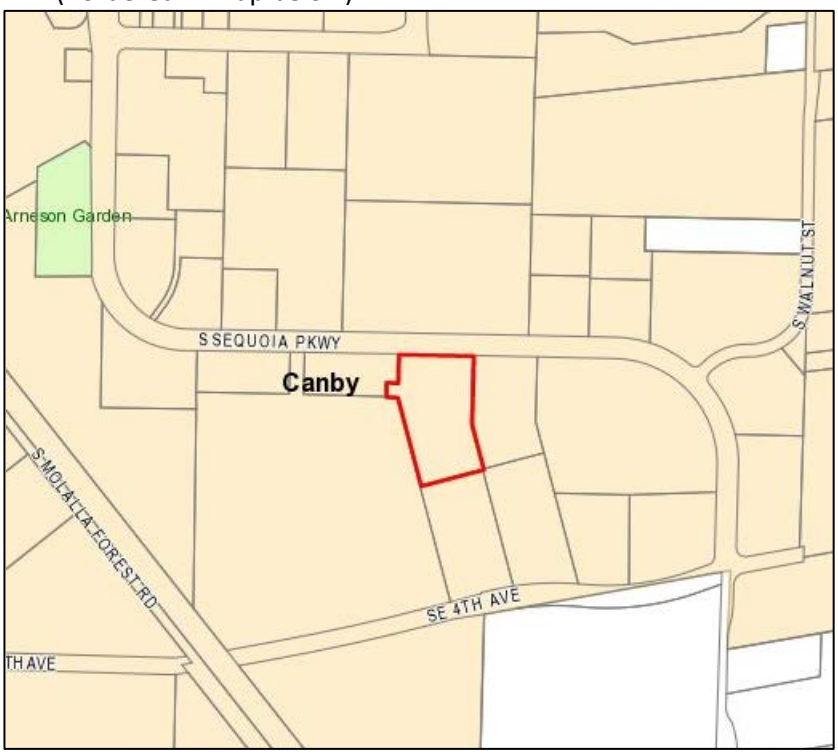
***Motion:*** *Commissioner Savory made a motion to adjourn; Commissioner Hensley seconded the motion. Motion passed 4/0. Meeting was adjourned at 9:27 pm.*

Assisted with Preparation of Minutes – Susan Wood

# City of Canby

**SITE AND DESIGN REVIEW STAFF REPORT**
**FILE #: DR 14-01**
**Prepared for the April 14, 2014 Planning Commission Meeting**

**LOCATION:** 341 S Sequoia Parkway
**TAXLOT:** 31E3401711 (Bordered in map below)




**LOT SIZE:** A 33,248 sf building and parking lot is proposed on a portion of the 2.44 acre taxlot
**ZONING:** M-2 Heavy Industrial/I-O Overlay Zone
**OWNER:** Trend Business Center LLC
**APPLICANT:** Jennifer Kimura, VLMK Engineers
**APPLICATION TYPE:** Site & Design Review (Type III)
**CITY FILE NUMBER:** DR 14-01

## I. PROJECT OVERVIEW & EXISTING CONDITIONS

Statement from the applicant's narrative:

***Overview:***
*The applicant is proposing to construct a 33,248 square feet speculative lease building on Lot 1 of the Trend Business Center.*
***Site Condition:***
*This 2.4 acre site is zoned M-2 (Heavy Industrial) and is currently vacant with a small*

*amount of its area paved for parking from the construction of Building 'D'. The site was also rough graded during that construction and is relatively flat. It is located on the south side of Sequoia Parkway.*

***Vehicle Access:***

*Primary vehicle access is from S Sequoia Parkway. Two shared access drives will serve this property, one existing and one to be developed and shared with the property to the west. Driveways are in excess of 200 feet apart.*

***Building Use:***

*The facility will be designed to accommodate warehouse or small manufacturing with support offices for staff. The building can be demised into three (3) separate tenant spaces or have all area occupied by one tenant.*

***Construction Materials:***

*The proposed Building is to be approx. 28'-0" in height and constructed using concrete tilt-up wall construction with a built-up insulated roof over a structural steel frame. The floor is to be a concrete slab on grade. Storefront glazing is to be used to take advantage of natural light along the buildings north and east sides where possible tenant offices spaces can be built. Recessed storefront entrances will be used to provide protection from the weather. The building has been designed with several jogs and staggered panels to provide articulation and interest. Walls will have reveals cast in them which will run horizontally around the building at varying heights. A multi-color paint scheme will finish the walls with painted metal copings along their top edges. All rooftop equipment will be screened from the public way.*

***Site Utilities:***

- *Storm:*
  - *Runoff from roof areas will be discharged directly to the existing drywell system. New drywells will be added as needed.*
  - *Stormwater will be collected from the asphalt paved parking areas in Stormwater Management catchbasins that contain filters to treat stormwater runoff. The treated stormwater will then be piped to drywells located below the parking areas*
- *Sanitary:*
  - *Sanitary sewer was installed with the construction of Building 'D' and is stubbed onto the property in the northeast corner of the site for tie-in by the new system.*
- *Domestic Water:*
  - *Domestic water is to be installed from the existing line in S. Sequoia Parkway.*
- *Fire Water:*
  - *Fire water exists in the easement along the easterly boundary line and will be tapped at the existing 6" line at the southeast corner of the property for connection to the new fire riser to be located at the south end of the building.*
- *Lighting:*
  - *On-site lighting will be provided for security purposes and in compliance with design standards.*
- *Misc. Utilities:*
  - *The site will also be served with gas, electric, cable, and phone.*

***Public Works:***

- *This project will include the completion of sidewalk along Sequoia Parkway from the Lots on both the east and west side. No street work is required.*

## II. ATTACHMENTS

- **A.** Citizen and agency comments
- **B.** Application form received 2.13.14
- **C.** Application narrative revised 3.17.14
- **D.** Design review drawing set G1.0-G7.0 revised 3.17.14
- **E.** Landscaping Plan L1.0 revised 3.17.14
- **F.** Floor Plan A1.0 revised 3.17.14
- **G.** Elevations A2.0 revised 3.17.14
- **H.** Traffic Impact Study dated January 2008
- **I.** Other supporting materials submitted with the application

## III. MAJOR ISSUES FOR PLANNING COMMISSION CONSIDERATION

The following is a list of staff interpretations and potential conditions of approval that the Planning Commission may want to discuss/comment on and/or use as a basis to apply additional conditions of approval:

- **A.** Concur that the submitted 2008 traffic study meets traffic study requirements. See 16.08.150 page 4.
- **B.** Review parking calculations. See 16.10.050 page 5.
- **C.** Review industrial berth requirements. See 16.10.060(A-B) pages5-6.
- **D.** Consider additional screening for front loading area if deemed appropriate. See 16.10.060(C) page 6.
- **E.** On-site circulation review was not required in the traffic study. See 16.10.070(A)(7) page 6.
- **F.** Determine if wheel stops along walkways and landscaped areas should be required. See 16.10.070(A)(8) pages 6-7.
- **G.** Canby's Public Works Design Standards and Chapter 16 conflict for maximum driveway width requirements; staff determines that the proposed 40' driveways should be allowed. See 16.10.070(B)(9)(a) page 7.
- **H.** Review proposed bicycle parking condition; see 16.10.100(A) pages 7-8.
- **I.** Review on-site walkways and determine if satisfactory. See 16.10.070(B)(5) page 7. and 16.35.050(H) page 9.
- **J.** Review staff's interpretation of the "Transportation and Circulation" portion of the 16.35.040 I-O design matrix. Review streets, pedestrian way, and required points design matrix points; see pages 10-11.
- **K.** Review staff's interpretation of the "Tree Retention, Open Space conservation and Trail Connections" portion of the 16.35.040 I-O design matrix. Staff determined the section is not applicable; see page 11.
- **L.** Review staff's interpretation of the "Landscaping" portion of the 16.35.040 I-O design matrix. Review outdoor amenity and grass/ground points. See pages 11-12.
- **M.** Review staff's interpretation of the "Building Appearance and Orientation" portion of the 16.35.040 I-O design matrix. Review building materials points and determine if alternative building materials should be required. See page 12.
- **N.** Give feedback on what lighting category from Table 16.43.070 should be required. See Table 16.43.070 page 13.
- **O.** Review potential rooftop equipment and determine if screening would be sufficient. See 16.49.050 page 14.
- **P.** Review the 15% site landscaping requirement and calculations. See 16.49.080(C) pages 14-15.

**Q.** Review parking lot landscaping calculations. Discuss removal of existing vegetation. See 16.49(B-C) and 16.49.120(D) pages 16-17.

**R.** Review the 6' wide planting area requirement. See 16.49.120(C) page 16.

**S.** Review the landscape island requirement and proposed parking/islands at the front of the site and determine if satisfactory. See 16.49.120(E) page 17.

## IV. APPLICABLE CRITERIA & FINDINGS

Major approval criteria used in evaluating this application are the following Chapters from the *City of Canby's Land Development and Planning Ordinance* (Zoning Code):

- Chapter 16.08 General Provisions
- Chapter 16.10 Off Street Parking & Loading
- Chapter 16.34 M-2 Heavy Industrial Zone
- Chapter 16.35 Canby Industrial Overly (I-O) Zone
- Chapter 16.42 Signs
- Chapter 16.43 Outdoor Lighting Standards
- Chapter 16.46 Access Limitations on Project Density
- Chapter 16.49 Site & Design Review
- Chapter 16.89 Application & Review Procedures
- Chapter 16.120 Parks, Open Space, & Recreation Land

Applicable code criteria are highlighted below in **gray,** with findings and discussion after the citations; most full code citations are omitted for brevity. If not discussed below, other standards from the code are either met fully, not applicable, and/or do not warrant discussion. Most met provisions have no discussion for brevity.

## *Chapter 16.08 General Provisions*

**16.08.090 (A) Sidewalks required**
**16.08.160 Safety and Functionality Standards**

**Findings:** There are existing 6' sidewalks and 5' planter strips on either side of the subject property. Engineering plans of the proposed right of way planter strip and sidewalk are needed prior to construction. These plans need to indicate sidewalk and planter strip widths to ensure they match surrounding sidewalks and planter strips and meet TSP standards-see **Condition #14**.

**16.08.150 Traffic Impact Study (TIS)**

**Findings:** The applicant submitted a 2008 study that was conducted for Building C and D to comply with traffic study requirements. No issues or mitigation measures were recommended in this study. No conflicts with the TSP found; however the current TSP was adopted in 2010, while the traffic study was conducted in 2008.

## *Chapter 16.10 Off Street Parking & Loading*

**16.10.050 Parking standards designated.**

**Findings:**

- This proposal (Building C) will build on a portion of taxlot 1711; some existing parking on taxlot 1711 was installed for Building D to the east. Design Review for Building D consisted of its subject taxlot (1714) and portions of Building C's taxlot (1711). Some of the parking that the applicant proposes to count for Building C was also counted for Building D.
- Staff would prefer that the applicant give parking calculations based on anything west of the "limit line of construction" delineated on Site Plan G1.0 because this is the actual construction site area; this was done for the adjacent Building D. However, the applicant gave calculations based on taxlot area; therefore some parking that was installed for Building D is also being counted for Building C (this proposal). This base taxlot area affects the parking lot landscaping calculations more than parking calculations (see discussion under 16.49(B-D).
- The applicant's site plan shows parking calculations for taxlot 1711 (Building C) and taxlot 1714 (Building D).
- The proposed building will be available for lease, therefore the exact use of the building is unknown at this time. Staff is using the "wholesale establishments" category for calculating required parking because it contains the highest parking requirement and anticipates the most intensive industrial use permitted in the M-2 Zone.
- The "wholesale establishments" category requires 2.0 spaces/1,000sf of office space and 1.5/1000sf of non-office space
- For Building C: 1500sf of office is proposed/estimated by the applicant, which requires: (1500sf/1,000sf=1.5)(2 spaces)=3 spaces. 32,705sf non office sf proposed/estimated by the applicant, which requires (32,705sf/1,000sf=32.705)(1.5 spaces)=49.1 spaces. Therefore, 3 + 49.1= 52.1 spaces are required for this proposal; 71 new parking spaces are proposed on taxlot 1711
- For Building D: If the "wholesale establishments" category is used, which requires 2.0 spaces/1,000sf of office space and 1.5/1000sf of non-office space, then 55 parking spaces are required and the existing 46 spaces would not meet this requirement. If the "manufacturing/warehouse" category is used, which requires 2.0 spaces/1,000sf of office space and 1.0/1000sf of non-office space, then parking requirements for Building D's taxlot are met: (5,393sf of office space/1,000)=5.393(2.0 spaces)=10.786 spaces and (29,452 of non-office space/1,000)=29.452(1.0 spaces)=29.452 spaces; with a total of 40 spaces required. Building D's taxlot has 46 existing parking spaces that meet parking requirement for the manufacturing/warehouse category.

**16.10.060 Off-street loading facilities**

***16.10.060(A-B) Number and dimensions***

**Findings:**

- This section requires 2 loading berths for 25,000-60,000sf of floor area; the applicant is proposing 10 berths.
- This section requires industrial berths to be 60'x12' and to have an unobstructed height of 14'. Not all the loading dock doors meet the 12'x14' dimensions, however the loading berth areas do meet the 60'x12'x14' dimensions. If the Planning Commission deems that an exemption is

necessary, 16.10.060(G) below allows for it.

**16.10.060 Off-street loading facilities**

***16.10.060(C) Screening***

**Findings:**
This section requires loading berths to be "*…screened from public view, from public streets, and adjacent properties by means of sight-site obscuring landscaping, walls or other means…*". Most of the proposed loading docks are oriented to the side or back of the building but are not screened with landscaping or walls specifically installed for such a purpose. There is one loading dock proposed at the front of the building. The loading area will be recessed from the front facade with landscaping on either side. The Planning Commission may consider additional screening as it deems appropriate.

**16.10.060 Off-street loading facilities**

***16.10.060(G) Exemptions***

**Findings:**
This section allows Planning Commission exemption of loading berth requirements. See 16.10.060(A-B) above for more discussion.

**16.10.070 Parking lots and access.**

***16.10.070(A)(2) Parking lots, compact spaces***

**Findings:**
- Compact spaces measuring 8'x16' are permitted for up to 30% of spaces "*Such parking stalls shall be marked "Compact Parking only" either on the parking surface or on a sign in front of the parking stalls."*
- 30% of the 71 proposed spaces is 23.1 spaces; 4 compact spaces by north entrance are proposed
- Depiction of how compact parking spaces will be marked per above are not detailed in the submitted plans; **Condition #15** addresses these requirements.

**16.10.070 Parking lots and access.**

***16.10.070(A)(7) Parking lots, on-site circulation***

**Findings:** This code section gives the option of requiring the traffic study to evaluate on-site circulation; this option was not required by the Planning Director because industrial uses are not used by the general public (ie it is not a commercial/retail parking lot) .

**16.10.070 Parking lots and access.**

***16.10.070(A)(8) Parking lots, parking bumpers/wheel stops***

**Findings:** This code sections requires parking bumpers or wheel stops to prevent cars from encroaching onto streets, landscaped areas, or pedestrian walkways. Drawings 1 and 12 on page G6.0 "Site Details" show the proposed cross section of the on-site walkways and typical curb sections. These drawings show wheel stops, but the applicant verbally stated that they prefer to not

have wheel stops for liability reasons. All landscape areas adjacent to parking areas are could be protected with a curb with no wheel stops, and the walkways are raised 6" and could also serve as a bumper. However, no wheel stops can result in vehicle overhang into walkways/landscaped areas. The Planning Commission may require wheel stops along walkways and landscaping areas as it deems appropriate.

**16.10.070 Parking lots and access.**
***16.10.070(B)(5) Sidewalks and walkways***

**Findings:** This section requires walkways from the public sidewalk to the ground floor entrance. The applicant is proposing to connect the northern entrance with a walkway and is proposing walkways along the northern and eastern entrances. Walkways on the eastern side of the building will be disconnected by the loading docks.

**16.10.070 Parking lots and access.**
***16.10.070(B)(9)(a) Driveway widths***

**Findings:** There is a Public Works Design Standards/code conflict for the maximum driveway width; the Design Standards have a maximum driveway width of 36' and the code's maximum driveway width is 40'. Staff proposes that the proposed 40' driveways be allowed.

**16.10.070 Parking lots and access.**
***Table 16.10.070 Minimum dimensional standards for parking***

**Findings:** The parking space dimensional standards in this section are met.

**16.10.100 Bicycle Parking**
***16.10.100(A) Dimensions***

**Findings:** This section specifies that bicycle spaces shall be 6'x2' with an overhead clearance of 7', that spaces/bike racks need to be at least 2' from a wall or other obstacle, and that racks be securely anchored.

Five bicycle parking spaces are required (see 16.10.100(C) below). The applicant is proposing one U style rack by the north entrance. U style racks can hold up to three bikes if they are parked as depicted in Drawing 6 on sheet G6.0, but realistically only 2 bikes can be accommodated with U style racks because bikes are usually parked parallel to the "U". The applicant is also proposing one indoor rack to be installed at a later time, but an indoor rack may only accommodate one tenant if the building is leased to multiple industries.

Therefore, **Condition #13** is proposed that requires one U style bike rack by each of the building's three entrances; this would accommodate 6 bikes.

**16.10.100 Bicycle Parking.**
***16.10.100(B) Location***

**Findings:** This section states that bicycle parking shall be within 50' of an entrance; **Condition #13**

addresses this requirement.

**16.10.100 Bicycle Parking.**

***16.10.100(C) Number of spaces***

**Findings:** The proposed building will be available for lease, therefore the exact use of the building is unknown at this time. Staff is using the "manufacturing, etc." category for calculating required bicycle parking because it contains the highest industrial parking requirement and anticipates the most intensive industrial use permitted in the M-2 Zone. This category requires 0.15 spaces/ 1000sf. Therefore 33,248sf/1,000sf=33.248*0.15=4.9 or 5 spaces, are required. **Condition #13** addresses this requirement.

## *16.34 M-2 Heavy Industrial Zone*

**16.34.010 Uses permitted outright**
**16.34.020 Conditional uses**

**Findings:** The proposed building will be leased. Warehousing and manufacturing uses are anticipated by the applicant, but exact uses are not known at this time. The above sections permit manufacturing uses within specific parameters; staff will determine if future tenants' proposed uses are allowed prior to obtaining a business license.

## *16.35 Canby Industrial Overlay (I-O) Zone*

**16.35.25 Pre-application review and conditions of approval**
**16.35.030 Uses permitted outright**
**16.35.040 Conditional uses**
**16.35.045 Prohibited uses**

**Findings:** The proposed building will be leased. Warehousing and manufacturing uses are anticipated by the applicant, but exact uses are not known at this time. The above sections permit manufacturing uses within specific parameters; staff will determine if future tenants' proposed uses are allowed prior to obtaining a business license.

**16.35.050 Development standards**

**Findings:** Lot frontage, setback, height, and lot size standards in the I-O Overlay Zone override the corresponding standards in 16.34.

**16.35.050 Development standards**

***16.35.050(C) Minimum yard requirements***

**Findings:** The above section requires a 35' setback; parking is not permitted within the first 20' of this setback. This standard is met.

**16.35.050 Development standards**

***16.35.050(H) Building orientation standards and pedestrian connections***

**Findings:** This section requires at least one entrance facing the street and a pedestrian connection from the public sidewalk to the primary entrance. The applicant is proposing one pedestrian connection from the public sidewalk to the northernmost entrance, which is assumed to be the primary entrance. If there are multiple tenants, all entrances could be considered primary entrances; the walkways on the east side of the building will be disconnected by the loading docks.

**16.35.050 Development standards**

***16.35.050(I) Right-of-way plantings***

**Findings:** **Condition #8** states that the applicant shall pay the city fee for city establishment of street trees per the Tree Regulation standards in Chapter 12.32.

**16.35.050 Development standards**

***16.35.050(M) Irrigation***

**Findings:** Per this section, all landscaped areas shall be irrigated; **Condition #9** addresses this requirement.

**16.35.060 Design guidelines**

**Findings:** This section lists general design guidelines to use when evaluating proposals in the Industrial Overlay Zone including:

- Flexibility to align local streets
- Tree retention, planting of large (3-inch) caliper trees, and use of lawn/ground cover planting in front yard setbacks;
- Placement of buildings at or near the setback line;
- Placement of parking areas to the side or rear of buildings;
- Placement of smaller commercial buildings at or near the street;
- Building entries visible from the street with direct pedestrian connections;
- Use of quality building materials;
- Architectural detail to break up and articulate large surfaces and volumes, and to accentuate building entries; and
- Open space retention and trail connections

**16.35.070 I-O Design review matrix**

**Findings:** The review matrix in 16.35 replaces the general design review matrix in 16.49. The Planning Commission is permitted to exempt non-applicable sections. Assigned point values and resulting scores are highlighted in the table below.

**Table 16.35.070 I-O Design review matrix**

| CRITERIA | POSSIBLE SCORES |
|---|---|
| **Parking** | |
| Parking areas located to the side or rear of buildings as viewed from public right-of-way: <50% of parking spaces=0; 50%-75%=1; 100%=2. | **0 1 2** |
| Increase minimum interior parking lot landscape over the base 15%: 15%-18%=0; 18%-22%=1; >22%=2. | **0 1 2** |
| Increase the number of trees planted within buffers and/or within the parking area: 100%-105% of base requirement*=0; 105%-110% of base requirement=1;>110%=2. ***The base requirement is determined based on total parking area/number of spaces, and parking setback perimeter, see Chapter 16.49.120. | **0 1 2** |
| Number of parking spaces (% of required minimum) : >110%=0; 110%-105%=1; 105%-100%=2. | **0 1 2** |
| **Minimum Acceptable Score: 4 points** | **Score: 4** |

**Findings:**

- There are 50 spaces to the side/rear; 71 new spaces are proposed; (50/71)(100)=70.4% of spaces are to the side/rear.
- 18.6% of the parking lot, as defined in 16.49.120(B-C), is landscaped; see 16.49.120(B-C) for more discussion.
- 16.49.120 requires the following number of trees: all landscape islands must contain 1 tree and 1 tree is required for every 40' along the required setback. There are 15 landscape islands with trees, 4 trees are required in the setback area, totaling 19 required trees. There are 32 total trees proposed in the parking lot area, or (32/19)(100)=168% of the base requirement of 19 trees.
- 52.1 spaces are required; (71/52.1)(100)=136% of the number of required parking spaces

| CRITERIA | POSSIBLE SCORES |
|---|---|
| **Transportation/Circulation** | |
| Proposed local street alignments: Street not proposed = 0; Street(s) proposed with some modification to master plane = 1; proposed street(s) approximate recommended alignments = 2. *Note: the Planned Parkway and collector streets are required elements, except as indicated by the Industrial Area Master Plan* | ~~**0 1 2**~~ **N/A** |
| Design of all pedestrian ways (private, on-site pathways): six feet wide, raised concrete with painted crosswalks (standard) = 0; standard with brick or similar pavers for pathways and crosswalks = 1; greater than 6 feet wide (inclusive of curb) and use of brick or similar pavers for pathways and crosswalks = 2 | **0 1 2** |

| | |
|---|---|
| Number of pedestrian connections between the street sidewalk and internal circulation system: One connection = 0 Two connections = 1 | **0 1 2** |
| **Minimum Acceptable Score (some provisions may not apply) : 3 points** ***(only 2 points needed for this proposal)*** | **Score: 2** |

**Findings:**

- The Planning Commission is allowed to exempt non-applicable sections of the review matrix; no new streets are proposed so first item is not applicable. Therefore, staff made the interpretation that only 2 points are required to pass the above section.
- The on-site walkways have a 6" curb, so they could be viewed as "raised". Staff is unsure if the walkway from the public sidewalk to the northern entrance is raised. The application states that walkways are to be scored to create a brick like pattern and are proposed to be 6'6" wide. Staff has assigned a point for the walkway, but the Planning Commission may require more information of how the walkways are "raised" in order to receive a point and pass the above section.

| CRITERIA | POSSIBLE |
|---|---|
| **Tree Retention, Open Space conservation and Trail Connections** | |
| Preserves trees as recommended by arborist or City Planning Department: <50% of recommended trees preserved=0; 50%-75%=1; 75%-100%=2 | ~~0 1 2~~ **N/A** |
| Replaces trees that were recommended for retention: No=0; Yes=1. Mitigation based on reasonable tree replacement ratio. | ~~0 1~~ **N/A** |
| When site includes designated open space, park or trail connection: proposal does not dedicate or establish easement for designated open space/park or trail connection=0; dedicated or establishes easement=1; dedicated land/right-of-way and constructs improvements=2. | ~~0 1 2~~ **N/A** |
| **Minimum Acceptable Score (some provisions may not apply): 3 points** ***(Section is N/A for this proposal)*** | **Score: N/A** |

**Findings:** The Planning Commission is allowed to exempt non-applicable sections of the review matrix; there are no existing trees recommended for retention on site and no open space dedications are proposed. Therefore, the above section is not applicable.

| CRITERIA | POSSIBLE |
|---|---|
| **Landscaping** | |
| Trees installed at 3 inch caliper: <25% of trees=0; 25%-50%=1; 50%-100%=2. | **0 1 2** |
| Usable outdoor amenity provided with development (e.g., water features, plazas, seating areas, and similar features): no=0; yes=1; yes and public access provided (i.e., through an easement) =2. | **0 1 2** |
| Amount of grass or other plantings used for ground cover treatment: <75%=0; 75%-90%=1; 90%-100%=2. | **0 1 2** |
| **Minimum Acceptable Score: 3 points** | **Score: 3** |

**Findings:**

- A bench is being provided at the public sidewalk/on site walkway connection, therefore 1 point is assigned.
- The applicant's landscaping plan shows 100% landscape coverage. However, plants will be mulched and 100% coverage at plant maturity is unrealistic. Staff has noted this section as a potential code edit and 2 points have been assigned.

| CRITERIA | POSSIBLE |
|---|---|
| **Building Appearance and Orientation** | |
| Building orientation at or near the street: parking or drive separates building from street=0; at least 20% of elevation within 5 feet of minimum setback=1; at least 20% of elevation is at minimum setback=2. | **0 1 2** |
| Building entrances visible from the street: no=0; yes=1. | **0 1** |
| Buildings use quality materials: concrete, wood, or wood siding=0; concrete masonry, stucco, or similar material=1; brick or similar appearance=2. | **0 1 2** |
| Articulation and/or detailing to break up large building surfaces and accentuate the building entrance(s): no=0; yes=2. | **0 2** |
| **Minimum Acceptable Score: 4 points** | **Score: 4** |

**Findings:**

- See depiction titled "Building C North Elevation" for an image of the building entrance.
- The applicant's narrative states the following regarding the architectural style: "*The proposed Building is to be approx. 28'-0" in height and constructed using concrete tilt-up wall construction with a built-up insulated roof over a structural steel frame. The floor is to be a concrete slab on grade. Storefront glazing is to be used to take advantage of natural light along the buildings north and east sides where possible tenant offices spaces can be built. Recessed storefront entrances will be used to provide protection from the weather. The building has been designed with several jogs and staggered panels to provide articulation and interest. Walls will have reveals cast in them which will run horizontally around the building at varying heights. A multi color paint scheme will finish the walls with painted metal copings along their top edges.* "
  Under strict interpretation, tilt-up concrete would receive a "0". Staff has assigned a point so the applicant may pass the table. The Planning Commission may require materials under the "1" or "2" category as it deems appropriate.
- Articulation is provided with recessed entries and loading docks, window glazing, and revels.

## *16.42 Signs*

**Findings:** No new signs are proposed, but new tenants will be required to obtain a sign permit to ensure compliance with 16.42. In addition, any temporary construction signs are subject to the temporary sign standards of 16.42, but they do not require a permit.

## 16.43 Outdoor Lighting Standards

**16.43.070 Luminaire Lamp Lumens, Shielding, and Installation Requirements**
**Table 16.43.070 – Luminaire Maximum Lumens and Required Shielding**

**Table 16.43.070 – Luminaire Maximum Lumens and Required Shielding**

| Lighting Zone | Fully Shielded | Shielded | Partly Shielded | Unshielded (Shielding is highly encouraged. Light trespass is prohibited.) |
|---|---|---|---|---|
| LZ 2 | 7800 lumens or less | 1600 lumens or less | 800 lumens or less | Landscape and facade lighting 1600 lumens or less; ornamental lights of 800 lumens or less. |

**Findings:** The submitted lighting plan does not show lumen values and shielding to demonstrate compliance with Table 16.43.070. Staff would like feedback on what type of category lights should be required and what lumen limits should be required; **Condition #7** should be worded accordingly. Industrial zones are part of the "LZ 2" zone.

16.43.070(E) states that landscape features shall be used to screen vehicle headlights; see the discussion under 16.49.120(G).

**16.43.080(B) Height Limits.**

**Findings:** No pole lights are proposed. Per this section, lighting mounted onto buildings shall not exceed 40% of the horizontal distance of the light from the property line or 4' higher than the tallest part of the building.

Lights are mounted at about 23 feet, horizontal distances from property line are ~90 and up from wall lights, thus the max mounting height would be ~36 feet for lights. This standard is met.

## 16.46 Access Limitations on Project Density

**Findings:** The access standards of 16.46 are met.

## 16.49 Site and Design Review

**16.49.050 Conditions placed on site and design review approvals.**

**B.** The following types of conditions may be contemplated, and the listing below is intended to be illustrative only and not to be construed as a limitation of the authority granted by this section.

**1.** Development Schedule. A reasonable time schedule may be placed on construction activities associated with the proposed development, or any portion thereof.

2. Dedications, Reservation. Dedication or reservation of land, or fee in lieu thereof for park, open space purposes, rights-of-way, bicycle or pedestrian paths, green way, riverbank or easements; the conveyance of title or easements to a homeowners' association.
3. Construction and Maintenance Guarantees. Security from the property owners in such an amount that will assure compliance with approval granted.
4. Plan Modification. Changes in the design or intensity of the proposed development, or in proposed construction methods or practices, necessary to assure compliance with this ordinance.
5. Off-Site Improvements. Improvements in public facilities, including public utilities, not located on the project site where necessary to assure adequate capacity and where service demand will be created or increased by the proposed development. The costs of such improvements may be paid for in full while allowing for recovery of costs from users on other development sites, or they may be pro-rated to the proposed development in proportion to the service demand projected to be created on increases by the project. If determined appropriate by the city based on specific site conditions, off-site roadway improvements may be required to accommodate bicycle and pedestrian travel consistent with the TSP and applicable sections of this code.
6. Other Approvals. Evaluation, inspections or approval by other agencies, jurisdictions, public utilities or qualified consultants may be required for all or any part of the proposed development.
7. Access Limitation. The number, location and design of street accesses to a proposed development may be limited or specified where necessary to maintain the capacity of streets to carry traffic safely, provided that sufficient access to the development is maintained.
8. Screening. The Planning Commission may require additional screening with landscaping, decorative fencing, decorative walls, or other means in order to screen outdoor storage areas, rooftop/ground mechanical equipment, garbage/recycling areas, or other visual clutter.

**Findings:** The above section permits the Planning Commission to require additional conditions of approval for design review applications. Staff recommends that the Planning Commission discuss the screening of rooftop mechanical equipment. The applicant is not proposing any rooftop equipment at this time, however future tenant improvements could propose rooftop equipment. The applicant submitted a rooftop line of sight diagram on page G6.0, however it is unclear what the equipment looks like when viewed from different angles. The Planning Commission should review and discuss any issues with the possibility of future rooftop equipment.

**16.49.080 General provisions for landscaping.**

***16.49.080(C) Minimum area requirement***

**Findings:**

- This section requires 15% of the total land area to be developed to be landscaped. Parking lot landscaping area may be included in this calculation, see 16.49.120 for more discussion.
- This proposal will build on a portion of taxlot 1711; some existing landscaping on taxlot 1711 was installed for Building D to the east. Design Review for Building D consisted of its subject taxlot (1714) and portions of Building C's taxlot (1711). Some of the landscaping that the applicant proposes to count for Building C's landscaping was also counted for Building D's landscaping.
- Staff would prefer that the applicant give landscaping calculations based on anything east of the

"limit line of construction" as delineated on Site Plan G1.0 because this is the actual construction site area; this was done for the adjacent Building D. However, the applicant gave calculations based on taxlot area; therefore some landscaping that was installed for Building D is also being counted for Building C (this proposal).

- The applicant's site plan shows landscaping calculations for taxlot 1711 (Building C) and taxlot 1714 (Building D) to show compliance with the overall site 15% landscaping requirement.
- Taxlot 1711/Building C's area is 2.4 acre/106,337sf; 15% landscaping is 15,951sf; 19,578sf of landscaping is proposed
- Taxlot 1714/Building D's area is 1.89acre/82,328sf; 15% landscaping is 12,349sf; 14,001sf of landscaping is existing on taxlot 1714/Building D's site.
- This project will remove some existing landscaping that was installed during the construction of Building D and some landscaping may be removed from the adjacent taxlot to the west of the site. In the strictest interpretation this requires modification applications; the Planning Commission is welcome to inquire about the removal of existing landscaping.

***16.49.080(F-P) Maintenance & installation provisions***

**Findings:** These sections contain provisions regarding landscaping installation and maintenance practices. Native vegetation is encouraged; the applicant is proposing some native vegetation.

Section I specifies that the landscaping shall be covered by grass or ground covering within 3 years of installation and permits up to 5% of the landscaped area to be covered with mulch. The applicant's landscaping plan shows 100% landscape coverage. However, plants will be mulched and 100% coverage at plant maturity is unrealistic. Staff has noted this section as a potential code edit.

**Condition #10** addresses the requirements of the above sections.

**16.49.090 Specifications for tree and plant materials**

**Findings:**

- This section requires deciduous trees to be 2" caliper, 6" above ground, and balled & burlapped at planting. Deciduous trees are specified as 2" caliper on the landscaping plan; the depiction of deciduous tree planting appears to meet the balled & burlapped and 6" above ground requirements.
- This section requires coniferous trees to be 5' high and balled & burlapped. The landscaping plan shows that this requirement is met.
- This section requires shrubs to be 1-5 gallons at planting; not all shrubs have the gallon size specified on the landscape plan.
- Other planting specifications are included in the above section.
- **Condition #10** addresses the requirements of the above section.

**16-49-100(A)-(C)-Maintenance & installation provisions**

**Findings:** These sections contain further provisions regarding landscaping installation and maintenance . **Condition #10** addresses the requirements of the above section.

**16.49.120 Parking lot landscaping standards**

***16.49.120(B) Application***

**B.** Application. Parking lot landscaping standards shall apply to any surface passenger vehicle parking area of ten (10) spaces or more, or to any paved vehicular use area 3,500 square feet or larger on the same tax lot or on contiguous tax lots under common ownership. Any paved vehicular area which is used specifically as a utility storage lot or a truck loading area shall be exempt from landscaping requirements within a parking lot.

***16.49.120(C) Landscaping within a parking lot***

**C.** Landscaping Within a Parking Lot.

**1.** Area within a parking lot shall include the paved parking and maneuvering area, as well as any area within ten (10) feet of any exterior face of curb surrounding the paved parking and maneuvering area.

**Findings:**

- Per the above sections, the parking lot area is the paved parking and maneuvering area, excluding the truck loading area.
- Parking lot landscaping is any area within 10' of the parking lot area; the above section needs to clarify that this 10' landscaping area is not intended to be included in the parking lot area calculation; staff has marked this as a needed code edit.
- This proposal (Building C) will build on a portion of taxlot 1711; some existing landscaping on taxlot 1711 was installed for Building D to the east. Design Review for Building D consisted of its subject taxlot (1714) and portions of Building C's taxlot (1711). Some of the landscaping that the applicant proposes to count for Building C's landscaping was also counted for Building D's landscaping.
- Staff would prefer that the applicant give landscaping calculations based on anything east of the "limit line of construction" as delineated on Site Plan G1.0 because this is the actual construction site area; this was done for the adjacent Building D. However, the applicant gave calculations based on taxlot area; therefore some landscaping that was installed for Building D is also being counted for Building C (this proposal).
- The overall taxlot landscaping is met for both building C and D's respective taxlots. See below for demonstration that Building C's parking lot landscaping is met; staff cannot guarantee that Building D's 15% parking lot landscaping is still met.
- This section also requires each interior landscape area to be a minimum of 6'wide. Some of the landscape strips on the site's perimeter and adjacent to the building walkways appear to be a little less than 6'. The Planning Commission may determine if all landscaped areas should be a minimum of 6' wide.

***16.49.120(D) Computing minimum area required to be landscaped in a parking lot***

**Findings:**
- 15% of the parking lot area is required to be landscaped
- The parking lot landscaping is met for Building C: Building C's parking lot area is 44,041sf; 15% is 6,606sf. The applicant is proposing 8,210sf of parking lot landscaping.
- Because some of the landscaping that was installed for Building D was used to calculate Building C's landscaping and because some of Building D's existing landscaping is proposed to be removed with this project, staff cannot guarantee that Building D's 15% parking lot landscaping is still met. The Planning Commission may require the applicant to demonstrate that Building D's parking lot landscaping is met.

***16.49.120(E) Landscape islands***

**Findings:**
- This section specifies that landscape islands shall be a minimum of 48sf and a minimum width of 6'. Landscape islands shall break up parking into rows of not more than 8 spaces. One tree that meets the criteria in (F) below is required in each landscape island.
- This provision is met except for the parking row at the front of the lot contains 9 spaces. The Planning Commission should determine if the proposed parking at the front of the site is acceptable.

***16.49.120(F) Criteria for trees in parking lots***

**Findings:**
- This section gives plant specifications for trees in parking lots. Specifically, it says that trees shall grow to a mature height of 40' and that trees shall be approximately 2" caliper at planting.
- The landscape plan notes that trees are 40'-45' tall at maturity.
- Caliper sizes of trees are specified, except the "Incense Cedar" does not specify caliper size; the Planning Commission can require a condition that specifies all tree be 2" caliper at planting.
- **Condition #11** addresses the requirements of the above section.

***16.49.120(G) Perimeter of parking and loading areas***

**Findings:**
- This section states that within 3 years of planting landscaping shall be of a height and density to shield vehicle headlights from head-on visibility.
- This section also requires one tree per every 40' in the front setback area.
- The landscape plan shows conformance with the one tree/40' requirement.
- It is difficult to tell from the submitted landscape plan if the vehicle headlights will be screened with the proposed vegetation. Landscaping needs to be maintained in a way that it grows to a height and density to shield vehicle headlights.
- **Condition #12** addresses the above headlight screening requirement.

***16.49.120(H) Irrigation requirements***

**Findings:** This section specifies that irrigation of landscaping is required and that an irrigation outlet is required approximately every 150 feet of all plant materials to be maintained. **Condition #9** addresses this requirement.

## *16.89 Application and Review Procedures*

**Findings:** This application is being processed in accordance with Chapter 16.89. Notice of the public hearing was mailed to owners and residents of lots as within 500 feet of the subject development and to applicable agencies. Notice of the meeting will be posted at the Development Services Building and published in the *Canby Herald*. A neighborhood meeting was not required because the area is surrounded by industrial uses.

## *16.120 Parks, Open Space & Recreation Land*

**Findings:** The development will be charged SDCs in lieu of dedicating park land.

**V. PUBLIC TESTIMONY**

Notice of this application and opportunity to provide comment was mailed to owners and residents of lots within 500 feet of the subject properties and to all applicable public agencies. All written testimony will be presented to the Planning Commission and there will be an opportunity for public testimony at the public hearing. As of the date of this packet, the city's consulting city engineer and NW Natural have submitted written comments.

**VI. CONDITIONS OF APPROVAL**

Staff concludes that, with conditions, the application will meet the requirements for site and design review approval. All conditions of approval shall be depicted on final construction plans, as applicable; the city will not approve final construction plans until all applicable conditions of approval are met. Staff has concluded the following conditions of approval:

**General**

1. Approval of this application is based on submitted application materials and public testimony. Approval is strictly limited to the submitted proposal and is not extended to any other development of the properties. Any modification of development plans not in conformance with the approval of application file #DR 14-01, including all conditions of approval, shall first require an approved modification in conformance with the relevant sections of this *Canby Land Development and Planning Ordinance*. Approval of this application is based on the following:
    a. Citizen and agency comments
    b. Application form received 2.13.14
    c. Application narrative revised 3.17.14
    d. Design review drawing set G1.0-G7.0 revised 3.17.14
    e. Landscaping Plan L1.0 revised 3.17.14
    f. Floor Plan A1.0 revised 3.17.14

g. Elevations A2.0 revised 3.17.14
h. Traffic Impact Study dated January 2008
i. Other supporting materials submitted with the application

**2.** The development shall comply with the standards of all applicable outside utility and regulatory agencies including:
a. City of Canby Planning
b. City of Canby Engineer
c. Canby Public Works
d. Canby Fire District
e. Canby Utility
f. Northwest Natural Gas
g. Canby Telcom
h. Wave Broadband
i. Oregon Department of Environmental Quality (DEQ)

**3.** The development shall comply with all applicable City of Canby Public Works Design Standards.

**4.** The owner/applicant shall comply with the recommendations of the consulting city engineer Hassan Ibrahim, dated 3.26.14.

**Stormwater**

**5.** The development shall comply with the standards of the Oregon Department of Environmental Quality (DEQ) pertaining to stormwater and other applicable regulations. The applicant shall submit documentation from DEQ that verifies the proposal is in compliance with all DEQ regulations.

**6.** The applicant shall submit a stormwater drainage plan for review by the city's consulting engineer. Stormwater designs must meet all Canby Public Works Design Standards.

**Lighting**

**7.** All site lighting shall meet the shielding and lumen standards Table 16.43.070.

**Landscaping**

**8.** The applicant shall pay the city fee for city establishment of street trees per the Tree Regulation standards in Chapter 12.32 of the Canby Municipal Code.

**9.** All landscaped areas shall be irrigated per 16.35.050(M) and 16.49.120(H); an irrigation outlet is required approximately every 150 feet of all plant materials to be maintained.

**10.** All landscaping shall be installed and maintained per the standards of 16.49.080(F-P), 16.49.100(A-C), and 16.49.090.

**11.** Parking lot trees shall follow the standards in 16.49.120(F).

**12.** Screening of parking and loading areas is required. Within three years of planting, screening shall be of such height and density as to shield vehicle headlights from head-on visibility; perimeter landscaping shall be maintained in a matter to achieve screening of vehicle headlights.

**Bicycle parking**

**13.** Final construction plans shall show a U style bike rack by each of the three entrances; the plans shall show that the spaces are at least 6'x2' with an overhead clearance of 7', that spaces/bike racks are at least 2' from a wall or other obstacle, that racks are securely anchored, and that the racks are within 50' of entrances.

**Other**

**14.** Construction plans for public sidewalk and planter strip improvements shall be submitted for review. These plans shall show that the site's sidewalk and planter strips match the widths of adjacent sidewalk and planter strips.

**15.** Final construction plans shall depict the four compact parking spaces by the north entrance marked on the parking surface or with a sign in front of the parking stalls.

**Procedural**

Prior to issuance of Building Permits the following must be completed:

**16.** The applicant shall apply for a City of Canby Site Plan Permit and pay all applicable development fees prior to construction.

**17.** The applicant shall apply for a City of Canby Site Erosion Control Permit prior to construction.

**18.** Submit final construction plans: Final construction plans shall indicate the design, location, and planned installation of any right of way improvements and utilities including, but not limited to, water, electric, sanitary sewer, natural gas, telephone, storm water, cable, and emergency service provisions. Construction plans shall be designed and stamped by a professional engineer registered in the State of Oregon.

**19.** Prior to the issuance of City Site Plan permit approval, final construction plans must be approved by the city and all other utility/service providers. The City of Canby may require a pre-construction conference to obtain final approval from utility providers and applicable city departments. This includes, but is not limited to, approval by:

a. City of Canby Planning
b. City of Canby Engineer
c. Canby Public Works
d. Canby Fire District
e. Canby Utility
f. Northwest Natural Gas
g. Canby Telcom
h. Wave Broadband

**20.** Clackamas County Building Codes Division will provide structural, electrical, plumbing, and mechanical plan review and inspection for this project. Applicable building permits are required from Clackamas County prior to construction.

## VII. Decision

Based on the application submitted and the facts, findings, and conclusions of this report, Staff recommends that the Planning Commission **approve** Site and Design Review File #DR 14-01 pursuant to the Conditions of Approval presented in this Staff Report.

***Sample motion:*** I move to approve Site and Design Review #DR 14-01 pursuant to the Conditions of Approval presented in this Staff Report.

## Angeline Lehnert

**From:** Kizer, Daniel <Daniel.Kizer@nwnatural.com>
**Sent:** Wednesday, March 26, 2014 10:50 AM
**To:** Laney Fouse
**Subject:** FW: Trend Business Public Hearing Notice
**Attachments:** 004 Design Review Set Revised.pdf; DR 14-01 Trend Public Hearing Notice.pdf; NW Natural Pre-App Comments_341 Sequoia Parkway_Jan 2014.pdf

Hi Laney, Our comments from January are attached.

Thanks,

Dan Kizer, P.E.
Field Engineer
Salem District and Lincoln County District
Daniel.kizer@nwnatural.com
Phone (503) 226-4211 x 8166
Cell (503) 931-3219

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**From:** Laney Fouse [mailto:FouseL@ci.canby.or.us]
**Sent:** Tuesday, March 25, 2014 2:54 PM
**To:** Angeline Lehnert; Bret Smith (PD); Bryan Brown; Canby Disposal (customerservice@canbydisposal.com); Curt McLeod (cjm@curran-mcleod.com); Dan Mickelsen; trameld@ci.canby.or.us; Dave Conner; David Von Moritz; Dinh Vu; Doug Thomas (dougthomas@wbcable.net); Douglas Quan; Gary Stockwell; Hassan Ibrahim (hai@curran-mcleod.com); Jeff Snyder; Jerry Nelzen; Joseph Lindsay; Julie Wehling; kenken@co.clackamas.or.us; Kizer, Daniel; Larry Hepler; Matilda Deas; Renate Mengelberg; Robert Hixson; Scott Caufield (scottc@co.clackamas.or.us); Todd Gary; Amanda Zeiber
**Subject:** Trend Business Public Hearing Notice

Hello,
Please find attached the Public Hearing and Comments form for the Trend Business project along with a set of design drawings for your review.
Thanks, Laney

*Laney Fouse*

Dan Kizer
Field Engineer
3123 Broadway, NE
Salem, OR 97303
Telephone: (503) 226-4211 x8166
Email: daniel.kizer@nwnatural.com

NW Natural
220 NW 2ND AVENUE
PORTLAND, OR 97209
TEL 503.226.4211
www.nwnatural.com

January 14, 2014

Ronda Rozell
Shops Complex
City of Canby
1470 Territorial Road
Canby, OR 97013

Re: Pre-application Conference Request for Comments
New Building at 341 S. Sequoia Parkway 1/14/14

There is a natural gas distribution system adjacent to the subject property in Sequoia Parkway capable of providing service to the proposed new building at 341 Sequoia Parkway in Canby.

If the Applicant is interested in natural gas please contact NW Natural online at www.nwnatural.com/Business/Partners/BuilderServices.

Civil plans for the subdivision will need to be submitted to ncproj@nwnatural.com before NW Natural can process the gas service application request.

We appreciate being included in the planning process. Please contact me if you have any questions or require more information.

Sincerely,

Dan Kizer
Salem Resource Center Field Engineer

*Planning & Economic Development*
*City of Canby*
*503-266-0685*
*Fax 503-266-1574*
*fousel@ci.canby.or.us*



PUBLIC RECORDS LAW DISCLOSURE

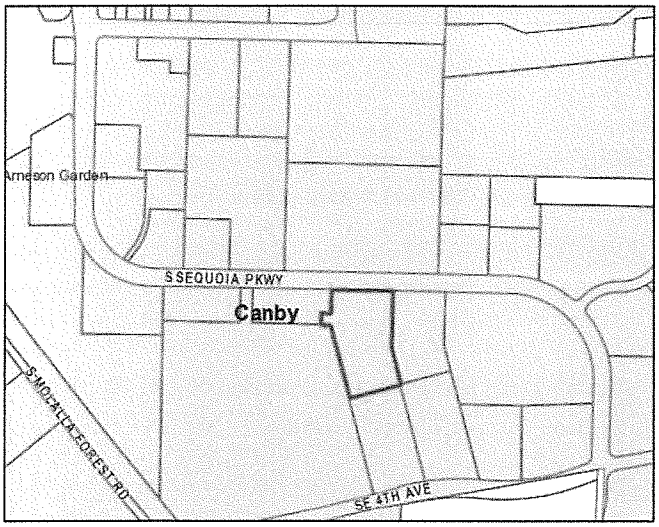
This email is a public record of the City of Canby and is subject to public disclosure unless exempt from disclosure under Oregon Public Records Law. This email is subject to the State Retention Schedule.

# City of Canby

## NOTICE OF PUBLIC HEARING & REQUEST FOR COMMENTS

The purpose of this Notice is to invite you to a Public Hearing at a Planning Commission meeting on Monday, April 14, 2014 at 7 pm in the City Council Chambers, 155 NW 2nd Avenue, and to comment on a proposed Site and Design Review. The applicant is proposing to construct a 33,248 square feet speculative lease building and parking lot on a portion of the 2.44 acre tax lot.

**Comments due–** If you would like your comments to be incorporated into the City's Staff Report, please return the Comment Form (on back) by Wednesday, April 2, 2014.




**Location:** 341 S Sequoia Parkway
**Tax Lot:** 31E34 01703 (Bordered in red on map at left)
**Lot Size and Zoning**: 2.44 acres, Zoned M2 (Heavy Industrial)/I-O Overlay Zone
**Owner:** Trend Business Center
**Applicant:** VLMK Engineers
**Application Type:** Site and Design Review
**City File Number:** DR 14-01
**Contact:** Angie Lehnert at 503-266-0686
**What is the Decision Process?** The Planning Commission will make a decision after the Public Hearing. The Planning Commission's decision may be appealed to the City Council.
**Where can I send my comments?** Written comments can be submitted up to the time of the Public Hearing and may also be delivered in person to the Planning Commission during the Public Hearing. (Please *see Comment Form).* Comments can be mailed to the Canby Planning Department, P O Box 930, Canby, OR 97013; in person at 111 NW Second Avenue; or emailed to lehnerta@ci.canby.or.us.

**How can I review the documents and staff report?** Weekdays from 8 AM to 5 PM at the Canby Planning Department. The staff report to the Planning Commission will be available for inspection starting Friday, April 4, 2014 and can be viewed on the City's website: http://www.ci.canby.or.us Copies are available at $0.25 per page or can be emailed to you upon request.

**Applicable Criteria:** Canby Municipal Code Chapters:

- Chapter 16.08 General Provisions
- Chapter 16.10 Off Street Parking & Loading
- Chapter 16.34 M-2 Heavy Industrial Zone
- Chapter 16.35 Canby Industrial Overlay (I-O) Zone
- Chapter 16.42 Signs
- Chapter 16.43 Outdoor Lighting Standards
- Chapter 16.46 Access Limitations on Project Density
- Chapter 16.49 Site & Design Review
- Chapter 16.89 Application & Review Procedures
- Chapter 16.120 Parks, Open Space, & Recreation Land

*Note: Failure of an issue to be raised in a hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to the issue precludes appeal to the board based on that issue.*

# CITY OF CANBY –COMMENT FORM

If you are unable to attend the Public Hearing, you may submit written comments on this form or in a letter addressing the Planning Commission. Please send comments to the City of Canby Planning Department:

**By mail:** Planning Department, PO Box 930, Canby, OR 97013
**In person:** Planning Department at 111 NW Second Street
**E-mail:** lehnerta@ci.canby.or.us

**Comments due–** If you would like your comments to be incorporated into the City's Staff Report, please return this Comment Form by Wednesday, April 2, 2014. Written comments can also be submitted up to the time of the Public Hearing on Monday, April 14, 2014 and may also be delivered in person to the Planning Commission during the Public Hearing at 7 pm in the City Council Chambers, 155 NW 2nd Avenue.

***Application: Site and Design Review, DR 14-01 Trend Business/VLMK***

**COMMENTS:**

SEE ATTACHED MEMO DATED 3-26-2014 FOR COMMENTS.

**YOUR NAME:** HASSAN IBRAHIM
**EMAIL:** hai@curran-mcleod.com
**ORGANIZATION or BUSINESS (if any):** Curran-mcleod.com
**ADDRESS:** 6655 SW HAMPTON ST, SUITE 210
**PHONE # (optional):** 503-684-3478
**DATE:** 3-26-2014

**Thank you!**

CURRAN-McLEOD, INC.
CONSULTING ENGINEERS
6655 SW HAMPTON, SUITE 210
PORTLAND, OR 97223

March 26, 2014

# MEMORANDUM

**TO:** Ms. Angie Lehnert
City of Canby

**FROM:** Hassan Ibrahim, P.E.
Curran-McLeod, Inc.

**RE:** **CITY OF CANBY**
**TREND BUILDING "C" (DR 14-01)**

We have reviewed the submitted preliminary plans on the above mentioned project and have the following comments:

1. The existing common driveway on Sequoia Parkway shall be widened to Industrial Driveway approach using 8" minimum concrete thickness with reinforcements over 4" min of crushed rock base. The 200-foot minimum access spacing as required by the Industrial Park Master Plan appears to be met.

2. The developer will be required to construct a 6-foot wide concrete sidewalk along the entire site frontage with a 5-foot wide planter strip to match the existing surroundings.

3. Street trees shall be selected from the City approved tree list. The street tree ordinance requires the developer to pay the City $200 per tree for installation and one (1) year of maintenance, then the property owner will take over all of the responsibilities.

4. All private storm drainage discharge shall be disposed on-site, the design methodology shall be in conformance with the City of Canby, June 2012 Public Works Standards.

5. The City may require individual monitoring devices for each unit discharging into the sanitary sewer system for sampling at each connection.

6. The private sanitary sewer system serving this development has been extended to this site as part of an earlier phase.

Should you have any questions or need additional information, please let me know.

C:\H A I\Projects\Canby\1009 Gen Eng\DR 14-01 Trend Bldg C Preliminary Comments.doc

City of Canby
Planning Department
111 NW 2nd Avenue
PO Box 930
Canby, OR 97013
(503) 266-7001

# LAND USE APPLICATION

## SITE AND DESIGN REVIEW
## General Type III

**APPLICANT INFORMATION:** *(Check ONE box below for designated contact person regarding this application)*

☒ Applicant Name: VLMK - Jennifer Kimura Phone: 503.222.4453
Address: 3933 SW Kelly Avenue Email: jenniferk@vlmk.com
City/State: Portland, Oregon Zip: 97239

☐ Representative Name: Same as above Phone:
Address: Email:
City/State: Zip:

☒ Property Owner Name: Trend Business Center LLC Phone: 503.624.4649
Signature: Scott McCormack
Address: 7190 SW Sandburg Street Suite 5 Email: Scott@MCCORMACKPROP.COM
City/State: Tigard, Oregon Zip: 97223

☐ Property Owner Name: Phone:
Signature:
Address: Email:
City/State: Zip:

*NOTE: Property owners or contract purchasers are required to authorize the filing of this application and must sign above.*

❶ All property owners represent they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.
❷ All property owners understand that they must meet all applicable Canby Municipal Code (CMC) regulations, including but not limited to CMC Chapter 16.49 Site and Design Review standards.
❸ All property owners hereby grant consent to the City of Canby and its officers, agents, employees, and/or independent contractors to enter the property identified herein to conduct any and all inspections that are considered appropriate by the City to process this application.

**PROPERTY & PROJECT INFORMATION:**

| 341 S. Sequoia Parkway | 2.4 acres | 31E34 01711 |
|---|---|---|
| Street Address or Location of Subject Property | Total Size of Property | Assessor Tax Lot Numbers |
| Vacant | M2 | HI |
| Existing Use, Structures, Other Improvements on Site | Zoning | Comp Plan Designation |

Proposed oncstruction of Bldg C - approximately 34,205 sf and associated site work
Describe the Proposed Development or Use of Subject Property

**STAFF USE ONLY**

| DR 14-01 | 2/13/14 | QA | | |
|---|---|---|---|---|
| FILE # | DATE RECEIVED | RECEIVED BY | RECEIPT # | DATE APP COMPLETE |

## SITE AND DESIGN REVIEW APPLICATION – TYPE III–INSTRUCTIONS

***All required application submittals detailed below must also be submitted in electronic format on a CD, flash drive or via email. Required application submittals include the following:***

| Applicant Check | City Check | |
|---|---|---|
| [X] | ☐ | One (1) copy of this application packet. The City may request further information at any time before deeming the application complete. |
| [X] | ☐ | Payment of appropriate fees – cash or check only. Refer to the city's Master Fee Schedule for current fees. Checks should be made out to the *City of Canby*. |
| [X] | ☐ | Mailing labels (1" x 2-5/8") for all property owners and all residents within 500 feet of the subject property. **If the address of a property owner is different from the address of a site, a label for each unit on the site must also be prepared and addressed to "occupant."** A list of property owners may be obtained from a title insurance company or from the County Assessor. |
| [X] | ☐ | One (1) copy of a written, narrative statement describing the proposed development and detailing how it conforms with the Municipal Code and to the approval criteria, including the applicable Design Review Matrix, and availability and adequacy of public facilities and services. ***Ask staff for applicable Municipal Code chapters and approval criteria.*** Applicable Code Criteria for this application includes: _____ _____ _____ |
| N / R ☐ | ☐ | Three (3) copies of a Traffic Impact Study (TIS), conducted or reviewed by a traffic engineer that is contracted by the City and paid for by the applicant (payment must be received by the City *before the traffic engineer will conduct or review a traffic impact study.* Ask staff to determine if a TIS is required. |
| N / R ☐ | ☐ | One (1) copy in written format of the minutes of the neighborhood meeting as required by Municipal Code 16.89.020 and 16.89.070. The minutes shall include the date of the meeting and a list of attendees. |
| [X] | ☐ | One (1) copy in written format of the minutes of the pre-application meeting |
| [x] Title Reportz | ☐ | One copy of either the recorded plat or the recorded deeds or land sales contracts that demonstrates how and when legal property lines were established and where the boundaries of the legal lot(s) of record are located. If the property is a lot or parcel created by plat, a copy of the recorded plat may be obtained from the Clackamas County Surveyor's office. If the property is a legal lot of record created by recorded deed or land sales contract at a time when it was legal to configure property lines by deed or contract, then those recorded deeds may be obtained from the Clackamas County Office of the Clerk, or a Title Company can also assist you in researching and obtaining deeds. |
| N/A ☐ | ☐ | If the development is located in a Hazard ("H") Overlay Zone, submit one (1) copy of an affidavit signed by a licensed professional engineer that the proposed development will not result in significant impacts to fish, wildlife and open space resources of the community. If major site grading is proposed, or removal of any trees having trunks greater than six inches in diameter is proposed, then submit one (1) copy of a grading plan and/or tree-cutting plan. |

| Applicant Check | City Check | |
|---|---|---|
| [X] | [ ] | Ten (10) paper copies of the proposed plans, printed to scale no smaller than 1"=50'. The plans shall include the following information: |

- [X] Vicinity Map. Vicinity map at a scale of 1"=400' showing the relationship of the project site to the existing street or road pattern.
- [X] Site Plan-the following general information shall be included on the site plan:
  - [X] Date, north arrow, and scale of drawing;
  - [X] Name and address of the developer, engineer, architect, or other individual(s) who prepared the site plan;
  - [X] Property lines (legal lot of record boundaries);
  - [X] Location, width, and names of all existing or planned streets, other public ways, and easements within or adjacent to the property, and other important features;
  - [X] Location of all jurisdictional wetlands or watercourses on or abutting the property;
  - [X] Finished grading contour lines of site and abutting public ways;
  - [X] Location of all existing structures, and whether or not they are to be retained with the proposed development;
  - [X] Layout of all proposed structures, such as buildings, fences, signs, solid waste collection containers, mailboxes, exterior storage areas, and exterior mechanical and utility equipment;
  - [X] Location of all proposed hardscape, including driveways, parking lots, compact cars and handicapped spaces, loading areas, bicycle paths, bicycle parking, sidewalks, and pedestrian ways;
  - [X] Callouts to identify dimensions and distances between structures and other significant features, including property lines, yards and setbacks, building area, building height, lot area, impervious surface area, lot densities and parking areas;
  - [X] Location of vision clearance areas at all proposed driveways and streets.
- [X] Landscape Plan, with the following general information:
  - [X] Layout and dimensions of all proposed areas of landscaping;
  - [X] Proposed irrigation system;
  - [X] Types, sizes, and location of all plants to be used in the landscaping (can be a "palette" of possible plants to be used in specific areas for landscaping);
  - [X] Identification of any non-vegetative ground cover proposed, and dimensions of non-vegetative landscaped areas;
  - [X] Location and description of all existing trees on-site, and identification of each tree proposed for preservation and each tree proposed for removal;
  - [X] Location and description of all existing street trees in the street right-of-way abutting the property, and identification of each street tree proposed for preservation and each tree proposed for removal.
  - [X] Elevations Plan

    The following general information shall be included on the elevations plan:
  - [X] Profile elevations of all buildings and other proposed structures;
  - [X] Profile of proposed screening for garbage containers and exterior storage areas;
  - [X] Profile of proposed fencing.
- [N/A] Sign Plan.
  - [ ] Location and profile drawings of all proposed exterior signage.
- [X] Color and Materials Plan.
  - [ ] Colors and materials proposed for all buildings and other significant structures.

| | | |
|---|---|---|
| [X] | [ ] | One (1) copy of a completed landscaping calculation form (see page 5) |
| [X] | [ ] | One (1) copy of a completed Design Review Matrix (see page 6) |

# SITE AND DESIGN REVIEW APPLICATION: LANDSCAPING CALCULATION FORM

## *Site Areas*

| | | |
|---|---|---|
| **1. Building area** | 34,205 | ***- Square footage of building footprints*** |
| **2. Parking/hardscape** | 54,178 | ***- Square footage of all sidewalks, parking, & maneuvering areas*** |
| **3. Landscaped area** | 17,954 | ***- Square footage of all landscaped areas*** |
| **4. Total developed area** | 106,337 | ***- Add lines 1, 2 and 3*** |
| **5. Undeveloped area** | 0 | ***- Square footage of any part of the site to be left undeveloped.*** |
| **6. Total site area** | 106,337 | ***- Total square footage of site*** |

## *Required Site Landscaping (Code 16.49.080)*

| | | |
|---|---|---|
| **7. Percent of landscaping required in Zoning District** | 15% | ***- Fill in the Appropriate Percentage:*** *R-1, R-1.5, R-2 Zones: 30%; C-2, C-M, C-R, M-1, M-2 Zones: 15%; C-1 Zone: 7.5%* |
| **8. Required minimum square footage of landscaping** | 15,950 | ***- Multiply line 4 and line 7*** |
| **9. Proposed square footage of landscaping** | 17,954 | ***- Fill in value from line 3*** |

## *Required Landscaping within a Parking Lot (Code 16.49.120(4))*

*Note:* This section and the next apply only to projects with more than 10 parking spaces or 3,500 square feet of parking area

| | | |
|---|---|---|
| **10. Zone** | M-2 I-O Overlay | ***- Fill in the Appropriate Zone and Percentage:*** *C-1 Zone: 5%; Core Commercial sub-area of the Downtown Canby Overlay: 10%, except for parking lots with 10 or more spaces and two or more drive aisles: 50 square feet per parking space; All other zones: 15%.* |
| **11. Percent of required landscaping** | 15% | |
| **12. Area of parking lot & hardscape** | 27,254 | *- Fill in area of parking and maneuvering areas plus all paved surface within ten (10) feet of those areas.* |
| **13. Number of vehicle parking spaces** | 77 | *- For Core Commercial sub-area in the Downtown Canby Overlay only, fill in the total # of parking spaces on-site.* |
| **14. Required square footage of landscaping within 10 feet of parking lot** | 4,088 | *- Multiply area of parking lot (line 12) by percent of required landscaping (line 11) -OR- for the CC sub-area in the Downtown Canby Overlay multiply line 13 by 50 square feet.* |
| **15. Proposed square footage of Landscaping within 10 feet of parking lot** | 6,203 | *- Calculate the amount of landscaping proposed within 10 feet of all parking and maneuvering areas.* |

## *Parking Lot Tree Calculation*

| | | |
|---|---|---|
| **16. Number of parking spaces** | 77 | *- Total number of vehicle parking spaces* |
| **17. Area of parking lot & hardscape** | 27,254 | *- Area from line 12* |
| **18. Number of parking spaces (line 16) divided by 8** | 9.6 | *- Round **up** to the nearest whole number* |
| **19. Area of parking lot area (line 17) divided by 2,800** | 9.7 | *- Round **up** to the nearest whole number* |
| **20. Number of required trees in parking lot** | 10 | *- Fill in the **larger** of row 18 and row 19* |
| **21. Number of trees provided within 10 feet of parking lot** | 17 | *- Fill in the number of proposed trees within 10 feet of parking and maneuvering areas.* |

# SITE AND DESIGN REVIEW APPLICATION: DESIGN REVIEW MATRIX

**Applicants:** Please circle the applicable point column to your project and compute the total and percentages at the end of the table.

Note:
Information provided for additional reference only
See matrix in attached Narrative

## Table 16.49.040 Site Design Review Menu

As part of Site and Design Review, the following menu shall be used as part of the review. In order to "pass" this table 60% of total possible points shall be earned, 10% of the total possible points must be from LID elements

| Design Criteria | Possible Points | | | | |
|---|---|---|---|---|---|
| **Parking** | **0** | **1** | **2** | **3** | **4** |
| Screening of parking and/or loading facilities from public right-of-way | Not screened | Partially screened | Fully screened | - | - |
| Parking lot lighting provided | No | Yes | - | - | - |
| Parking location (behind building is best) | Front | Side | Behind | - | - |
| Number of parking spaces provided (% of minimum required) | >120% | 101-120% | 100% | - | - |
| **Screening of Storage Areas and Utility Boxes** | **0** | **1** | **2** | **3** | **4** |
| Trash storage is screened from view by solid wood fence, masonry wall or landscaping. | No | Yes | - | - | - |
| Trash storage is located away from adjacent property lines. | 0 - 10 feet from adjacent property | 11 - 25 feet from adjacent property | >25 feet from adjacent property | - | - |
| Utility equipment, including rooftop equipment, is screened from view. | Not screened | Partially screened | Fully screened | - | - |
| **Access** | **0** | **1** | **2** | **3** | **4** |
| Distance of access to nearest intersection. | ≤70 feet | 71 - 100 feet | >100 feet | - | - |
| Pedestrian walkways from public street/sidewalks to building entrances. | One entrance connected. | - | Walkways connecting all public streets/ sidewalks to building entrances. | - | - |
| Pedestrian walkways from parking lot to building entrance. | No walkways | Walkway next to building only | Walkways connecting all parking areas to building entrances | | |

| Tree Retention | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| **Design Criteria** | **Possible Points** | | | | |
| Percentage of trees retained | <10% | 10-50% | 51-75% | >75% | - |
| Replacement of trees removed | <50% | ≥50% | - | - | - |
| **Signs** | **0** | **1** | **2** | **3** | **4** |
| Dimensional size of sign (% of maximum permitted) N / A | >75% | 50-75% | <50% | - | - |
| Similarity of sign color to building color N / A | Not similar | Somewhat similar | Similar | - | - |
| Pole sign used N / A | Yes | No | - | - | - |
| **Building Appearance** | **0** | **1** | **2** | **3** | **4** |
| Style (similar to surroundings) | Not similar | Somewhat similar (1 or 2 points possible depending on level of similarity) | | - | - |
| Color (subdued and similar to surroundings is better) | Neither | Similar or subdued | Both | - | - |
| Material (concrete, wood and brick are best) | Either 1 or 2 points may assigned at the discretion of the Site and Design Review Board | | | | |
| Size of building (smaller is better) | >20,000 square feet | ≤20,000 square feet | - | - | - |
| Provision of public art (i.e. murals, statues, fountains, decorative bike racks, etc.) | No | - | - | - | Yes |
| **Landscaping** | **0** | **1** | **2** | **3** | **4** |
| Number of non-required trees provided | - | At least one tree per 500 square feet of landscaping. | - | - | - |
| Amount of grass (less grass is better) (% of total landscaped area) | >50% | 25-50% | <25% | - | - |
| **Low Impact Development (LID)** | **0** | **1** | **2** | **3** | **4** |
| Use of pervious paving materials (% of total paved area) | <10% | - | 10-50% | 51-75% | >75% |
| Provision of park or open space area | None | - | Open space (Generally not for public use) | - | Park (public or privately owned for public use) |

| Design Criteria | Possible Points | | | | |
|---|---|---|---|---|---|
| Use of drought tolerant species in landscaping (% of total plants) | <25% drought tolerant | - | 25-50% drought tolerant | 51-75% drought tolerant | >75% drought tolerant |
| Provision of additional interior parking lot landscaping (% of minimum required) | 100% | 101-110% | 111-120% | >120% | - |
| Provision of an eco-roof or rooftop garden (% of total roof area) | <10% | - | - | 10-50% | >50% |
| Parking integrated within building footprint (below-grade, structured parking, or tuck-under parking) (% of total on-site parking) | <10% | - | - | 10-50% | >50% |
| Disconnecting downspouts from city stormwater facilities | None | Some downspouts disconnected | All downspouts disconnected | - | - |
| Shared parking with adjacent uses or public parking structure (% of total required parking spaces) | None | <50% | ≥50% | - | - |
| Provision of rain gardens/bioretention areas for stormwater runoff (% of total landscaped area) | None | - | 10-50% | 51-75% | >75% |
| | **Total Possible Points = 71, 60%=42.6 points, 10%=7.1 points** | | | | |

**Total Points Earned:** _____ (42.6 points required for 60%)

**Total LID Points Earned:** _____(7.1 required for 10%)

# SITE AND DESIGN REVIEW – TYPE III: APPLICATION PROCESS

1. Prior to submitting an application, all applicants are encouraged to request a pre-application meeting with the City -or- the Planning Director may determine that a pre-application meeting is required prior to submitting an application. To schedule a pre-application meeting, an applicant must submit a completed pre-application form and set of preliminary plans to the City Planner, and after receiving the Planner's initials, must then make and take (3) copies of the pre-application materials to the Canby Public Works Department to schedule the pre-application meeting. The amount of the fee for a pre-application meeting is based on whether the application involves a public hearing or not.

2. Prior to submitting an application, applicants may be required to hold a neighborhood meeting with surrounding property owners and any recognized neighborhood association representative, pursuant to the procedures described in Canby Municipal Code Section 16.89.070. In certain situations, the Planning Director may waive the neighborhood meeting requirement.

3. At the time an application is submitted to the City, payment of all required application processing fees is required. An application will not be accepted without payment of fees. City Staff can provide you with information concerning application fees.

4. Staff will check the application, making sure that it is complete and all fees are paid. Copies of the application materials are routed to various City/State/County departments, as applicable, for their comments. The application is reviewed for completeness; the City Planner will accept or return the application with a written list of omissions within thirty (30) calendar days of the submittal.

5. Staff investigates the application, writes a staff report, issues public notice, notifies surrounding property owners, and makes all facts relating to the request available to the Planning Commission and all interested parties.

6. Prior to the public hearing, the City will prepare notice materials for posting on the subject property. This material must be posted **by the applicant** at least ten (10) days before the public hearing.

7. The staff report will be available to all interested parties seven (7) days prior to the hearing.

8. The Planning Commission holds a public hearing. The staff report is presented to the Commission. Testimony is presented by the applicant, proponents and opponents, followed by rebuttal from the applicant.

9. The Commission then issues findings of fact which support approval, modification, or denial of the application. A decision may be appealed to the City Council.

10. If an approval or a denial is appealed, City Council holds a public hearing. The staff report is presented and testimony taken, as at the original hearing(s). Unless the City Council decides to hear the appeal de novo, only testimony regarding items already in the record is permitted, and no new information may be entered. In the case of an appeal, the Council may affirm, revise or reverse the action of the Planning Commission in all or in part. The Council may also remand the matter back to the hearing body for further consideration.

11. Prior to construction of the project, a preconstruction meeting is held with the City and all applicable utility and service providers. If required, this meeting must be held and approval of Plan set by all agencies, and payment of Canby System Development Charge (SDC) and construction excise tax to the City before issuance of any building permits for the project(s) by Clackamas County.

# SITE AND DESIGN REVIEW – TYPE III: REVIEW CRITERIA *(Code 16.49.040)*

1. The Planning Commission shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the following A through D, and with Criteria 4, 5, and 6 below:

   A. The proposed site development, including the site plan, architecture, landscaping and graphic design, is in conformance with the standards of this and other applicable City ordinances insofar as the location, height and appearance of the proposed development are involved; and

   B. The proposed design of the development is compatible with the design of other developments in the same general vicinity; and

   C. The location, design, size, color and materials of the exterior of all structures and signs are compatible with the proposed development and appropriate to the design character of other structures in the same vicinity; and

   D. The Planning Commission shall, in making its determination of compliance with subsections B and C above, use the applicable matrix *[pages 8-12]* to determine "compatibility".

2. The Planning Commission shall, in making its determination of compliance with the above requirements, be guided by the objectives and standards set forth in this section. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed development. If the site and design review plan includes utility facilities or public utility facility, then the City Planner shall determine whether those aspects of the proposed plan comply with applicable standards.

3. The Planning Commission shall, in making its determination of compliance with the requirements set forth, consider the effect of its action on the availability and cost of needed housing. The Planning Commission shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Planning Commission from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of housing beyond the minimum necessary to achieve the purposes of this ordinance.

4. As part of the site and design review, the property owner may apply for approval to cut trees in addition to those allowed in Chapter 12.32, the City Tree Ordinance. The granting or denial of said application will be based on the criteria in Chapter 12.32. The cutting of trees does not in and of itself constitute change in the appearance of the property which would necessitate application for site and design review.

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January 28, 2014 (Revised 3/17/14)

# Project Narrative - City Zoning

**Type Three Design Review submittal**
**City of Canby, Oregon - Pre-Application number (PRA 14-01)**

**Project: Trend Business Center - Building 'C'**

| | |
|---|---|
| Site: | 341 S Sequoia Parkway – Tax Lot 31E34 01703 |
| Location: | 341 S Sequoia Parkway, Canby, Clackamas County. |
| Applicant: | VLMK Engineers, Jennifer Kimura |
| Owner: | Trend Business Center LLC |
| Proposal: | New 34,205 Sq. ft. Spec Building |
| Zoning | M-2 Heavy Industrial Zone/I-O Overlay Zone |

**Overview**:
The applicant is proposing to construct a *33,248* square feet speculative lease building on Lot 1 of the Trend Business Center.

**Site Condition:**
This 2.4 acre site is zoned M-2 (Heavy Industrial) and is currently vacant with a small amount of its area paved for parking from the construction of Building 'D'. The site was also rough graded during that construction and is relatively flat. It is located on the south side of Sequoia Parkway.

**Vehicle Access:**
Primary vehicle access is from S Sequoia Parkway. Two shared access drives will serve this property, one existing and one to be developed and shared with the property to the west. Driveways are in excess of 200 feet apart.

**Building Use:**
The facility will be designed to accommodate warehouse or small manufacturing with support offices for staff. The building can be demised into three (3) separate tenant spaces or have all area occupied by one tenant.

**Construction Materials:**
The proposed Building is to be approx. 28'-0" in height and constructed using concrete tilt-up wall construction with a built-up insulated roof over a structural steel frame. The floor is to be a concrete slab on grade. Storefront glazing is to be used to take advantage of natural light along the buildings north and east sides where possible tenant offices spaces can be built. Recessed storefront entrances will be used to provide

protection from the weather. The building has been designed with several jogs and staggered panels to provide articulation and interest. Walls will have reveals cast in them which will run horizontally around the building at varying heights. A multi color paint scheme will finish the walls with painted metal copings along their top edges. All rooftop equipment will be screened from the public way.

**Site Utilities:**

- Storm:
  - Runoff from roof areas will be discharged directly to the existing drywell system. New drywells will be added as needed.
  - Stormwater will be collected from the asphalt paved parking areas in Stormwater Management catchbasins that contain filters to treat stormwater runoff. The treated stormwater will then be piped to drywells located below the parking areas
- Sanitary:
  - Sanitary sewer was installed with the construction of Building 'D' and is stubbed onto the property in the northeast corner of the site for tie-in by the new system.
- Domestic Water:
  - Domestic water is to be installed from the existing line in S. Sequoia Parkway.
- Fire Water:
  - Fire water exists in the easement along the easterly boundary line and will be tapped at the existing 6" line at the southeast corner of the property for connection to the new fire riser to be located at the south end of the building.
- Lighting:
  - On-site lighting will be provided for security purposes and in compliance with design standards.
- Misc. Utilities:
  - The site will also be served with gas, electric, cable, and phone.

**Public Works:**

- This project will include the completion of sidewalk along Sequoia Parkway from the Lots on both the east and west side. No street work is required.

The following is a written response to the city code sections that apply to this project as outlined in the Pre-Application notes. Each section has been copied from the city website and is followed by our response in ***Bold Italics:***

**DIVISION III. – ZONING**

**Chapter 16.08**

**GENERAL PROVISIONS**

After review of Chapter 16.08, the following section apply to this project and have responses as noted below:

**16.08.090 Sidewalks required.**

**A.** In all commercially zoned areas, the construction of sidewalks and curbs (with appropriate ramps for the handicapped on each corner lot) shall be required as a condition of the issuance of a building permit for new construction or substantial remodeling, where such work is estimated to exceed a valuation of twenty thousand dollars, as determined by the building code. Where multiple permits are issued for construction on the same site, this requirement shall be imposed when the total valuation exceeds twenty thousand dollars in any calendar year.

**B.** The Planning Commission may impose appropriate sidewalk and curbing requirements as a condition of approving any discretionary application it reviews. (Ord. 740 section 10.3.05(I), 1984)

***Response:***
***We are added new sidewalks in front of parking areas with all associated ramps and required connection to the public way. Extruded concrete curbs are to be provided around all the remaining landscaping and parking areas as shown on the site plan.***

**16.08.110 Fences.**

**A.** Fences not more than three and one-half feet in height may be constructed within the street setbacks of any R-1, R-1.5, R-2 or C-1 zone. Fences not more than six feet in height may be constructed in any interior yard, rear yard, or street yard along an alley; provided, however, that in no case shall a fence be constructed in violation of the requirements of a vision clearance area.

**B.** On corner lots, the 3.5-foot height limit will apply within the required setback along both street-facing yards.

**C.** Arbors that are added to a fence that is constructed of proper design (height and setbacks) and in accordance with this section (16.08.110),are allowed with the following limitations:

**1.** The arbor shall not exceed eight (8) feet in height (including the fence and vegetation);

**2.** The arbor, or any part of the arbor, shall not obstruct the view of drivers or pedestrians navigating the streets and/or sidewalks in the area;

**3.** Vegetation on the arbor shall not be allowed to grow solid at any time, creating a solid barrier that blocks visibility;

**4.** If the vegetation becomes too full or too high, the owner is financially responsible to rectify the situation, and to maintain the vegetation, fence, and arbor;

**5.** Color, construction, and design must be consistent with other like arbors/fences in the immediate area;

**6.** The arbor shall not block, or in any way impede any present significant vistas enjoyed by neighboring homes and/or other points of interest existing at the time of the building of the fence or arbor;

**7.** The primary purpose of the arbor is to support and sustain foliage/vegetation.

**D.** No more than one row of fencing is allowed within a required street yard setback.

**E.** The Planning Commission may require sight-blocking or noise mitigating fences for any development it reviews.

**F.** The Planning Commission may require fences of up to eight feet in height for any development in C-2, C-M, M-1 or M-2, or Planned Unit Development zones.

**G.** No fence/wall shall be constructed throughout a subdivision, planned unit development or be part of a project that is/was subject to site and design review approval where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission. (Ord. 890 section 8, 1993; Ord. 740 section 10.3.05(K), 1984; Ord. 955 section 2, 1996; Ord. 981 section 43, 1997)

**H.** In all zones, private fences along a public pedestrian/bicycle pathway shall comply with the following in order to provide security and visibility for pathway users while maintaining privacy for the residence.

**1.** Fencing installed as part of a new subdivision shall comply with either (a) or (b) below.

**2.** Fencing installed by a property owner on an individual lot shall comply with either (a), (b), or (c) below.

**a.** Solid fencing shall be no greater than four (4) feet in height; or

**b.** Fencing shall be constructed with black open wire material, wooden slats, or some other material that allows visual access between he pathway and adjacent uses; or

**c.** Solid fencing shall be set back at least three (3) feet from the property line that abuts the pathway. (Ord 1338, 2010)

***Response:***
***The only fencing proposed will be to enclose the waste / recycle area to the south of the building as shown and detailed on the drawings. Project complies with this criteria.***

**16.08.150 Traffic Impact Study (TIS).**

**A.** Purpose. The purpose of this section of the code is to implement Section 660-012-0045(2)(b) of the State Transportation Planning Rule, which requires the city to adopt a process to apply conditions

to development proposals in order to minimize adverse impacts to and protect transportation facilities. This section establishes the standards to determine when a proposal must be reviewed for potential traffic impacts; when a Traffic Impact Study must be submitted with a development application in order to determine whether conditions are needed to minimize impacts to and protect transportation facilities: what information must be included in a Traffic Impact Study; and who is qualified to prepare the Study.

**B.** Initial scoping. During the pre-application conference, the city will review existing transportation data to determine whether a proposed development will have impacts on the transportation system. It is the responsibility of the applicant to provide enough detailed information for the city to make a determination. If the city cannot properly evaluate a proposed development's impacts without a more detailed study, a transportation impact study (TIS) will be required to evaluate the adequacy of the transportation system to serve the proposed development and determine proportionate mitigation of impacts. If a TIS is required, the city will provide the applicant with a "scoping checklist" to be used when preparing the TIS.

**C.** Determination. Based on information provided by the applicant about the proposed development, the city will determine when a TIS is required and will consider the following when making that determination.

**1.** Changes in land use designation, zoning designation, or development standard.

**2.** Changes in use or intensity of use.

**3.** Projected increase in trip generation.

**4.** Potential impacts to residential areas and local streets.

**5.** Potential impacts to priority pedestrian and bicycle routes, including, but not limited to school routes and multimodal street improvements identified in the TSP.

**6.** Potential impacts to intersection level of service (LOS).

**D.** TIS General Provisions

**1.** All transportation impact studies, including neighborhood through-trip and access studies, shall be prepared and certified by a registered Traffic or Civil Engineer in the State of Oregon.

**2.** Prior to TIS scope preparation and review, the applicant shall pay to the city the fees and deposits associated with TIS scope preparation and review in accordance with the adopted fee schedule. The city's costs associated with TIS scope preparation and review will be charged against the respective deposits. Additional funds may be required if actual costs exceed deposit amounts. Any unused deposit funds will be refunded to the applicant upon final billing.

**3.** For preparation of the TIS, the applicant may choose one of the following:

**a.** The applicant may hire a registered Oregon Traffic or Civil Engineer to prepare the TIS for submittal to the city. The city Traffic Engineer will then review the TIS and the applicant will be required to pay to the city any fees associated with the TIS review; or

**b.** The applicant may request that the city Traffic Engineer prepare the TIS. The applicant will pay to the city any fees associated with preparation of the TIS by the city Traffic Engineer.

**4.** The TIS shall be submitted with a concurrent land use application and associated with application materials. The city will not accept a land use application for process if it does not include the required TIS.

**5.** The city may require a TIS review conference with the applicant to discuss the information provided in the TIS once it is complete. This conference would be in addition to any required pre-application conference. If such a conference is required, the city will not accept the land use application for processing until the conference has taken place. The applicant shall pay the TIS review conference fee at the time of conference scheduling, in accordance with the adopted fee schedule.

**6.** A TIS determination is not a land use action and may not be appealed.

**E.** TIS Scope. The city shall determine the study area, study intersections, trip rates, traffic distribution, and required content of the TIS based on information provided by the applicant about the proposed development.

**1.** The study area will generally comprise an area within a ½-mile radius of the development site. If the city determines that development impacts may extend more than ½ mile from the development site, a larger study area may be required. Required study intersections will generally include (in addition to the primary access points) collector/collector and above intersections with an anticipated peak hour traffic increase of five-percent from the proposed project.

**2.** If notice to ODOT or other agency is required pursuant to noticing requirements in Chapter 16.89, the city will coordinate with those agencies to provide a comprehensive TIS scope. ODOT may also require a TIS directly to support an OR 99E approach permit application.

**F.** TIS Content. A project-specific TIS checklist will be provided to the applicant by the city once the city has determined the TIS scope. A TIS shall include all of the following elements, unless waived by the city.

**1.** Introduction and Summary. This section shall include existing and projected trip generation including vehicular trips and mitigation of approved development not built to date; existing level and proposed level of service standard for city and county streets and volume to capacity for state roads; project build year and average growth in traffic between traffic count year and build year; summary of transportation operations; traffic queuing and delays at study area intersections; and proposed mitigation(s).

**2.** Existing Conditions. This section shall include a study area description, including information about existing study intersection level of service.

**3.** Impacts. This section should include the proposed site plan, evaluation of the proposed site plan, and a project-related trip analysis. A figure showing the assumed future year roadway network (number and type of lanes at each intersection) also shall be provided. For subdivision and other developments, the future analysis shall be for the year of proposed site build-out. For

proposed comprehensive plan and/or zoning map amendments, the future analysis year shall be 20 years from the date of the City's adopted TSP, or 15 years, whichever is greater.

**4.** Mitigation. This section shall include proposed site and area-wide specific mitigation measures. Mitigation measures shall be roughly proportional to potential impacts. See Subsection K below for rough proportionality determination.

**5.** Appendix. This section shall include traffic counts, capacity calculations, warrant analysis, and any other information necessary to convey a complete understanding of the technical adequacy of the TIS.

**G.** TIS Methodology. The City will include the required TIS methodology with the TIS scope.

**H.** Neighborhood Through-Trip Study. Any development projected to add more than 30 through-vehicles in a peak hour or 300 through-vehicle per day to an adjacent residential local street or neighborhood route will be require assessment and mitigation of residential street impacts. Through-trips are defined as those to and from a proposed development that have neither an origin nor a destination in the neighborhood. The through-trip study may be required as a component of the TIS or may be a stand-alone study, depending on the level of study required in the scoping checklist. The through-trip study shall include all of the following:

**1.** Existing number of through-trips per day on adjacent residential local streets or neighborhood routes.

**2.** Projected number of through-trips per day on adjacent residential local streets or neighborhood routes that will be added by the proposed development.

**3.** Traffic management strategies to mitigate for the impacts of projected through-trip consistent.

If a residential street is significantly impacted, mitigation shall be required. Thresholds used to determine if residential streets are significantly impacted are:

**1.** Local residential street volumes should not increase above 1,200 average daily trips

**2.** Local residential street speeds should not exceed 28 miles per hour ($85^{th}$ percentile speed).

**I.** Mitigation. Transportation impacts shall be mitigated at the time of development when the TIS identifies an increase in demand for vehicular, pedestrian, bicycle, or transit transportation facilities within the study area. Mitigation measures may be suggested by the applicant or recommended by ODOT or Clackamas County in circumstances where a state or county facility will be impacted by a proposed development. The city shall determine if the proposed mitigation measures are adequate and feasible. ODOT must be consulted to determine if improvements proposed for OR 99E comply with ODOT standards and are supported by ODOT. The following measures may be used to meet mitigation requirements:

**1.** On-and off-site improvements beyond required standard frontage improvements.

**2.** Development of a transportation demand management program.

**3.** Payment of a fee in lieu of construction, if construction is not feasible.

**4.** Correction of off-site transportation deficiencies within the study area that are substantially exacerbated by development impacts.

**5.** Construction of on-site facilities or facilities located within the right-of-way adjoining the development site that exceed minimum required standards and that have a transportation benefit to the public.

**J.** Conditions of Approval. The city may deny, approve, or approve with appropriate conditions a development proposal in order to minimize impacts and protect transportation facilities.

**1.** Where the existing transportation system will be impacted by the proposed development, dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or accessways may be required to ensure that the transportation system is adequate to handle the additional burden caused by the proposed use.

**2.** Where the existing transportation system is shown to be burdened by the proposed use, improvements such as paving, curbing, installation or contribution to traffic signals, traffic channelization, construction of sidewalks, bikeways, accessways, paths, or street that serve the proposed use may be required.

**3.** The city may require the development to grant a cross-over access easement(s) to adjacent parcel(s) to address access spacing standards on arterials and collector roadways or site-specific safety concerns. Construction of shared access may be required at the time of development if feasible, given existing adjacent land use. The access easement must be established by deed.

**K.** Rough Proportionality Determination. Improvements to mitigate impacts identified in the TIS shall be provided in rough proportion to the transportation impacts of the proposed development.

**1.** The TIS shall include information regarding how the proportional share of improvements was calculated, using the ratio of development trips to growth trips and the anticipated cost of the full Canby Transportation System Plan. The calculation is provided below:

Proportionate Share Contribution = [Net New Trips/(Planning Period Trips-Existing Trips)] X Estimated Construction Cost

**a.** Net new trips means the estimated number of new trips that will be created by the proposed development within the study area.

**b.** Planning period trips means the estimated number of total trips within the study area within the planning period identified in the TSP.

**c.** Existing trips means the estimated number of existing trips within the study area at the time of TIS preparation.

**d.** Estimated construction cost means the estimated total cost of construction of identified improvements in the TSP. (Ord 1340, 2011)

***Response:***
***A traffic study is attached with this submittal to comply with this criteria.***

**Chapter 16.10**

**OFF-STREET PARKING AND LOADING**

**16.10.010 Off-street parking required – exceptions.**

**A.** At the time of establishment of a new structure or use, change in use, or change in use of an existing structure, within any planning district of the city, off-street parking spaces and off-street loading berths shall be as provided in this and following sections, unless greater requirements are otherwise established by the conditional use permit or the site and design review process, based upon clear and objective findings that a greater number of spaces are necessary at that location for protection of public health, safety and welfare. A lesser number of spaces may be permitted by the Planning Commission based on clear and objective findings that a lesser number of parking spaces will be sufficient to carry out the objective of this section.

**B.** No off-street parking shall be required for any use permitted outright within the C-1 zone in the rectangular area bounded by N. Ivy Street on the east, NW First Avenue on the south, N. Elm Street on the west, and NW Third Avenue on the north.

**C.** At the time of enlargement of an existing structure or use, the provisions of this section shall apply to the enlarged structure or use only. (Ord. 1304, 2009; Ord. 1237, 2007; Ord. 890 section 9, 1993; Ord. 872, 1992; Ord. 854 section 2, 1991; Ord. 848, Part V, section 1, 16.10.010(A)(B), 1990)

**16.10.020 Definitions.**

**A.** Floor Area. Except where otherwise specified, the floor area measured shall be the gross floor area of the building primary to the function of the particular use of the property other than space devoted to off-street parking or loading.

**B.** Employees. Where employees are specified, the term shall apply to all persons, including proprietors, working on the premises during the peak shift. (Ord. 854 section 2, 1991; Ord. 848, Part V, section 1, 16.10.020(A)(B), 1990)

**16.10.030 General requirements.**

**A.** Should the owner or occupant of a structure change the use to which the building is put, thereby increasing parking or loading requirements, the increased parking/loading area shall be provided prior to commencement of the new use.

**B.** Parking and loading requirements for structures not specifically listed herein shall be determined by the City Planner, based upon requirements of comparable uses listed.

**C.** In the event several uses occupy a single structure, the total requirements for off-street parking shall be the sum of the requirements of the several uses computed separately. If the applicant can demonstrate that the uses do not have overlapping parking needs (based on days and hours of operation) and can share parking, the total requirement for combined uses may be reduced by up to 60 percent.

**D.** Off-street parking spaces for dwellings shall be located on the same lot, or adjacent lot, with the dwelling. Parking spaces located within an on-site garage shall count toward the minimum parking requirement for residential uses. Other required parking spaces may be located on a separate parcel, provided the parcel is not greater than five hundred (500) feet from the entrance to the building to be served, measured along the shortest pedestrian route to the building. The applicant must prove that the parking located on another parcel is functionally located and that there is safe vehicular and pedestrian access to and from the site.

**E.** Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business.

**F.** Institution of on-street parking shall not be allowed for off-street parking, where none is previously provided, and shall not be done solely for the purpose of relieving crowded parking lots in commercial or industrial planning districts.

**G.** Parking facilities may be shared by users on adjacent parcels if all of the following standards are met, or the Planning Commission determines a lesser combination meets the intent of the ordinance:

**1.** One of the parcels has excess parking spaces, considering the present use of the property; and the other parcel lacks sufficient area for required parking spaces. Excess parking spaces can be determined by considering when the uses need the parking spaces, such as time of day or day of week.

**2.** The total number of parking spaces meets the standards for the sum of the number of spaces that would be separately required for each use. If the applicant can demonstrate that the uses do not have overlapping parking needs (based on days and hours of operation) and can share parking, the total requirement for combined uses may be reduced by up to 60 percent.

**3.** Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying present use of the excess parking area on one lot by patrons of the uses deficient in required parking areas.

**4.** Physical access between adjoining lots shall be such that functional and reasonable access is provided to uses on the parcel deficient in parking spaces.

**5.** Adequate directional signs shall be installed specifying the joint parking arrangement.

**H.** The number of vehicular spaces required in Table 16.10.050 may be reduced by up to 10% if one of the following is demonstrated to the satisfaction of the Planning Director or Planning Commission:

**1.** Residential densities greater than nine units per gross acre (limit parking to no less than one space per unit for multi-family structures); or

**2.** The proposed development is pedestrian-oriented by virtue of a location which is within convenient walking distance of existing or planned neighborhood activities (such as schools, parks, shopping, etc.) and the development provides additional pedestrian amenities not required by the code which, when taken together, significantly contribute to making walking convenient (e.g., wider sidewalks, pedestrian plazas, pedestrian scale lighting, benches, etc.). (Ord. 890 section 10,

1993; Ord. 854 section 2 [part], 1991; Ord. 848, Part V, section 16.10.030, 1990; Ord. 1043 section 3, 2000; Ord. 1338, 2010)

**16.10.040 Prohibited near intersections.**
In no case will off-street parking be allowed within a vision clearance area of an intersection. (Ord. 740 section 10.3.10(D), 1984)

**16.10.050 Parking standards designated (ABBREVIATED FOR THIS NARRATIVE).**
The parking standards set out in Table 16.10.050 shall be observed. (Ord. 854 section 2, [part], 1991; Ord. 848 section 1, 16.10.050, 1990; Ord. 740 section 10.3.10(E), 1984; Ord. 981 section 20, 1997)

| | |
|---|---|
| n. Club or lodge | 1.00 space per 200 square feet of floor area |
| o. Day care , adult or child care; does not include Family Daycare (12 or | 1.00 space per 500 square feet of floor area |
| p. All others | 1.00 space per 550 square feet |
| q. Wireless telecommunication | 1.00 space per site |
| ***Industrial:*** | |
| a. Manufacturing | 2.00 spaces per 1,000 gross square feet of office space, plus 1.00 space per 1,000 gross square feet of non-office manufacturing space. Minimum of 5 parking spaces overall. |
| b. Warehousing | 2.00 spaces per 1,000 gross square feet of office space, plus 1.00 space per 1,000 gross square feet of non-office warehousing space. Minimum of 5 parking spaces overall. |
| c. Wholesale establishments | 2.00 spaces per 1,000 gross square feet of office space, plus 1.50 spaces per 1,000 gross square feet of non-office wholesale space. Minimum of 5 parking spaces overall. |

***Response:***
***The project is designed as a speculative Shell building. We have estimated use per the above highlighted standards for 1,500 sq. ft. of tenant offices (2/1000) and the remaining 32,705 sq. ft. based on manufacturing or warehouse (1/1000). With the above numbers we are required to have a minimum of 36 spaces and we are providing 77 spaces to comply with this criteria.***

**16.10.060 Off-street loading facilities**

**A.** The minimum number of off-street loading berths for commercial and industrial uses is as follows:

| SQUARE FEET OF FLOOR AREA | NUMBER OF BERTHS |
|---|---|
| | |
| Less than 5,000 | 0 |
| 5000 – 25,000 | 1 |
| 25,000 – 60,000 | 2 |
| 60,000 and over | 3 |

**B.** Loading berths shall conform to the following minimum size specifications:

**1.** Commercial uses – 13’ x 35’

**2.** Industrial uses – 12' x 60'

**3.** Berths shall have an unobstructed minimum height of 14'.

**C.** Required loading areas shall be screened from public view, from public streets, and adjacent properties by means of sight-site obscuring landscaping, walls or other means, as approved through the site and design review process.

**D.** Required loading facilities shall be installed prior to final building inspection and shall be permanently maintained as a condition of use.

**E.** A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading children shall be located on the site of a school or day care center having a capacity greater than twenty-five (25) students.

**F.** The off-street loading facilities shall, in all cases, be on the same lot or parcel as the structure they are intended to serve. In no case shall the required off-street loading spaces be part of the area used to satisfy the off-street parking requirement.

**G.** The Planning Commission may exempt a building from the loading berth requirement, or delay the requirement, based on findings that loading berths are not needed for a particular building or business. (Ord. 854 section 2[part], 1991; Ord. 848, Part V, section 1, 16.10.060, 1990; Ord. 1237, 2007)

***Response:***
***Two berths are required for this project and we are providing six (6) loading berths to comply with this criteria.***

**16.10.070 Parking lots and access.**

**A. Parking Lots.** A parking lot, whether as accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:

**1.** Parking lot design shall comply with the dimensional standards set forth in Figure 1 of this section.

**2.** Parking stalls of eight (8) feet in width and sixteen (16) feet in length for compact vehicles may comprise up to a maximum of thirty (30) percent of the total number of parking stalls. Such parking stalls shall be marked "Compact Parking only" either on the parking surface or on a sign in front of the parking stalls.

**3.** Areas used for standing or maneuvering of vehicles shall have paved asphalt, concrete, solid concrete paver surfaces, or paved "tire track" strips maintained adequately for all weather use and so drained as to avoid the flow of water across sidewalks or into public streets, with the following exception:

**a.** The Planning Director or Planning Commission may approve the use of an engineered aggregate system for outdoor storage and/or non-required parking areas provided that the applicant can demonstrate that City Standards related to:

**i.** minimizing dust generation,
**ii.** minimizing transportation of aggregate to city streets, and

**iii.** minimizing infiltration of environmental contaminants including, but not limited to, motor oils, fuels, volatile organic compounds (e.g. benzene, toluene, ethylbenzene, xylene), and ethylene glycol are met.

The decision maker may impose conditions as necessary to meet City Standards.

**b.** Use of permeable surfacing materials for parking lots and driveways is encouraged whenever site and soil conditions make permeable surfacing feasible. Permeable surfacing includes, but is not limited to: paving blocks, turf block, pervious concrete, and porous asphalt. All permeable surfacing shall be designed, constructed, and maintained in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations. Maintenance of permeable surfacing materials located on private property are the responsibility of the property owner.

**4.** The full width of driveways must be paved in accordance with (3) above:

**a.** For a minimum of 20 feet from the right-of-way line back into the private property to prevent debris from entering public streets, and

**b.** To within 150 feet of all portions of the exterior wall of the first story of any structure(s) served by the driveway to ensure fire and emergency service provision.

**5.** Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents. Artificial lighting, which may be provided, shall be so deflected as not to shine or create glare in any residential planning district or on any adjacent dwelling, or any street right-of-way in such a manner as to impair the use of such way.

**6.** Groups of more than four (4) parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

**7.** Off-street parking areas, and the accesses to them, shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress and the maximum safety of pedestrian and vehicular traffic on the site and in adjacent roadways. The Planning Director or Planning Commission may require engineering analysis and/or truck turning diagrams to ensure safe and efficient traffic flow based on the number and type of vehicles using the site, the classification of the public roadway, and the design of the parking lot and access drives.

**8.** Parking bumpers or wheel stops shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

**9.** Accessible parking shall be provided, constructed, striped, signed and maintained as required by ORS 447.233 and all Oregon Structural Specialty Code requirements.

***Response:***
***All parking areas are to be paved. The new parking spaces are designed to meet the city standards for size, count and maximum allowed spaces between landscape islands. The new parking lot new landscaping will reduce dust and provide a neat clean appearance.***

**B. Access.**

**1.** The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this ordinance are continuing requirements for the use of any structure or parcel of real property in the City of Canby. No building permit or other permits shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. Should the owner or occupant of a lot or building change the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this ordinance to begin or maintain such altered use until the required increase in ingress and egress is provided.

**2.** The City of Canby encourages joint/shared access. Owners of two (2) or more uses, structures, or parcels of land may agree to, or may be required by the City to, utilized jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designed in this ordinance, provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts shall be placed on permanent files with the city recorder.

**3.** All ingress and egress shall connect directly with public streets.

**4.** Vehicular access for residential uses shall be brought to within fifty (50) feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units All ingress and egress shall connect directly with public streets

**5.** Required sidewalks shall extend from the ground floor entrances or the ground floor landing of a stairs, ramps or elevators to the sidewalk or curb of the public street or streets that provide the required access and egress.

6. To afford safe pedestrian access and egress for properties within the city, a sidewalk shall be constructed along all street frontages, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to city standards except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design, and in a manner approved by the Site and Design Review Board. Sidewalks approved by Board may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grade and alignment established by the Site and Design Review Board.

7. The standards set forth in this ordinance are minimum standards for access and egress, and may be increased through the site and design review process in any particular instance where the standards provided herein are deemed insufficient to

**protect the public health, safety and general welfare. (Ord. 890 section 12, 1993; Ord. 1237, 2007; Ord. 1338, 2010)**

**Minimum Access Requirements**

**16.10.070(B)(8): Minimum access requirements for residential uses - ingress and egress for residential uses shall not be less than the following (except that in the case of flag lots, section 16.64.0400) shall apply):**

| *Dwelling units* | *Minimum number of accesses required* | *Minimum access width* | *Sidewalks & Curbs (in addition to driveways)* |
|---|---|---|---|
| 1 or 2 | 1 | 12 feet | none required |
| 3-19 | 1 | 20 feet | Minimum of one sidewalk connection to residences and parking areas; curb required if sidewalk adjacent to driveway. |
| 20-49 | Option A: 1 access OR Option B: 2 accesses | 20 feet 12 feet | Minimum of one sidewalk connection to residences and parking areas; curb required if sidewalk adjacent to driveway. |
| 50-499 | Option A: 1 access OR Option B: | 30 feet 20 feet | Curbs required; Minimum of one sidewalk connection to residences and parking areas |
| Over 500 | As required by Site and Design Review Board | | As required by Public Works Director |

**16.10.070(B)(9): Minimum access requirements for commercial or institutional uses - ingress and egress for commercial uses shall not be less than the following:**

| *Parking spaces required* | *Minimum number of accesses* | *Minimum access width* | *Sidewalks & curbs (in addition to driveways)* |
|---|---|---|---|
| 1-4 | 1 | 12 feet | *None required* |
| 5-99 | 1 | 20 feet | Curbs required; sidewalk on one side minimum |
| 100-249 | 2 | 20 feet | Curbs required; sidewalk on one side minimum |
| Over 250 | As required by Site and Design Review Board | As required by Public Works Director | |

**16.10.070(B)(10): Minimum access requirements for industrial uses - ingress and egress for industrial uses shall not be less than the following:**

| *Parking spaces required* | *Minimum number of accesses* | *Minimum access width* | *Sidewalks & curbs (in addition to driveways)* |
|---|---|---|---|
| 1-250 | 1 | 24 feet | Curbs required; sidewalks on one side minimum |

| | |
|---|---|
| Over 250 | As required by Public Works Director |

8. One-Way Ingress or Egress – Way Ingress or Egress – When approved through the site and design review process, one-way ingress or egress may be used to satisfy the requirements of subsection (H), (I) and (J). However, the hard surfaced pavement of one-way drives shall not be less than twelve (12) feet for multi-family residential, commercial or industrial uses.

9. Maximum driveway widths and other requirements except for single-family dwellings [see subsection (d) below]:

a. Unless otherwise herein provided, maximum driveway widths shall not exceed forty (40) feet.

b. No driveways shall be constructed within five (5) feet of an adjacent property line, except when two (2) adjacent property owners elect to provide joint access to their respective properties as provided by subsection 2.

c. There shall be a minimum distance of forty (40) feet between any two (2) adjacent driveways on a single property.

d. The minimum distance between two driveways on one single-family residential lot shall be thirty (30) feet. There is no minimum setback distance between a driveway and the property line for driveways on single-family residential lots.

10. Distance Between Driveways and Intersections- Except for single-family dwellings [see subsection (f) below] the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection:

a. At the intersection of any collector or arterial streets, driveways shall be located a minimum of fifty (50) feet from the intersection.

b. At the intersection of two (2) local streets, driveways shall be located a minimum of thirty (30) feet from the intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the five (5) foot setback between the driveway and property line.

c. If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the five (5) foot setback between the driveway and property line.

d. In the case of existing flag lots, it shall be at the discretion of the Site and Design Review Board to determine the best location for driveways.

***Response:***
***Project complies - Access into the site is provided off of Sequoia Parkway. One shared with the property to the east and a new expansion of an existing drive to the west. Sidewalks provide access to and along the public way. Driveways are located in excess of 200' apart.***

**16.10.100 Bicycle Parking.**
Bicycle parking shall be provided for all multi-family residential, institutional, commercial, and industrial uses.

**A.** Dimensions and characteristics: Bicycle parking spaces shall be a minimum of six (6) feet long and two (2) feet wide, and overhead clearance in covered spaces shall be a minimum of seven (7) feet. A minimum five (5) foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking. Bicycle racks located on a sidewalk shall provide a minimum of two (2) feet between the rack and a wall or other obstacle, and between the rack and curb face. Bicycle racks or lockers shall be securely anchored to the surface or a structure. Bicycle racks located in the Downtown Commercial Zone shall be of the inverted U style (a.k.a. staple racks). See Figure 20 of the Canby Downtown Plan for correct rack placement.

**B.** Location: Bicycle parking shall be located in well-lit, secure locations within fifty (50) feet of the main entrance to a building, but not further from the entrance than the closest automobile parking space, and in no case further than 50 feet from an entrance when several entrances are involved.

**C.** Number of spaces: The bicycle parking standards set out in Table 16.10.100 shall be observed. (Ord. 1019 section 1, 1999; Ord. 1076, 2001)

***Response:***
***Per table 16.10.100, two spaces are required and have been provided outside of the north entry into the building. Additional spaces are to be provided as required with each tenant improvement.***

## Chapter 16.34
## M-2 HEAVY INDUSTRIAL ZONE

Sections:



### 16.34.10 Uses permitted outright.
Uses permitted outright in the M-2 zone shall be as follows:

**A.** A use permitted outright in an M-1 zone. (Ord. 740 section 10.3.33(A), 1984)

### 16.34.20 Conditional uses.
Conditional uses in the M-2 zone shall be as follows:

**A.** Aggregate removal operations;

**B.** All other uses when evaluated on the standards and criteria specified in Chapter 16.50 and the point system set out in Table 16.34.020 for evaluating heavy industrial development proposals.

**C.** Detached WTS facilities (monopole), equal to or over 100 feet in height and less than 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120).

**D.** Detached WTS facilities (lattice tower), equal to or over 150 feet in height and at least 660 feet from the nearest land zoned or planned for residential use or Highway 99E (see 16.08.120). (Ord. 740 section 10.3.33(B), 1984; Ord. 981 section 33, 1997)

**16.34.30** Development standards.

The following subsections indicate the required development standards of the M-2 zone:

**A.** Minimum lot area: five thousand square feet; ***106,337 sq. ft. lot***

**B.** Minimum width and frontage: fifty feet. ***Approx 250 feet provided***

**C.** Minimum yard requirements:

**1.** Street yard: none, except twenty feet where abutting a residential zone; **Complies**

**2.** Interior yard: none, except twenty feet where abutting a residential zone. ***Complies***

**D.** Maximum building height:

**1.** Freestanding signs: thirty feet; ***None***

**2.** All other structures: forty-five feet. ***28.5 feet proposed***

**E.** Maximum lot coverage: no limit. ***N/A***

**F.** Other regulations:

**1.** Vision clearance distances shall be fifteen feet from any alley or driveway and thirty feet from any other street or railroad; ***30 foot vision triangles are shown on the plans.***

***2.*** Outside storage abutting or facing a lot in a residential zone shall be enclosed by a site-blocking fence or berm. The fence or berm shall be so designed as to screen the storage from view from the residential zone and shall be of such material and design as will not detract from adjacent residences. (Ord. 890 section 34, 1993; Ord. 740 section 10.3.33(C), 1984; Ord 1237, 2007) ***N/A***

***Response: Project complies with uses for warehouse or manufacturing use allowed. For all development standards see Site Plan Sheet G1.0.***

Chapter 16.35

CANBY INDUSTRIAL AREA OVERLAY (I-O) ZONE

Sections:



**16.35.10** Purpose.

The purpose of the Canby Industrial Area Overlay (I-O) zone is to implement the design guidelines and standards of the Canby Industrial Area Master Plan (Master Plan):

**A.** Provide efficient circulation and access;

**B.** Allow flexibility in siting development, including a range of industrial and commercial/industrial land uses;

**C.** Provide visual continuity for streetscapes and developments;

**D.** Encourage durable, high quality building materials.

The zone is intended to ensure high-quality industrial development with a mix of employment types and uses. (Ord. 1008 section 1 [part], 1998; Ord. 1057 section 2 [part], 2000)

**16.35.20** Applicability

It is the policy of the City of Canby to apply the I-O zone to all lands within the Master Plan area and other areas determined by the City, upon annexation or prior to application for development permit. The Master Plan area generally includes the area bound by Highway 99E and 1st Avenue to the north, Mulino Road to the east, SE 13th Avenue to the south, and Molalla Western Railroad to the west. The I-O zone has the following affect with regard to other chapters of this ordinance:

**A.** Incorporates the Canby Industrial Area Master Plan into Title 16. The Master Plans design guidelines, standards, and plan maps are hereby incorporated by reference.

**B.** Permits land uses which are permitted by the underlying zone districts (C-M, M- 1, M-2), with some exceptions.

**C.** Replaces selected development standards contained in the C-M, M-1, and M-2 zones, for continuity and quality of site design within the Master Plan area.

**D.** Utilizes the City's processes for development review, including land divisions, conditional uses, and design reviews. Provides a design review matrix (i.e., replacing the table in Chapter 16.49) which is tailored to the Master Plan area.

**E.** Provides additional conditional use standards to ensure development compatibility.

**F.** Lists uses that are prohibited outright due to incompatibility with the goals for the area. (Ord. 1008 section 1 [part], 1998; Ord. 1057 section 2 [part], 2000)

16.35.25 Pre-application review and conditions of approval

**A.** A pre-application meeting with utility and service providers is required prior to any land use application, building permit application, or business license application in the I-O zone, unless this requirement is waived by the City Planner. The City Planner shall provide application forms for this purpose indicating all required information. The pre- application meeting shall allow utility and service providers to make a detailed assessment of the proposed use prior to forming a recommendation on approval. In addition, this meeting will allow the City to evaluate whether a Conditional Use Permit will be required.

**B.** At the pre-application meeting, the City shall determine the need for a Hazardous Materials Management Plan. If required by the City, the applicant shall prepare a plan meeting the relevant sections of the Oregon Fire Code as determined by the City. The Plan shall allow utility and service providers to review the health and safety impacts of any proposed use and ensure an adequate plan will be in place to address those impacts prior to forming a recommendation on approval.

**C.** The Planning Commission or City Council may impose conditions to protect public health and safety on any discretionary land use application. (Ord. 1057 section 2 [part], 2000; Ord. 1237, 2007)

***Response: Pre Application completed and minutes are attached for this criteria.***

16.35.030 Uses permitted outright.

Unless limited by sections 16.35.040 or 16.35.045, uses permitted outright in the C-M zone, M-1 zone, and M-2 zone are permitted outright in the I-O zone, subject to the respective zone district boundaries. (Ord. 1008 section 1 [part], 1998; Ord. 1057 section 2 [part], 2000)

**16.35.40** Conditional uses.

Unless limited by subsection A below or section 16.35.045, conditional uses permitted in the C-M zone, M-1 zone, and M-2 zone are permitted as conditional uses in the I-O zone, subject to the respective zone district boundaries.

**A.** Any proposed site development, change in use, land division, or other action that results in any of the following requires conditional use approval in the I-O zone:

**1.** Less than 12 employees per developed acre. For the purposes of this section only, "developed" means all areas used for buildings, landscaping, vehicle maneuvering and parking areas, outdoor storage, and other areas occupied by the use. For the purposes of this section only, employees means full-time equivalents unless the City specifically allows other interpretations;

**2.** More than 60 acres total in I-O zoning that is occupied by a single use or business.

For the purposes of this section, businesses classified in the same NAICS industry group (four-digit code) are considered to be in the same use. This section is intended to apply cumulatively to all properties in the zone;

**3.** Utilization of any public service or utility to such an extent that the utility would not be able to supply all other uses projected in its current long-range plans;

**4.** Uses requiring an H occupancy under the Oregon Structural Specialty Code;

**5.** In any C-M zoning overlain by I-O zoning, any retail or commercial use with a building footprint exceeding 50,000 square feet;

**6.** In any M-1 or M-2 zoning overlain by I-O zoning, any retail or commercial use not related to or supportive of the primary industrial use of the park; or

**7.** In any M-1 or M-2 zoning overlain by I-O zoning, retail areas occupying more than 15% of the building footprint or more than 3,000 square feet.

**B.** To approve a conditional use in the I-O zone, the Planning Commission shall find that each of the following additional criteria are either met, or can be met by observance of conditions, unless it is not applicable:

**1.** The proposed use is compatible with the industrial nature of the park and will have minimal negative impact on the development and use of surrounding properties;

**2.** The proposed use does not pose a threat to public health or safety; and

**3.** The proposed use is beneficial to the overall economic diversity and vitality of the City.

These criteria are in addition to those provided in Section 16.50.010. In all other aspects, the conditional use process shall be as specified in Chapter 16.50. (Ord 1008 section 1 [part], 1998, Ord. 1057 section 2 [part], 2000; Ord. 1237, 2007).

***Response: Not applicable***

**16.35.45** Prohibited uses.

The following uses are prohibited in the I-O zone:

**A.** Slaughter house;

**B.** Rendering, reduction, or distillation of, or manufacturing from, animals, fish and their by-products;

**C.** Auto, truck or motorcycle race track;

**D.** Auto, truck, or motorcycle wrecking or salvage yard;

**E.** Scrap metal storage and sales;

**F.** Reclamation or manufacturing of steel barrels or drums;

**G.** Dump or landfill, including rubbish, slag, organic materials, offal, or garbage in general;

**H.** Livestock feeding pen, other than those associated with existing agricultural uses;

**I.** Fireworks manufacturing or the manufacturing of ammunition or explosives;

**J.** Nuclear power plant or similar use;

**K.** Curing and storage of hides;

**L.** Incinerator, smelter, blast furnace, or coke oven;

**M.** Manufacture of oils, gasoline, or products made directly from petroleum, other oils, or tar products;

**N.** Fertilizer production;

**O.** Creosote production;

**P.** Insecticide production;

**Q.** Tire manufacturing;

**R.** Saw, shingle, or lumber mill; and

**S.** In any M-1 or M-2 zoning overlain by I-O zoning, commercial or retail uses over 50,000 square feet are prohibited.

This list should not be used to imply that any other use is permitted. (Ord. 1057 section 2 [part], 2000)

***Response: Not applicable***

**16.35.50** Development standards.

The following subsections indicate the required development standards of the I-O zone. These standards replace the standards of the C-M zone, M-1 zone, and M-2 zone, as follows:

**A.** Minimum lot area: none. ***Complies***

***B.*** Minimum lot width and frontage: none. ***Complies***

**C.** Minimum yard requirements (measured from building foundation to right-of-way line):

***1.*** Street yards(s): 20 feet for buildings up to 25 feet in height; 35 feet for buildings between 25 feet and 45 feet in height. Parking and internal drives (except curb cuts and entrance drives) are prohibited within the required 20 foot street yard. ***Approx. 70 feet provided***

**2.** Interior yard: 10 feet, except 20 feet where abutting a residential zone. Common- wall lot lines (attached buildings), and development which provide shared parking and circulation with abutting developments, are exempt from interior yard standards***. 11.0 feet provided at side yard***

**D.** Maximum building height: 45 feet. ***28.5; proposed***

**E.** Maximum lot coverage: 60 percent in the C-M zone; none in the M-1 and M-2 zones. ***Complies***

**F.** Street access (curb cuts) spacing shall be a minimum of 200 feet on designated parkway and collector streets. ***217 feet provided***

**G.** Street right-of-way improvements shall be made in accordance with the circulation plan, and streetscape/street section standards of the Industrial Area Master Plan***. Sidewalk connection being made***

**H.** Building orientation standards. The following standards are intended to ensure direct, clear, and convenient pedestrian access:

**1.** Development in the M-1 zone and M-2 zone shall provide at least one public entrance facing the street. A direct pedestrian connection shall be provided between the primary building entrance and public sidewalk. ***Complies one provided***

**2.** Developments within the C-M zone shall provide continuous, straight-line pedestrian connections between the street(s), buildings, and parking areas. ***Complies one provided***

***I.*** Right-of-way plantings: Street trees and ground cover plantings shall be installed with development, as approved by the City. Shrubs are prohibited within the public right-of-way. ***Existing***

**J.** Metal building exteriors are prohibited, except that the Planning Commission may approve architectural metal elements that accent and enhance the aesthetics of building entrances and office areas.

**K.** Lighting shall be required for all streets, sidewalks, and pedestrian ways. Applications for land division approval and site plan review shall include photometric plans. ***Complies see sheet G7.0***

**L.** Shared access: The City may require the provision of shared access drives through the land division review process. Shared access drives are intended to maintain adequate driveway spacing and circulation along the designated Parkway and Collector streets. ***Complies shared access provided***

**M.** All landscaped areas shall be irrigated. ***Complies provided***

**N.** Other regulations: The C-M zone, M-1 zone, and M-2 zone provide other applicable regulations related to vision clearance, Highway 99E sidewalk width, setback measurement, outside storage, and wireless/cellular tower certification. (Ord. 1008 section 1[part], 1998; Ord. 1237, 2007; Ord. 1299, 2008)

***Response:*** ***A. Lot area - Complies 2.4 acres None required***
***B. Lot width - Complies none required***
***C. Minimum yards - Complies and exceeds 35' front yard and 10' sideyard***
***D. Max Building Height - Complies with 28'-6" height***
***E. Max Coverage - Complies none in M-2 Zone***

***F. Street Access - Complies space between access is greater than 200'***
***G. Street Improvements - Complies sidewalk being installed road exists***
***H. Building Orientation - Complies main entry facing street.***
***I. ROW Planting - Existing complies***
***J. Metal Buildings - Not Applicable***
***K. Lighting - Complies lighting plan provided***
***L. Shared Access - Complies shared access provided***
***M. Irrigation - Complies all Landscaping to be irrigated***
***N, Vision Clearance met***

**16.35.60** Design guidelines.

The Industrial Area Master Plan provides design guidelines for reviewing development applications. The guidelines, which are incorporated into Table 16.35.000, encourage:

**A.** Flexibility to align local streets based on parcelization and development requirements;

**B.** Tree retention, planting of large (3-inch) caliper trees, and use of lawn/ground cover planting in front yard setbacks;

**C.** Placement of buildings at or near the setback line;

**D.** Placement of parking areas to the side or rear of buildings;

**E.** Placement of smaller commercial buildings at or near the street;

**F.** Building entries visible from the street with direct pedestrian connections;

**G.** Use of quality building materials;

**H.** Architectural detail to break up and articulate large surfaces and volumes, and to accentuate building entries; and

**I.** Open space retention and trail connections, as designated by the Master Plan. (Ord. 1008, section 1[part], 1998)

**16.35.70** I-O Design review matrix.

The City uses the following matrix to evaluate compliance with the I-O design guidelines. The matrix substitutes for the general design review matrix provided in Chapter 16.49. Design review applications must comply with all other applicable provisions of Chapter 16.49, and achieve scores equal to or greater than the minimum acceptable scores in the matrix. (See Master Plan for illustrations.)

**A.** Exception: The City may reduce the minimum acceptable score(s) upon finding that certain provisions do not apply to a proposed development.

**Table 16.35.040**

| CRITERIA | Possible Scores |
|---|---|
| **Parking** | |
| Parking areas located to the side or rear of buildings as viewed from public right-of-way: <50% of parking spaces=0; 50%-75%=1; 100%=2.<br>**75% of the parking is located to side and rear** | **0** ***1*** **2** |
| 1<br>Increase minimum interior parking lot landscape over the base 15%: 15%-18%=0; 18%-22%=1; >22%=2.<br>**Interior parking lot landscaping covers 18.6%** | **0** ***1*** **2** |
| Increase the number of trees planted within buffers and/or within the parking area: 100%-105% of base requirement*=0; 105%-110% of base requirement=1;>110%=2. *****The base requirement is determined based on total parking area/number of spaces, and parking setback perimeter, see Chapter 16.49.120.<br>**Additional trees have been added to exceed the base requirement of 110%. See Calculation on Landscape plan** | **0** **1** ***2*** |
| Number of parking spaces (% of required minimum): >110%=0; 110%-105%=1; 105%-100%=2. | **0** ***0*** **2** |
| **Minimum Acceptable Score** **4 points** | ***4*** |
| **Transportation/Circulation** | |
| Proposed local street alignments: Street not proposed = 0; Street(s) proposed with some modification to master plane = 1; proposed street(s) approximate recommended alignments = 2. *Note: the Planned Parkway and collector streets are required elements, except as indicated by the Industrial Area Master Plan*<br>**Street is existing and needs no improvement. This criterion is not applicable** | **0** **1** **2**<br>***N/A*** |
| Design of all pedestrian ways (private, on-site pathways): six feet wide, raised concrete with painted crosswalks (standard) = 0; standard with brick or similar pavers for pathways and crosswalks = 1; greater than 6 feet wide (inclusive of curb) and use of brick or similar pavers for pathways and crosswalks = 2<br>**Sidewalks are to be wider than 6'-0". All walks and crosswalks are to be scored to create a brick like pattern.** | **0** **1** ***2*** |

| | |
|---|---|
| Number of pedestrian connections between the street sidewalk and internal circulation system: One connection = 0 Two connections = 1<br>**This site is best served by one pedestrian connection from the public way due to its narrow width and no benefit would be gained from a second connection. A second connection with this width would only add additional impervious surface area increasing storm water runoff.** | **0 1 2**<br>***N/A*** |
| **Minimum Acceptable Score (some provisions may not apply) 3 points** | ***2*** |
| **Tree Retention, Open Space conservation and Trail Connections** | |
| Preserves trees as recommended by arborist or City Planning Department: <50% of recommended trees preserved=0; 50%-75%=1; 75%-100%=2<br>**All but one existing tree is to be preserved. These trees were planted with building 'D' construction** | **0** ***1*** **2** |
| Replaces trees that were recommended for retention: No=0; Yes=1. Mitigation based on reasonable tree replacement ratio.<br>**The one tree (see above) not being retained is being replaced. See landscape plan** | **0** ***1*** |
| When site includes designated open space, park or trail connection: proposal does not dedicate or establish easement for designated open space/park or trail connection=0; dedicated or establishes easement=1; dedicated land/right-of-way and constructs improvements=2.<br>**Site does not include designated open space, park or trail connection. This criterion is not applicable** | **0 1 2**<br>***N/A*** |
| **Minimum Acceptable Score (some provisions may not apply) 3 points** | ***2*** |

| | |
|---|---|
| **Landscaping** | |
| Trees installed at 3 inch caliper: <25% of trees=0; 25%-50%=1; 50%-100%=2. | ***0*** **1 2** |
| Usable outdoor amenity provided with development (e.g., water features, plazas, seating areas, and similar features): no=0; yes=1; yes and public access provided (i.e., through an easement)=2.<br>**A Seating area and bench has been provided at the pedestrian connection to the public way.** | **0** ***1*** **2** |
| Amount of grass or other plantings used for ground cover treatment: <75%=0; 75%-90%=1; 90%-100%=2.<br>**Plans (L1.0) call for** | **0 1** ***2*** |
| **Minimum Acceptable Score 3 points** | ***3*** |
| **Building Appearance and Orientation** | |

| | |
|---|---|
| Building orientation at or near the street: parking or drive separates building from street=0; at least 20% of elevation within 5 feet of minimum setback=1; at least 20% of elevation is at minimum setback=2. | ***0*** **1 2** |
| Building entrances visible from the street: no=0; yes=1.<br>**Building entrance is visible from the public way** | **0** ***1*** |
| Buildings use quality materials: concrete, wood, or wood siding=0; concrete masonry, stucco, or similar material=1; brick or similar appearance=2.<br>**Building design combines the use of a multi-color paint scheme with offset storefront glazing and recessed shadow lines (reveals) and prefinished metal trims to provide a quality appearance that ties in with that of the existing structures to the east and west of this structure** | **0** ***1*** **2** |
| Articulation and/or detailing to break up large building surfaces and accentuate the building entrance(s): no=0; yes=2.<br>**Articulation has been provided through the use of recessed entries, offset glazing systems, and horizontal recessed reveals. Loading docks are recessed into the building for added articulation.** | **0** ***2*** |
| **Minimum Acceptable Score** **4 points** | ***4*** |

## Chapter 16.43

## OUTDOOR LIGHTING STANDARDS

**16.43.010 Purpose**.

The purpose of this section is to provide regulations for outdoor lighting that will:

**A.** Regulate uses of outdoor lighting for nighttime safety, utility, security, productivity, enjoyment and commerce.

**B.** Minimize glare, particularly in and around public rights-of-way.

**C.** Minimize light trespass, so that each owner of property does not cause unreasonable light spillover to other property.

**D.** Preserve the night sky for astronomy and enjoyment.

**E.** Conserve energy and resources to the greatest extent possible.

**16.43.030 Applicability.**

The outdoor lighting standards in this section apply to the following:

**A.** New uses, buildings, and major additions or modifications:

**1.** For all proposed new land uses, developments, buildings, and structures that require a building permit, all outdoor lighting fixtures shall meet the requirements of this Code.

**2.** All building additions or modifications of fifty (50) percent or greater in terms of additional dwelling units, gross floor area, or parking spaces, either with a single addition or cumulative additions, shall meet the requirements of this Code for the entire property, including previously installed and any new outdoor lighting.

**B.** Minor additions. Additions or modifications of less than fifty (50) percent to existing uses, in terms of additional dwelling units, gross floor area, or parking spaces, shall meet the requirements of this Code with regard to shielding and lamp type for all new lighting.

***Response:***
***Building and site lighting has been designed to comply with the above standards. See sheet G7.0 for the site lighting plan and details.***

## Chapter 16.46

## ACCESS LIMITATIONS ON PROJECT DENSITY

***Response:***
***Chapter is for residential developments - see access standards above in Section 16.10.070***

## Chapter 16.49

## SITE AND DESIGN REVIEW

**16.49.030 Site and design review plan approval required.**

**A.** The following projects require site and design review approval, except as exempted in B below:

**1.** All new buildings.

**2.** All new mobile home parks.

**3.** Major building remodeling above 60% of value.

**4.** Addition of more than 5,000 square feet of additional gross floor area in a one year period.

**5.** Construction activity which causes a decrease in pervious area in excess of 2,500 square feet in a one year period.

None of the above shall occur, and no building permit for such activity shall be issued, and no sign permit shall be issued until the site and design review plan, as required by this ordinance, has been reviewed and approved by the Board and their designees for conformity with applicable criteria.

**B.** The following are exempt from site and design review (but still may require a site plan review and/or building permit):

**1.** Signs that are not a part of a reviewable development project. Signs that are a part of a reviewable development project, and that are proposed more than two (2) years beyond the final occupancy of the reviewed development.

**2.** Alterations or remodeling that do not change the exterior of the building.

**3.** Temporary public structures which will be removed within two (2) years of placement.

**4.** Commercial and industrial accessory structures under 500 square feet.

**5.** Temporary commercial tent/canopy structures, which meet the Uniform building or Fire Code, and which will be removed within thirty (30) days of placement.

**6.** Temporary Vendor activity permitted pursuant to Section 16.08.140.

**7.** Parking lot or paving projects. If no buildings or structures are involved, paving or parking lot development in excess of 2,500 square feet of impervious surface is exempted from a Type III site and design review. However, parking lot and paving projects in excess of 2,500 square feet of impervious surface require Type I site plan review. All new paved areas and parking lots in excess of 2,500 square feet must meet the requirements of Section 16.49.150.

**8.** Single family or two-family dwellings and their accessory structures, and any alterations or remodeling thereof.

**9.** Minor public facilities.

**10.** Approved Public Art Murals as defined in CMC Chapter 2.80.020.

**C.** Construction, site development and landscaping shall be carried out in substantial accord with the approved site and design review plan. Review of the proposed site and design review plan and any changes thereto shall be conducted in accordance with site and design review procedures.

**D.** No fence/wall shall be constructed throughout a project that is/was subject to site and design review approval where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission. (Ord. 1315, 2009; Ord. 1237, 2007; Ord. 1080,

2001; Ord. 1019 section 2, 1999; Ord. 981 sections 52&53, 1997; Ord. 955 section 23, 1996; Ord. 890 section 43, 1993; Ord. 848, Part III, section 1, 1991; Ord. 1341, 2011)

***Response:***
***The proposed Building is greater than 5,000 s.f. therefore, we are submitting for Design Review.***

**16.49.035 Application for Site and Design Review**

**A.** For site and design review projects in the Downtown Canby Overlay Zone, applicants may choose one of the following two processes:

**1.** Type II – If the applicant meets all applicable site and design review standards set forth in Chapters 16.41 and 16.49; the applicant shall submit a Type II application for approval pursuant to the approval criteria set forth in 16.49.040; or

**2.** Type III – If the applicant proposes the use of alternative methods or materials to meet the intent of the site and design review standards set forth in Chapter16.41, the applicant shall submit a Type III application for approval pursuant to the approval criteria set forth in 16.49.040. The applicant must still meet all applicable requirements of Chapter 16.49.

**B.** All other projects subject to site and design review approval pursuant to Section 16.49.030 are subject to the Type III procedural requirements set forth in Chapter 16.89. The applicant shall submit a Type III application for approval pursuant to the approval criteria set forth in 16.49.040. (Ord 1296, 2008)

***Response:***
***We are submitting for a Type III Design Review.***

**16.49.040 Criteria and standards.**

**A.** In review of a Type III Site and Design Review Application, the Board shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the following:

**1.** The proposed site development, including the site plan, architecture, landscaping and graphic design, is in conformance with the standards of this and other applicable city ordinances insofar as the location, height and appearance of the proposed development are involved; and

**2.** The proposed design of the development is compatible with the design of other developments in the same general vicinity; and

**3.** The location, design, size, color and materials of the exterior of all structures and signs are compatible with the proposed development and appropriate to the design character of other structures in the same vicinity.

**4.** The proposed development incorporates the use of LID best management practices whenever feasible based on site and soil conditions. LID best management practices include, but are not limited to, minimizing impervious surfaces, designing on-site LID stormwater management facilities, and retaining native vegetation.

**5.** The Board shall, in making its determination of compliance with this Ordinance, shall use the matrix in Table 16.49.040 to determine compatibility unless this matrix is superseded by another matrix applicable to a specific zone or zones under this title. An application is considered to be compatible with the standards of Table 16.49.040 if the following conditions are met:

**a.** The development accumulates a minimum of 60 percent of the total possible number of points from the list of design criteria in Table 16.49.040; and

**b.** At least 10 percent of the points used to comply with (a) above must be from the list of LID Elements in Table 16.49.040. (Ord. 1338, 2010).

**B.** In review of a Type II Site and Design Review Application described in Section 16.49.035.A.1, the Planning Director shall, in exercising his powers, duties or functions, determine whether there is compliance with the DCO site and design review standards.

**C.** In review of a Type III Site and Design Review Application, the Board shall, in exercising or performing its powers, duties or functions, determine whether there is compliance with the INTENT of the design review standards set forth in this Ordinance.

**D.** The Board shall, in making its determination of compliance with the above requirements, be guided by the objectives and standards set forth in this Ordinance. It must be demonstrated that all required public facilities and services are available, or will become available through the development, to adequately meet the needs of the proposed development. If the site and design review plan includes utility facilities or public utility facility, then the City Planner shall determine whether those aspects of the proposed plan comply with applicable standards..

**E.** The Board shall, in making its determination of compliance with the requirements set forth, consider the effect of its action on the availability and cost of needed housing. The Board shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of housing beyond the minimum necessary to achieve the purposes of this ordinance.

**F.** As part of the site and design review, the property owner may apply for approval to cut trees in addition to those allowed in Chapter 12.32, the city Tree Ordinance. The granting or denial of said application will be based on the criteria in Chapter 12.32. The cutting of trees does not in and of itself constitute change in the appearance of the property which would necessitate application for site and design review. (Ord. 848, Part III, section 2, 1991; Ord. 955 section 24 & 25, 1996; Ord 1237, 2007, Ord 1296, 2008)

***Response:***
***Building 'C' has been designed to comply with the general INTENT of the city code .***
***This project is the second phase of the Trend Business Center and as such continues with the existing size, shape, features of the buildings and landscaping of that which already exists in the park.***

***Please note:***

1) ***The proposed Building meets the site requirements of setbacks, heights, landscaping , parking and access.***
2) ***The proposed Building meets the building requirements of height, access, conformance with surrounding developments and general layout.***
3) ***We are not proposing to remove any trees as part of this new development.***

**Table 16.49.040 Site Design Review Menu**
***Not applicable - Please see I-O Design Matrix 16.35.70 above***

**16.49.080 General provisions for landscaping.**

**A.** The standards set forth in this section are minimum standards for landscaping.

**B.** The purpose of these landscaping standards is to provide uniform standards for the development and maintenance of the landscaping of private property and public rights-of-way. The purpose of landscaping is to improve the livability of residential neighborhoods, enhance the customer attraction of commercial areas, increase property values, improve the compatibility of adjacent uses, provide visual separation and physical buffers between incompatible adjacent land uses, provide visual relief from the expanse of parking lots, screen undesirable views, contribute to the image and appeal of the overall community, and mitigate air and noise pollution.

These standards are also intended to facilitate Low Impact Development (LID) techniques through the retention of existing native vegetation and mature, healthy trees, to the extent feasible. Additional LID related goals of this chapter are to: reduce erosion and storm water runoff; preserve and promote urban wildlife habitats; reduce the amount of carbon dioxide in the air; shade and reduce the temperature of adjacent waterways; and enhance the streetscapes along the city's public rights-of-way with an emphasis on trees and LID stormwater facilities.

**C.** The minimum area requirement for landscaping for developments coming under design review shall be the percentage of the total land area to be developed as follows. Parking lot landscaping area is included in calculating the following landscape areas:

**1.** Fifteen (15) percent for all industrial and commercial zones (except the Downtown-Commercial zone, but including the Commercial-Residential zone).

**2.** Seven and one-half (7.5) percent for the Downtown-Commercial zone.

**3.** Thirty (30) percent for all residential zones.

***Response:***
***Complies - See sheet L1.0 (landscape Plan) that is designed to meet the city requirements for quantity (15% min.) and design (plant types, location, etc.). Screening of the parking lots is as shown on the Landscape plan sheet L1.0 by use of evergreen planting (Japanese Holly/Rhododendron).***

**Chapter 16.89**

**APPLICATION AND REVIEW PROCEDURES**

**16.89.020 Description and Summary of Processes.**

All land use and development applications shall be decided by using the procedures contained in this Chapter. Specific procedures for each type of permit are contained in Sections 16.89.030 through 16.89.060. The procedure type assigned to each permit governs the decision-making process for that permit. Additional requirements may be found in the individual chapters governing each permit type. The four types of procedure are described below. Table 16.89.020 lists the City's land use and development applications and their required procedures.

**A.** Type I Procedure (Ministerial). Type I decisions are made by the Planning Director without public notice and without a public hearing. The Type I procedure is used when there are clear and objective approval criteria and applying those criteria requires no use of discretion.

**B.** Type II Procedure (Administrative). Type II decisions are made by the Planning Director with public notice and an opportunity for a public hearing. The appeal of a Type II decision is heard by the Planning Commission.

**C.** Type III Procedure (Quasi-Judicial/Legislative). Type III decisions are made by the Planning Commission after a public hearing, with appeals reviewed by the City Council. Type III procedures generally use discretionary approval criteria.

**D.** Type IV procedure (Council Decision). Type IV decisions generally apply to legislative matters, but include certain other applications as well. Legislative matters involve the creation, revision, or large-

scale implementation of public policy (e.g., adoption of land use regulations, zone changes, and comprehensive plan amendments that apply to entire districts). Type IV matters are considered initially by the Planning Commission with final decisions made by the City Council. Annexations and certain quasi-judicial applications are also processed under the Type IV process. (Ord. 1080, 2001; Ord 1237, 2007)

***Response:***
***This project is submitting for Type III Design Review and understand that the process requires a meeting with the city Planning Commission.***

**16.89.050 Type III Decision.**

**A.** Pre-application conference. A pre-application conference may be required by the Planning Director for Type III applications.

**B.** Neighborhood meetings. As directed in Table 16.89.020, the applicant may be required to present their development proposal at a neighborhood meeting before the City accepts the application as complete. See Section 16.89.070.

**C.** Application requirements. Type III applications shall be made on forms provided by the Planning Director. The application shall be accompanied by all required information and fees.

**D.** Public notice.

**1.** At least 20 days prior to a public hearing on a Type III decision or a Type II appeal decision, the Planning Director shall mail notice meeting the requirements of state law to:

**a.** All owners of real property and, if the owner's address is different from the site address, all residents of property, within the distance prescribed in Table 16.89.020;

**b.** The appointed chair of any neighborhood association whose boundaries include the subject property;

**c.** Any person who submits a written request to receive notice; and

**d.** Any governmental agency which is entitled to notice under an intergovernmental agreement entered into with the City.

**e.** For appeals, the appellant and all persons who provided testimony.

**2.** Notice of any proposal that includes a new transportation facility or improvement, and where these facilities or improvements included or may impact a collector or arterial street, will be sent to the ODOT and Clackamas County or any special interest transportation groups as appropriate. Special interest transportation groups could include trucking organizations, bicycle and pedestrian interest groups, and interest groups for people with disabilities. Information that should be conveyed with the notice includes the following:

**a.** Project location

**b.** Proposed land use action
**c.** Location of project access point(s)

**3.** The City shall prepare an affidavit of mailing for the public notice and make the affidavit part of the application file. Failure of any individual to receive notice as prescribed in this section does not invalidate the proceedings.

**4.** Written notice shall be published in a newspaper of general circulation in Canby once in either of the two consecutive weeks prior to the hearing.

**5.** At least ten (10) days before the hearing, written notice shall be posted at City Hall and such other conspicuous locations as the Council may determine to be appropriate.

**6.** At least ten (10) days before the hearing, the applicant shall post notice of the hearing on the property as directed by the Planning Director.

**7.** The Planning Director may expand the notice area or take other steps to assure that affected property owners or residents are made aware of the pending public hearing.

**8.** Any application that involves access to the state highway system must be provided to the Oregon Department of Transportation for their review and comment regarding conformance with state access management standards and requirements.

**E.** Conduct of public hearing.

**1.** In all evidentiary hearings required by this title the following procedures shall be followed:

**a.** All interested persons in attendance shall be heard on the matter of hearing, and this fact shall be communicated to those in attendance;

**b.** A summary of the application or other matter for hearing shall be given by the presiding officer or their designee;

**c.** The staff report shall be made followed by questions, if any, of the staff by the hearings body;

**d.** The public hearing shall be opened and testimony shall be received in the following order:

**i.** Applicant;

**ii.** Proponents;

**iii.** Opponents; and

**iv.** Rebuttal by proponents or applicant;

**e.** Close public hearing;

**f.** Questions and discussion by hearing body;

**g.** Decision by the hearing body except that further discussions, decision, or reopening of the public hearing may be postponed to another meeting, the time, date, and place of which shall be announced before adjournment.

**2.** All persons who speak at the hearing shall identify themselves by name, address, and interest in the matter. Attorneys or other agents shall be allowed to speak on behalf of all participants.

**3.** Physical evidence in the form of written documents, photographs, or other exhibits may be accepted by the hearing body if deemed to be pertinent.

**4.** A record made at any prior evidentiary hearing may be accepted, considered, and used by the hearing body at any subsequent hearing, and said body, by majority vote of a quorum present, may deny to accept or hear any repetitious matter.

**5.** The hearing body may recess a hearing in order to obtain additional information or to serve further notice upon other property owners or persons it decides may be interested. Upon recessing for these purposes, the hearing body shall announce the time and date when the hearing will be resumed.

**6.** Before the conclusion of the initial evidentiary hearing, any participant may ask the hearings body for an opportunity to present additional relevant evidence or testimony that is within the scope of the hearing. The hearings body shall grant the request by scheduling a date to finish the hearing as follows:

**a.** If the hearings body grants a continuance, the completion of the hearing shall be continued to a date, time, and place at least seven days after the date of the first evidentiary hearing. An opportunity shall be provided at the second hearing for persons to present and respond to new written evidence and oral testimony. If new written evidence is submitted at the second hearing, any person may request, before the conclusion of the second hearing, that the record be left open for at least seven days, so that they can submit additional written evidence or testimony in response to the new written evidence; or

**b.** If the hearings body leaves the record open for additional written evidence or testimony, the record shall be left open for at least seven days after the hearing. Any participant may ask the City in writing for an opportunity to respond to new evidence submitted during the period the record was left open. If such a request is filed, the hearings body shall reopen the record as follows:

**i.** When the hearings body re-opens the record to admit new evidence or testimony, any person may raise new issues which relate to that new evidence or testimony.

**ii.** An extension of the hearing or record granted pursuant to this subsection is subject to the limitations of ORS 227.178 (120-day rule), unless the continuance or extension is requested or agreed to by the applicant.
**iii.** If requested by the applicant, the City shall allow the applicant at least seven days after the record is closed to all other persons to submit final written arguments in support of the application, unless the applicant expressly waives this right. The applicant's final submittal shall be part of the record but shall not include any new evidence.

**F.** Decision process.

**1.** Approval or denial of a Type III decision or appeal of a Type II decision shall be based on standards and criteria located in the code.

**2.** The hearings body shall issue a final written order containing findings and conclusions that approve, approve with conditions, or deny the application.

**3.** The written decision shall explain the relevant criteria and standards, state the facts relied upon in rendering the decision, and justify the decision according to the criteria, standards, and facts.

**4.** In cases involving attorneys, the prevailing attorney shall prepare the findings, conclusions, and final order. Staff shall review and, if necessary, revise, these materials prior to submittal to the hearings body.

**G.** Notice of Decision.

**1.** The written findings shall be sent to:

**a.** Any person who submits a written request to receive notice, provides written comments during the application review period, or provides written or oral testimony in the public hearing;

**b.** The applicant and owner of the subject property;

**c.** Any governmental agency which is entitled to notice under an intergovernmental agreement entered into with the City.

**2.** The written findings shall include information on the application, the City's decision, and a statement explaining how an appeal of the decision may be filed.

**H.** Effective Date. A Type III decision is final for purposes of appeal when it is mailed by the City.

**I.** Appeal. The Planning Commission's decision on a Type III decision or Type II appeal may be appealed to the City Council as follows:

**1.** The following have legal standing to appeal:

**a.** The applicant;

**b.** Any person who was mailed notice of the decision;
**c.** Any other person who participated in the proceeding by testifying or submitting written comments; and

**d.** The City Council, on its own motion.

**2.** Procedure.

**a.** A Notice of Appeal shall be filed in writing, on forms provided for the purpose by the Planning Director, within 10 days of the date the Notice of Decision was mailed.

**b.** The Notice of Appeal shall be accompanied by all required information and fees.

**c.** The appeal shall be limited to the specific issues raised during the comment period and public hearing process unless the hearings body allows additional evidence or testimony concerning any other relevant issue. The hearings body may allow additional evidence if it determines that such evidence is necessary to resolve the case. The purpose of this requirement is to limit the scope of appeals by encouraging persons to be involved in the public hearing. Only in extraordinary circumstances should new issues be considered by the hearings body on an appeal.

**3.** The City Council shall overturn the decision of the Planning Commission only when one or more of the following findings are made:

**a.** That the Commission did not correctly interpret the requirements of this title, the Comprehensive Plan, or other requirements of law;

**b.** That the Commission did not observe the precepts of good planning as interpreted by the Council; or

**c.** That the Commission did not adequately consider all of the information which was pertinent to the case.

**4.** The Council's action on an appeal shall be governed by the same general regulations, standards, and criteria as apply to the Commission in the original consideration of the application.

**J.** Any decision of the Planning Commission may be appealed to the City Council unless otherwise specified in this Title. Such appeals will be processed using the Type III procedures unless otherwise specified in this Title.

**K.** The decision of the City Council regarding a Type IV decision, appeal of a Planning Commission decision, or any other process contained within this title, is the final decision of the City. (Ord. 1080, 2001; Ord. 1111 section 5, 2003; Ord 1237, 2007)

***Response:***

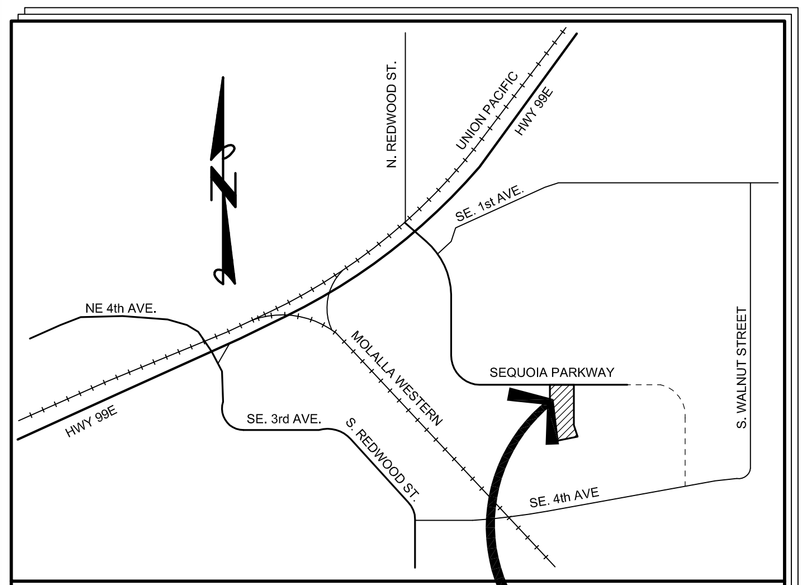
***Please note the following:***

1) ***The Pre-Application was held on 1/14/14. A copy of the meeting minutes are attached as part of our submittal package.***
2) ***Due to the fact that this site is surrounded by other commercial/industrial facilities, the requirement for a neighborhood meeting has been waived by the Planning Director.***
3) ***All other application requirements are included in this submittal package.***

Chapter 16.120

## PARKS, OPEN SPACE AND RECREATION LAND

***Not Applicable***




## Vicinity Map:

1"=900.0'

# TREND BUSINESS CENTER

# Building 'C'

341 S. Sequoia Parkway
Canby, Oregon

## Special Inspection:

## Project Directory:

### Owner / Developer:

Trend Business Center, LLC
7190 SW Sandburg Street, Suite 5
Tigard, OR 97223
Phone: (503) 624-4649
Contact: Scott McCormack

### Engineer:

VLMK Consulting Engineers
3933 Southwest Kelly Avenue
Portland, Oregon 97201
Phone: (503) 222-4453
Contact: Havlin G. Kemp, P.E.
Patrick S. Haugen

### Landscape Architect:

Otten and Associates
3933 Southwest Kelly Avenue Suite B
Portland, Oregon 97239
Phone: (503) 972-0311
Contact: Janet Otten

### Site Surveyor:

Northwest Surveying
1815 Northwest 169th Place
Beaverton, Oregon. 97006
Phone: (503) 848-2127
Contact: Clint Stubs

### Contractor:

Perlo Construction
16101 SW 72nd Avenue Suite 200
Portland, OR 97224
Phone: (503) 624-2090
Contact: -

## Project Permit Numbers:

| Permit # / Jurisdiction: | Descrition: | Date: |
|---|---|---|
| DR - Canby T.B.D. | Site Design Review Submittal | Feb. 2014 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

## Approval Signature Block:

| Approved for Construction By: | Date: | With Changes Noted: |
|---|---|---|
| PLANNING: | | ☐ |
| PUBLIC WORKS | | ☐ |
| CANBY UTILITY WATER | | ☐ |
| CANBY UTILITY ELECTRIC | | ☐ |
| CANBY TELEPHONE | | ☐ |
| NW NATURAL GAS | | ☐ |
| FIRE | | ☐ |
| CITY ENGINEER | | ☐ |

NOTE:
THIS BLOCK IS FOR SITE UTILITY WORK/PERMIT ONLY.

## Deferred Submittals (Bidder Design):

| NO. | SYSTEM DESCRIPTION | SUB-CONTRACTOR | SUBMITTAL |
|---|---|---|---|
| 1 | ELECTRICAL | TO BE DETERMINED | DIRECTLY TO CITY BY SUB-CONTRACTOR |
| 2 | MECHANICAL | TO BE DETERMINED | DIRECTLY TO CITY BY SUB-CONTRACTOR |
| 3 | FIRE PROTECTION | TO BE DETERMINED | DIRECTLY TO CITY BY SUB-CONTRACTOR |
| 4 | PLUMBING | TO BE DETERMINED | DIRECTLY TO CITY BY SUB-CONTRACTOR |
| 5 | OPEN-WEB STEEL JOISTS AND GIRDERS | TO BE DETERMINED | SHOP DRAWINGS |
| 6 | LANDSCAPE IRRIGATION | TO BE DETERMINED | DIRECTLY TO CITY BY SUB-CONTRACTOR |

NOTE:
IN ACCORDANCE WITH I.B.C. SECTION 106.3.4.2 DEFERRED SUBMITTAL ITEMS SHALL BE REVIEWED BY VLMK PRIOR TO SUBMITTAL TO THE BUILDING OFFICIAL FOR PERMIT APPROVAL. THE SUBCONTRACTOR OR VENDOR IS RESPONSIBLE TO PROVIDE CUSTOMARY DESIGN DOCUMENTS AND PERMIT COORDINATION FOR THEIR DEFERRED SUBMITTAL ITEMS. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

## Schedule of Drawings:

REVISIONS: 1

## Description of Sets:

| SHEET | TITLE | DATE | DESIGN REVIEW 02 / 11 / 14 | REVISED PER OWNER AND PLANNING DEPARTMENT 03 / 17 / 14 |
|---|---|---|---|---|
| CVR 1.0 | COVER SHEET | | ● | Ⓡ |
| G 1.0 | SITE PLAN AND SHELL CODE SUMMARY | | ● | Ⓡ |
| G 2.0 | GRADING PLAN | | ● | Ⓡ |
| G 2.1 | GRADING DETAILS | | | |
| G 3.0 | UTILITY PLAN | | ● | Ⓡ |
| G 4.0 | EROSION CONTROL PLAN | | | |
| G 4.1 | EROSION CONTROL DETAILS | | | |
| G 5.0 | CIVIL DETAILS | | | |
| G 5.1 | CIVIL DETAILS | | | |
| G 5.2 | CIVIL DETAILS | | | |
| G 6.0 | SITE DETAILS | | ● | Ⓡ |
| G 6.1 | SITE DETAILS | | ● | Ⓡ |
| G 7.0 | SITE LIGHTING PLAN | | ● | Ⓡ |
| - | SITE SURVEY | | ● | ○ |
| - | SITE SURVEY | | ● | ○ |
| L 1.0 | SITE LANDSCAPE PLAN | | ● | Ⓡ |
| A 1.0 | FLOOR PLAN | | ● | Ⓡ |
| A 1.1 | MEZZANINE FLOOR PLANS | | | |
| A 2.0 | BUILDING ELEVATIONS | | ● | Ⓡ |
| A 2.1 | BUILDING SECTIONS | | | |
| A 3.0 | WALL SECTIONS | | | |
| A 3.1 | WALL SECTIONS | | | |
| A 4.0 | STOREFRONT PLANS/ELEVATIONS | | | |
| A 4.1 | STOREFRONT DETAILS | | | |
| A 5.0 | ARCHITECTURAL DETAILS | | | |
| A 6.0 | ROOF PLAN AND DETAILS | | | |
| A 7.0 | SPECIFICATIONS | | | |
| A 8.0 | SPECIFICATIONS | | | |
| S 1.0 | FOUNDATION PLAN | | | |
| S 2.0 | FOUNDATION DETAILS | | | |
| S 3.0 | MEZZANINE FRAMING PLAN AND DETAILS | | | |
| S 4.0 | ROOF FRAMING PLAN | | | |
| S 5.0 | ROOF FRAMING DETAILS | | | |
| S 6.0 | PANEL DETAILS | | | |
| S 7.0 | PANEL ELEVATIONS | | | |
| S 8.0 | PANEL ELEVATIONS | | | |
| | STRUCTURAL CALCULATIONS | | | |
| | CIVIL CALCULATIONS | | | |

## Notes:

REMOVE AND REPLACE ALL PREVIOUS PRINTS UPON RECEIPT OF REVISED DRAWINGS. REPLACED DRAWINGS WITH REDLINES OR COMMENTS SHALL BE SAVED FOR RECORD.

● FIRST RELEASE OF DRAWING(S) AS NOTED UNDER 'DESCRIPTION OF SET'
○ RE-ISSUED WITH NO CHANGES
Ⓟ PRELIMINARY/PROGRESS DRAWING
Ⓧ DELETED DRAWING
Ⓡ REVISED DRAWING
Ⓒ CALCULATIONS - 8 1/2" X 11" BOUND SEPERATE

PROGRESS SET ☐
BID SET ☐
DESIGN REVIEW SET △1 ☒
PERMIT SET ☐
CONSTRUCTION SET ☐

DATE: JANUARY, 2014
SCALE: NONE
PROJ. NO.: 20130584
DRAWN: PSH
CHECKED: HGK

# COVER

TREND 'C' 20130584

VLMK CONSULTING ENGINEERS
3933 SW Kelly Avenue • Portland • Oregon 97201-4393
P 503.222.4453
F 503.248.9263
E vlmk@vlmk.com
W www.vlmk.com

20130584 0-Cover.dwg

## PAVEMENT SECTIONS

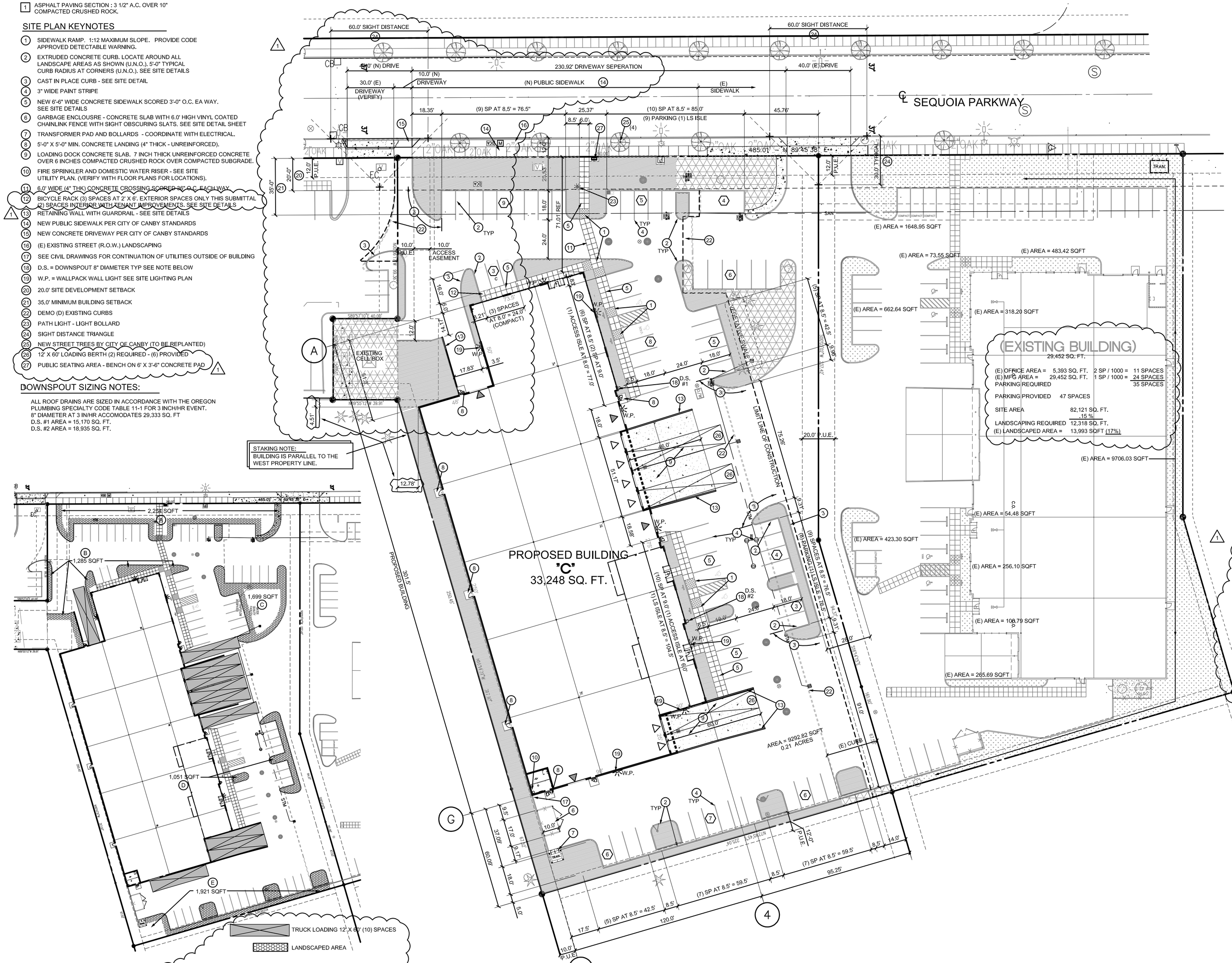
1 ASPHALT PAVING SECTION : 3 1/2" A.C. OVER 10" COMPACTED CRUSHED ROCK.

## SITE PLAN KEYNOTES

1. SIDEWALK RAMP. 1:12 MAXIMUM SLOPE. PROVIDE CODE APPROVED DETECTABLE WARNING.
2. EXTRUDED CONCRETE CURB. LOCATE AROUND ALL LANDSCAPE AREAS AS SHOWN (U.N.O.), 5'-0" TYPICAL CURB RADIUS AT CORNERS (U.N.O.). SEE SITE DETAILS
3. CAST IN PLACE CURB - SEE SITE DETAIL
4. 3" WIDE PAINT STRIPE
5. NEW 6'-6" WIDE CONCRETE SIDEWALK SCORED 3'-0" O.C. EA WAY. SEE SITE DETAILS
6. GARBAGE ENCLOUSRE - CONCRETE SLAB WITH 6.0' HIGH VINYL COATED CHAINLINK FENCE WITH SIGHT OBSCURING SLATS. SEE SITE DETAIL SHEET
7. TRANSFORMER PAD AND BOLLARDS - COORDINATE WITH ELECTRICAL.
8. 5'-0" X 5'-0" MIN. CONCRETE LANDING (4" THICK - UNREINFORCED).
9. LOADING DOCK CONCRETE SLAB. 7 INCH THICK UNREINFORCED CONCRETE OVER 6 INCHES COMPACTED CRUSHED ROCK OVER COMPACTED SUBGRADE.
10. FIRE SPRINKLER AND DOMESTIC WATER RISER - SEE SITE UTILITY PLAN. (VERIFY WITH FLOOR PLANS FOR LOCATIONS).
11. 6.0' WIDE (4" THK) CONCRETE CROSSING SCORED 36" O.C. EACH WAY.
12. BICYCLE RACK (3) SPACES AT 2' X 6'. EXTERIOR SPACES ONLY THIS SUBMITTAL (2) SPACES INTERIOR W/TENANT IMPROVEMENTS. SEE SITE DETAILS
13. RETAINING WALL WITH GUARDRAIL - SEE SITE DETAILS
14. NEW PUBLIC SIDEWALK PER CITY OF CANBY STANDARDS
15. NEW CONCRETE DRIVEWAY PER CITY OF CANBY STANDARDS
16. (E) EXISTING STREET (R.O.W.) LANDSCAPING
17. SEE CIVIL DRAWINGS FOR CONTINUATION OF UTILITIES OUTSIDE OF BUILDING
18. D.S. = DOWNSPOUT 8" DIAMETER TYP SEE NOTE BELOW
19. W.P. = WALLPACK WALL LIGHT SEE SITE LIGHTING PLAN
20. 20.0' SITE DEVELOPMENT SETBACK
21. 35.0' MINIMUM BUILDING SETBACK
22. DEMO (D) EXISTING CURBS
23. PATH LIGHT - LIGHT BOLLARD
24. SIGHT DISTANCE TRIANGLE
25. NEW STREET TREES BY CITY OF CANBY (TO BE REPLANTED)
26. 12' X 60' LOADING BERTH (2) REQUIRED - (6) PROVIDED
27. PUBLIC SEATING AREA - BENCH ON 6' X 3'-6" CONCRETE PAD

## DOWNSPOUT SIZING NOTES:

ALL ROOF DRAINS ARE SIZED IN ACCORDANCE WITH THE OREGON PLUMBING SPECIALTY CODE TABLE 11-1 FOR 3 INCH/HR EVENT.
8" DIAMETER AT 3 IN/HR ACCOMODATES 29,333 SQ. FT
D.S. #1 AREA = 15, 170 SQ. FT.
D.S. #2 AREA = 18,935 SQ. FT.




## PARKING LOT LANDSCAPE PLAN / CALCULATION

1" = 50.0'

| | | |
|---|---|---|
| TOTAL SITE IMPERVIOUS AREA: | 53,511 | SQFT. |
| SITE SIDEWALK AREAS: | 1,970 | SQFT, |
| TRUCK LOADING AREAS: | 7,500 | SQFT, |
| ADJUSTED SITE IMPERVIOUS AREA: | 44,041 | SQFT, |
| | 15 | % |
| REQUIRED LANDSCAPE AREA: | 6,606 | SQFT. |
| LANDSCAPE AREA PROVIDED: | 8,210 | SQFT. 18.6% |

## SITE PLAN

D = DEMOLISH OR REMOVE
E = EXISTING
N = NEW
P.U.E. = PUBLIC UTILITY EASEMENT
U.E. = UTILITY EASEMENT

## GENERAL NOTES:

PROPERTY LINE BEARINGS AND DISTANCES AS WELL AS SITE AREA CALCULATIONS ARE PROVIDED FOR ZONING AND PERMIT REVIEW ONLY. REAL PROPERTY LEGAL DESCRIPTIONS AND AREA CALCULATIONS ARE TO BE PROVIDED BY A REGISTERED PROFESSIONAL SURVEYOR.

1" = 30.0'

30 0 30 60 90

## SITE PLANNING SYMBOLS

- ASPHALT PAVING AS NOTED THIS SHEET
- LANDSCAPED AREA - SEE SHEET L1.0
- (E) LANDSCAPED AREA
- 00.0' CONTROL DIMENSION
- 6.0' HIGH CHAIN LINK FENCE WITH GATES AS SHOWN (SEE SPECIFICATIONS)
- GARB. GARBAGE ENCLOSURE - SEE SITE DETAIL SHEET
- DISABLED PARKING STALL. 9.0' STALL W/ 6.0' STRIPED SIDE ACCESS. PROVIDE CODE APPROVED SIGN AT EACH STALL SEE STANDARD DETAIL AT SITE DETAIL SHEET,
- VAN DISABLED VAN PARKING STALL. 9.0' STALL W/ 8.0' STRIPED SIDE ACCESS. PROVIDE CODE APPROVED SIGN AT EACH STALL SEE STANDARD DETAIL AT SITE DETAIL SHEET,
- 6 NUMBER OF STANDARD PARKING STALLS 8.5' X 18.0'
- 6 C NUMBER OF COMPACT PARKING STALLS 8.0' X 16.0'
- 6 SP AT 9, 0' = 54. 0' NUMBER AND WIDTH OF PARKING SPACES. COMPACT SPACES ONLY AS NOTED.
- DOCK DOOR
- GRADE DOOR

## GENERAL SYMBOLS

| EXIST | NEW | |
|---|---|---|
| ▨ | ■ | CATCH BASIN (CB) –OR– AREA DRAIN (AD) |
| ◎ | ● | MANHOLE (MH) |
| ○ | ● | UTILITY POLE |
| ◇ | ◆ | FIRE HYDRANT (FH) |
| M | M | METER |
| V | V | UTILITY VAULT |
| T | T | TRANSFORMER AND PAD |
| TRAN | TRAN | TRANSFORMER |
| ⊗ | ⊗ | VALVE BOX COVER |
| ☼ | ☼ | LIGHT POLE |
| ☼ | ☼ | WALL MOUNTED LIGHT |
| ⋈ | ⋈ | FIRE DEPARTMENT CONNECTION (FDC) |
| ⋈ | ⋈ | GATE VALVE |
| C.O. ○ | C.O. ○ | CLEAN OUT (CO) |

## PLANNING AND ZONING REVIEW:

| | |
|---|---|
| JURISDICTION | CITY OF CANBY |
| LAND USE ZONE | M-2 |
| OVERLAY ZONES | I-O |
| STREET ADDRESS | SEQUOIA PARKWAY |
| LEGAL DESCRIPTION | LOT 4, BURDEN, S.E. 1/4 OF SEC 34 T.3S, R.1E., W.M. CLACKAMAS COUNTY, OREGON |
| SETBACKS: STRUCTURES: | 20'-0" FRONT, 10'-0" SIDE, 0'-0" REAR |

AUTO PARKING REQUIRED

| | | |
|---|---|---|
| OFFICE: | 2 SPACES PER 1,000 SQ. FT. (1,500 FOR CALC) | 3 SPACES REQ'D |
| MFR / WHSE: | 1 SPACE PER 1,000 SQ. FT. (31,748 FOR CALC) | 32 SPACES REQ'D |
| | | 35 SPACES REQ'D |
| PARKING PROVIDED | 71 SPACES - (4) ADA (3) COMPACT (64) STANDARD 8.5, X 18' | |

BIKE PARKING REQUIRED

| | | |
|---|---|---|
| OFFICE: | 2 SPACES OR 1 PER 1,000 SQ. FT. (1,500 FOR CALC) = | 2 SPACES REQ'D |
| MFR / WHSE: | .1 SPACE PER 1,000 SQ. FT. (31,748 FOR CALC) = | 3 SPACES REQ'D |
| | 2' X 6' SPACE | 5 SPACES REQ'D |

(9) SPACES PROVIDED (3) SPACES EXTERIOR (2) SPACES INTERIOR

| | | |
|---|---|---|
| LANDSCAPING REQUIRED | 15% OF SITE AREA (106,337 SQ. FT.) | |
| | ,15 | |
| | 15,950 SQ. FT. REQUIRED | |
| LANDSCAPE PROVIDED | 14,317 SQ. FT. | (NEW) |
| | 5,261 SQ. FT. | (EXISTING) |
| | 19,578 SQ. FT. | 17.8% TOTAL |

## AREA SUMMARY - PROPOSED BUILDING "C" SITE:

| | | | |
|---|---|---|---|
| SITE AREA: | 106,337 SQFT, | 2.4 | ACRES (+/-) |
| BUILDING AREA: | 33,248 SQFT, | 31,3% | COVERAGE |
| LANDSCAPE TOTAL: | 19,578 SQFT, | 18,4% | COVERAGE |
| IMPERVIOUS SURFACE: | 53,511 SQFT, | 50,3% | COVERAGE |

## GENERAL IBC REVIEW:

INTERNATIONAL BUILDING CODE (IBC) REVIEW, 2009 EDITION, OSSC AMENDMENTS 4/01/10
INTERNATIONAL FIRE CODE, 2009 EDITION, OSSC AMENDMENTS 7/01/10

| | |
|---|---|
| OCCUPANCY | F-1/F-2 MANUFACTURING S-1/S-2 (WAREHOUSE), B (OFFICE) |
| CONSTRUCTION TYPE | V-B (CONCRETE TILT-UP WITH WOOD ROOF) |
| FULLY SPRINKLED | YES |
| BASIC ALLOWABLE AREA | 8,500 SQ. FT. (BASED ON F-1) |
| TOTAL ALLOWABLE AREA | 39,165 SQ. FT. (WITH AREA INCREASES) |
| TOTAL AREA | 34,205 SQ. FT. (PROPOSED) |

THIS PROJECT IS DESIGNED AS A "SHELL" BUILDING AND WILL ADDRESS THE FOLLOWING ITEMS WITH THE TENANT IMPROVEMENT PERMIT SUBMITTAL:
A. INTERIOR BIKE RACKS (IF REQUIRED),
B. CURTAIN BOARDS (IF REQUIRED) DUE TO THE USE OF DEMISING WALLS.
C. ENERGY CODE COMPLIANCE FORMS PER EACH TENANT.
D. EGRESS PATH AND LIGHTING PER EACH TENANT.
E. RACK PERMITS AND HIGH PILE STORAGE REQUIREMENTS PER EACH TENANT.

## ALLOWABLE AREA:

| | Weighted Average Sideyard Calculation - Yards 20 feet or greater | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | Total |
| Yard Width (20' to 60') | | 60 | 60 | 60 | 60 | 60 | 0 | 60 | 28 | 0 | 0 | 0 | 0 | 0 | 388 |
| Wall Length | | 93 | 276 | 30 | 24 | 90 | 250 | 28 | 50 | 0 | 0 | 0 | 0 | 0 | 841 |
| Yard Width x Wall Length | | 5580 | 16560 | 1800 | 1440 | 5400 | 0 | 1680 | 1400 | 0 | 0 | 0 | 0 | 0 | 33860 |
| W | 40.3 | Weighted Average = Sum of (Yard Width x Wall Lengths) / Sum of wall lengths | | | | | | | | | | | | | |
| F | 591 | Perimeter Wall Length where yards are greater than 20 feet | | | | | | | | | | | | | |
| P | 841 | Perimeter Wall Length all walls regardless of yard width | | | | | | | | | | | | | |
| Lf | 0.61 | Frontage Increase (Sect 506.2): Lf=(F/P - 0.25) x W/30 | | | | | | | | | | | | | |
| At | 8,500 | Base Allowable area (Table 503) | | | | | | | | | | | | | |
| Is | 3 | Sprinkler Increase (Sect 506.3) One story building = 3, 2 story = 2, 3 story = 3 | | | | | | | | | | | | | |
| | 1 | Number of stories | | | | | | | | | | | | | |
| Aa | 39,165 | Total Allowable Area (Sect 506.1): Aa = (At + (At x If) + (At x Is)) x Number of Stories | | | | | | | | | | | | | |
| | 34,205 | ACTUAL AREA (GROUND FLR) | | | | | | | | | | | | | |

| | | |
|---|---|---|
| 3 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |
| NO. | DATE | REVISIONS |


VLMK CONSULTING ENGINEERS
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www.vlmk.com


TREND BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

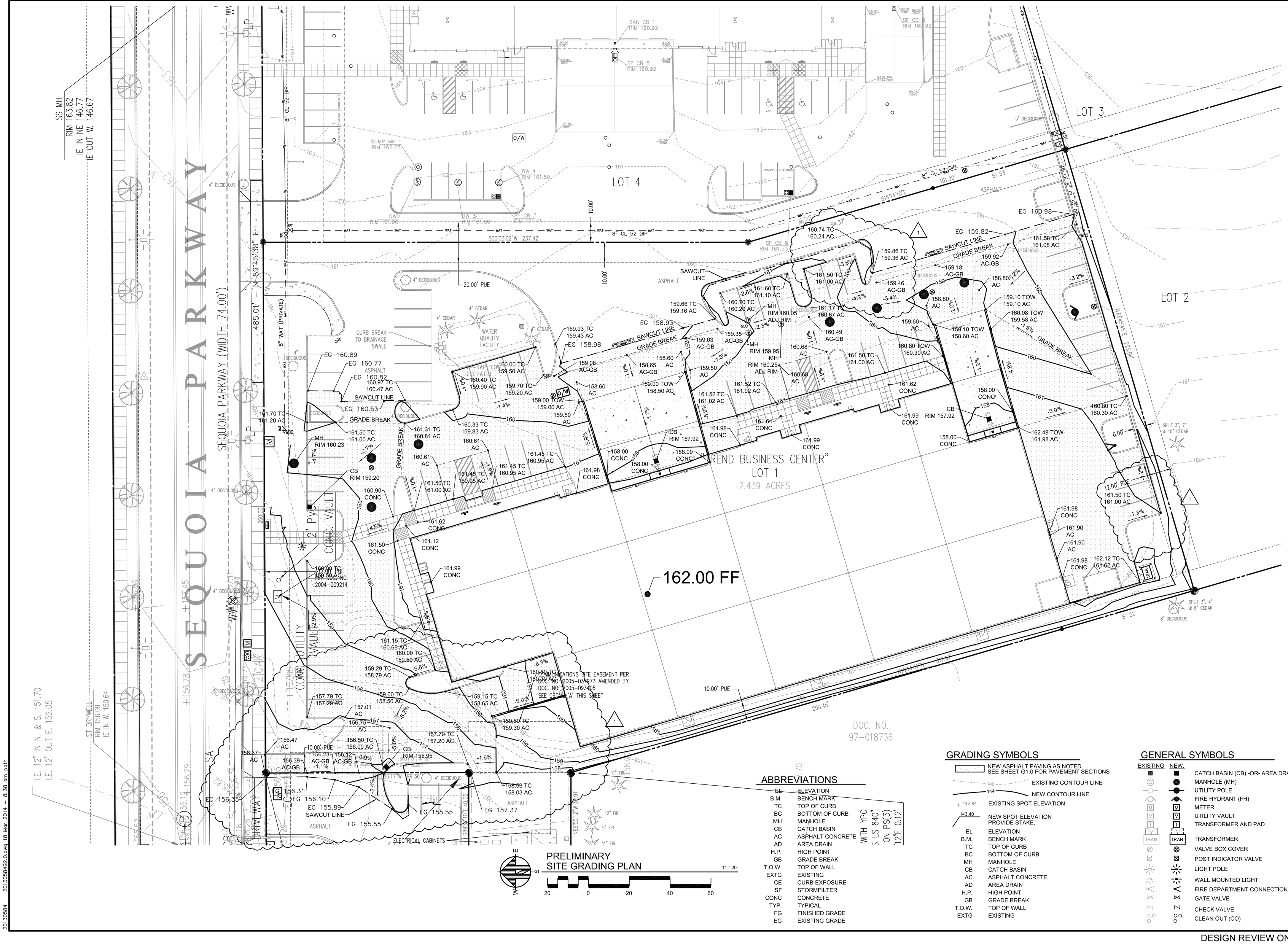
BUILDING "C"

SITE PLAN

| | |
|---|---|
| DATE | NOVEMBER 2013 |
| SCALE | NOTED |
| PROJECT NO. | 20130584 |
| DRAWN | PSH |
| CHECKED | HGK |
| SHEET NO | G1.0 |
| OF | |

20130584 20130584G1.0.dwg 18 Mar 2014 – 8:37 am path

DESIGN REVIEW ONLY - REVISED 3-17-14




## PRELIMINARY SITE GRADING PLAN

1" = 20'

20 0 20 40 60

## ABBREVIATIONS

| | |
|---|---|
| EL | ELEVATION |
| B.M. | BENCH MARK |
| TC | TOP OF CURB |
| BC | BOTTOM OF CURB |
| MH | MANHOLE |
| CB | CATCH BASIN |
| AC | ASPHALT CONCRETE |
| AD | AREA DRAIN |
| H.P. | HIGH POINT |
| GB | GRADE BREAK |
| T.O.W. | TOP OF WALL |
| EXTG | EXISTING |
| CE | CURB EXPOSURE |
| SF | STORMFILTER |
| CONC | CONCRETE |
| TYP. | TYPICAL |
| FG | FINISHED GRADE |
| EG | EXISTING GRADE |

WITH YPC
S LS 840"
ON PS(3)
12"E 0.12"

## GRADING SYMBOLS

- NEW ASPHALT PAVING AS NOTED SEE SHEET G1.0 FOR PAVEMENT SECTIONS
- 140 EXISTING CONTOUR LINE
- 144 NEW CONTOUR LINE
- + 142.84 EXISTING SPOT ELEVATION
- 143.40 NEW SPOT ELEVATION PROVIDE STAKE.
- EL ELEVATION
- B.M. BENCH MARK
- TC TOP OF CURB
- BC BOTTOM OF CURB
- MH MANHOLE
- CB CATCH BASIN
- AC ASPHALT CONCRETE
- AD AREA DRAIN
- H.P. HIGH POINT
- GB GRADE BREAK
- T.O.W. TOP OF WALL
- EXTG EXISTING

## GENERAL SYMBOLS

| EXISTING | NEW | |
|---|---|---|
| | ■ | CATCH BASIN (CB) -OR- AREA DRAIN (AD) |
| | ● | MANHOLE (MH) |
| | ● | UTILITY POLE |
| | ◆ | FIRE HYDRANT (FH) |
| M | M | METER |
| V | V | UTILITY VAULT |
| T | T | TRANSFORMER AND PAD |
| TRAN | TRAN | TRANSFORMER |
| ⊗ | ⊗ | VALVE BOX COVER |
| ⊠ | ⊠ | POST INDICATOR VALVE |
| | | LIGHT POLE |
| | | WALL MOUNTED LIGHT |
| | | FIRE DEPARTMENT CONNECTION (FDC) |
| | | GATE VALVE |
| | | CHECK VALVE |
| C.O. | C.O. | CLEAN OUT (CO) |

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |

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TREND BUSINESS CENTER
BUILDING "C"
341 SEQUOIA PARKWAY
CANBY, OREGON

# SITE GRADING PLAN

DATE: NOVEMBER 2013
SCALE: NOTED
PROJECT NO.: 20130584
DRAWN: RJL
CHECKED: HGK
SHEET NO: G2.0
OF

DESIGN REVIEW ONLY - REVISED 3-17-14

20130584 20130584G3.0.dwg 18 Mar 2014 – 8:41 am path

I.E. 12" IN N. & S. 151.70
I.E. 12" OUT E. 152.05

ST-DRYWELL
RIM 156.09
IE IN W. 150.64

SS MH
RIM 163.82
IE IN NE 146.77
IE OUT W. 146.67

NEW SANITARY SEWER LATERAL CONNECTION

EX. 12"PVC SANITARY SEWER

SEQUOIA PARKWAY (WIDTH 74.00')

EX. 16"DI WATERLINE

485.01' – N 89°45'38" E

DRIVEWAY

2" OAK

SF CB C3
RIM 159.20
IE 156.90

8" WAT (PRIVATE)

8" CL 52 DIP

CONC. UTILITY VAULT

2" PVC

CONC. VAULT

SAN SAMPLING MH
RIM 160.25

SHUT-OFF VALVE

6" SAN
S=0.0100

8" STM
S=0.0200

2" PVC

SF CB C4
RIM 155.95
IE 153.65

DRYWELL C5
RIM 160.75

DRYWELL C4
RIM 160.70

SED MH C2
RIM 160.35

CURB BREAK TO DRAINAGE SWALE

ASPHALT

SUMP MH
RIM 162.25

4" SAN
S=0.0050

10" STM
S=0.0150

INSTALL DCDA AND VAULT ON EXISTING LINE FOR ONSITE FIRE WATER SERVICE

ELECTRICAL CABINETS

S89°57'10"E 40.00'

N89°55'12"W 39.91'

COMMUNICATIONS SITE EASEMENT PER DOC. NO. 2005-037973 AMENDED BY DOC. NO. 2005-093405 SEE DETAIL 'A' THIS SHEET

RF-RAP FLOW DISSIPATER

OIL/WAT SEPARATOR
RIM 159.35

WATER QUALITY FACILITY

SHUT-OFF VALVE

20.00' PUE

S00°03'02"W 237.42'

10.00'

8" CL 52 DIP

LOT 4

10" STM
S=0.1252

4" SAN S=0.0820

8"STM S=0.0300

SF CB 5
RIM 160.92

SAN CB 1
RIM 160.92

C.O.

SF CB 6
RIM 161.53

SF CB 3
RIM 161.13

DW 3
RIM 161.60

DW 4
RIM 161.50

SF CB 1
RIM 162.82

SAN CB 2
RIM 160.92

4" SAN S=0.0478

8" STM S=0.0200

SF CB 8
RIM 160.92

SF CB C2
RIM 157.92
IE 155.62

SAN CB C2
RIM 157.92
IE 156.82

DRYWELL C3
RIM 160.32

DRYWELL C2
RIM 159.62

DRYWELL C1
RIM 158.95

SF CB C1
RIM 157.92
IE 155.62

SAN CB C1
RIM 157.92
IE 156.82

SHUT-OFF VALVE

SED MH C1
RIM 158.90

EXTG SHUT-OFF VALVE

S61°14'15"E

8" CL 52 DIP

161.90'

67.53'

ASPHALT

46 LF 6" CL 52 DIP

6" WATER

N73°45'45"E 225.04'

LOT 3

LOT 2

6.00'

12.00' PUE

67.52'

TRAN.

TREND BUSINESS CENTER"
LOT 1
2.439 ACRES

N46°44'31"W 317.87'

250.45'

DOC. NO. 97-018736

10.00' PUE

PRELIMINARY SITE UTILITY PLAN

1" = 20'

## GENERAL SYMBOLS

| EXISTING | NEW | |
|---|---|---|
| ▥ | ■ | CATCH BASIN (CB) -OR- AREA DRAIN (AD) |
| ◎ | ● | MANHOLE (MH) |
| ⊙ | ○ | UTILITY POLE |
| ⧫ | ◆ | FIRE HYDRANT (FH) |
| M | M | METER |
| V | V | UTILITY VAULT |
| T | T | TRANSFORMER AND PAD |
| TRAN | TRAN | TRANSFORMER |
| ⊠ | ⊠ | VALVE BOX COVER |
| ⊗ | ⊗ | POST INDICATOR VALVE |
| ☼ | ☼ | LIGHT POLE |
| ⧖ | ⧖ | WALL MOUNTED LIGHT |
| ⋀ | ⋀ | FIRE DEPARTMENT CONNECTION (FDC) |
| Z | Z | GATE VALVE |
| C.O. | C.O. | CHECK VALVE |
| ○ | ○ | CLEAN OUT (CO) |

NOTE:
THESE SYMBOLS, ABBREVIATIONS AND LINETYPES DO NOT NECESSARILY APPEAR IN THESE DRAWINGS. USE ONLY AS APPLICABLE.

## UTILITY SYMBOLS

| | |
|---|---|
| SA | SANITARY - EXISTING |
| SA | SANITARY - NEW |
| ST | STORM - EXIST |
| ST | STORM - NEW |
| G | GAS - EXISTING |
| G | GAS - NEW |
| T | TELEPHONE - EXISTING |
| T | TELEPHONE - NEW |
| E | ELECTRICAL - EXISTING |
| E | ELECTRICAL - NEW |
| W | WATER - EXISTING |
| W | WATER - NEW |
| DW | DOMESTIC WATER - NEW |
| FW | FIRE WATER - NEW |
| FDC | FDC SERVICE LINE - NEW |
| IE | INVERT ELEVATION |
| C.O. | CLEAN OUT |
| MH | MANHOLE |
| CB | CATCH BASIN |
| AD | AREA DRAIN |
| EXTG | EXISTING |

DESIGN REVIEW ONLY - REVISED 3-17-14

TREND BUSINESS CENTER

# BUILDING "C"

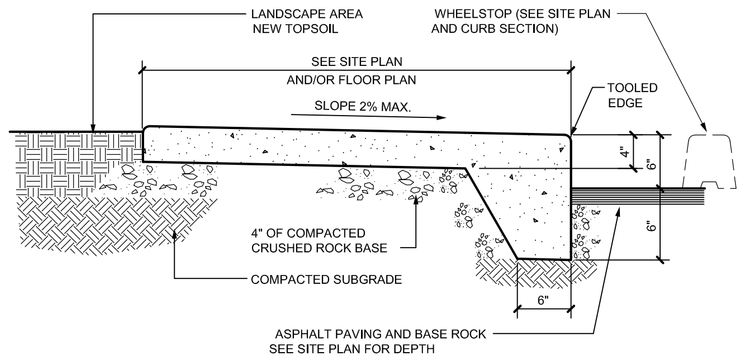
341 SEQUOIA PARKWAY
CANBY, OREGON

# SITE UTILITY PLAN

DATE NOVEMBER 2013
SCALE NOTED
PROJECT NO. 20130584
DRAWN RJL
CHECKED HGK
SHEET NO G3.0 OF

VLMK CONSULTING ENGINEERS
3933 SW Kelly Avenue • Portland • Oregon 97239-4393
P 503.222.4453
F 503.248.9263
E vlmk@vlmk.com
W www.vlmk.com

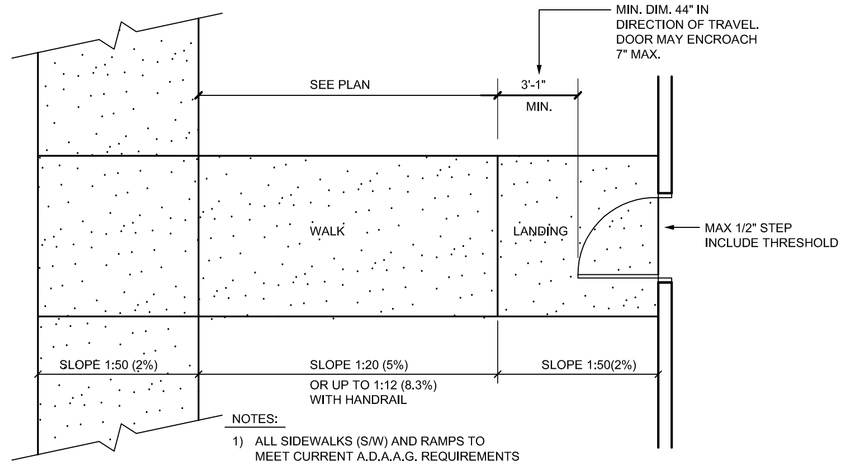
| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |




NOTES:

1) PROVIDE NEATLY TOOLED CONTROL JOINTS AT 5'-0" ON CENTER.

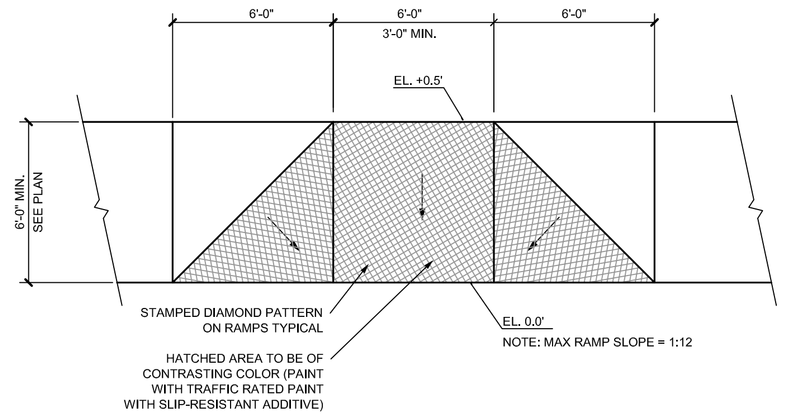
1 G6.0 TYPICAL SIDEWALK SECTION — GS103.dwg — 1" = 1'-0"



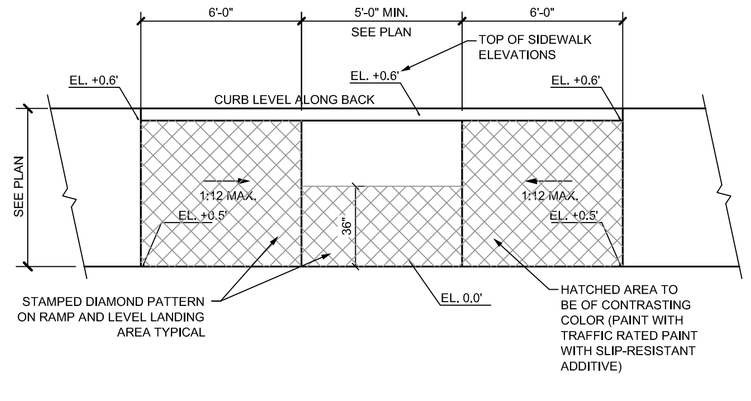

NOTES:

1) ALL SIDEWALKS (S/W) AND RAMPS TO MEET CURRENT A.D.A.A.G. REQUIREMENTS
2) SEE FLOOR PLANS FOR ALL DIMENSIONS OF SIDEWALKS AROUND BUILDING TYP.
3) FOR ALL A.D.A RAMP LOCATIONS AND TYPE SEE SITE PLAN TYP.

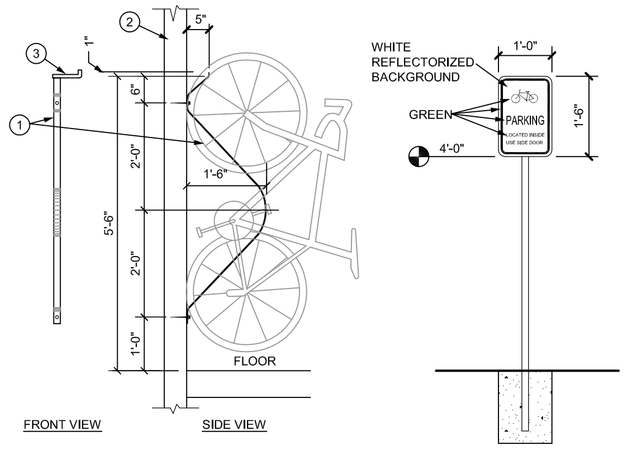
2 G6.0 GRADING AT ENTRY DOOR — GS105.dwg — 1/4" = 1'-0"




3 G6.0 SIDEWALK RAMP PLAN — GS107.dwg — 1/4" = 1'-0"



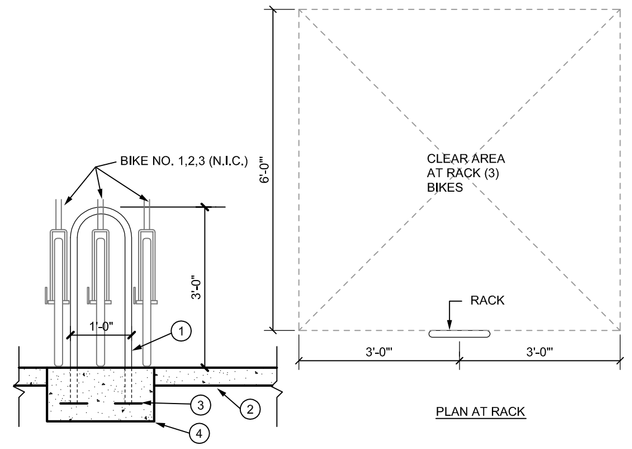

4 G6.0 SIDEWALK RAMP PLAN — GS106.dwg — 1/4" = 1'-0"




KEYNOTES THIS DETAIL:

1. 1 1/2" X 1/8" BENT FLAT BAR WITH 1/2" ROD BENT INTO HOOK AND WELDED TO TOP AS SHOWN. SHOP PRIME WITH ZINC OXIDE PRIMER. PAINT AFTER INSTALLATION WITH OIL BASED ENAMEL. COLOR PER OWNER.
2. STANDARD STUD OR CONCRETE WALL
3. 1/2" BENT ROD

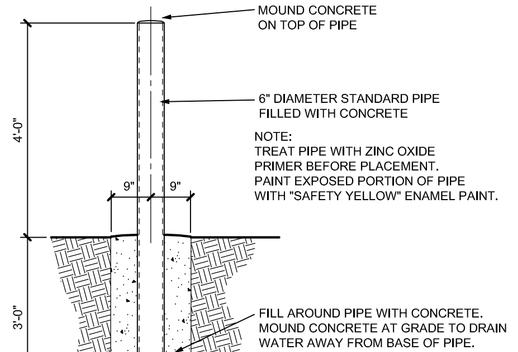
5 G6.0 INDOOR BIKE RACK — GS111.dwg — 1/2" = 1'-0"



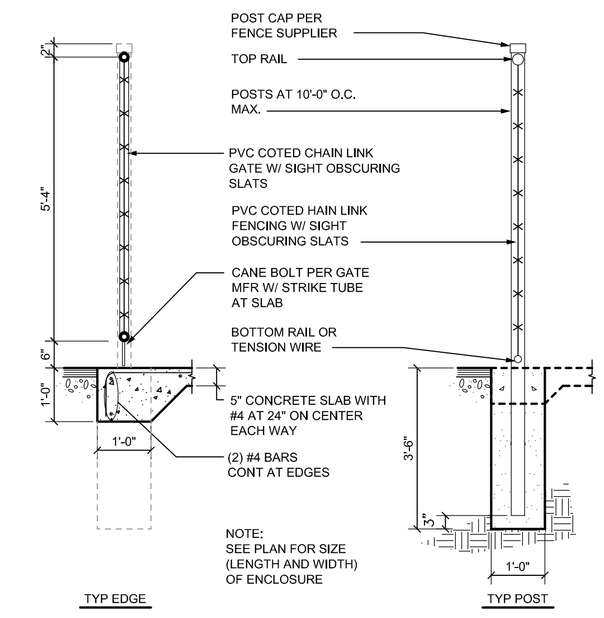

KEYNOTES THIS DETAIL:

1. 1 1/2" DIAMETER STANDARD PIPE. SHOP PRIME WITH ZINC OXIDE PRIMER. PAINT AFTER INSTALLATION WITH OIL BASED ENAMEL. COLOR PER OWNER.
2. STANDARD 4" CONCRETE SIDEWALK.
3. 6" X 6" X 1/4" STEEL BASE PLATE WELDED TO PIPE ENDS.
4. SET PIPE ENDS IN 24" X 12" X 12" DEEP CONCRETE FOOTING.

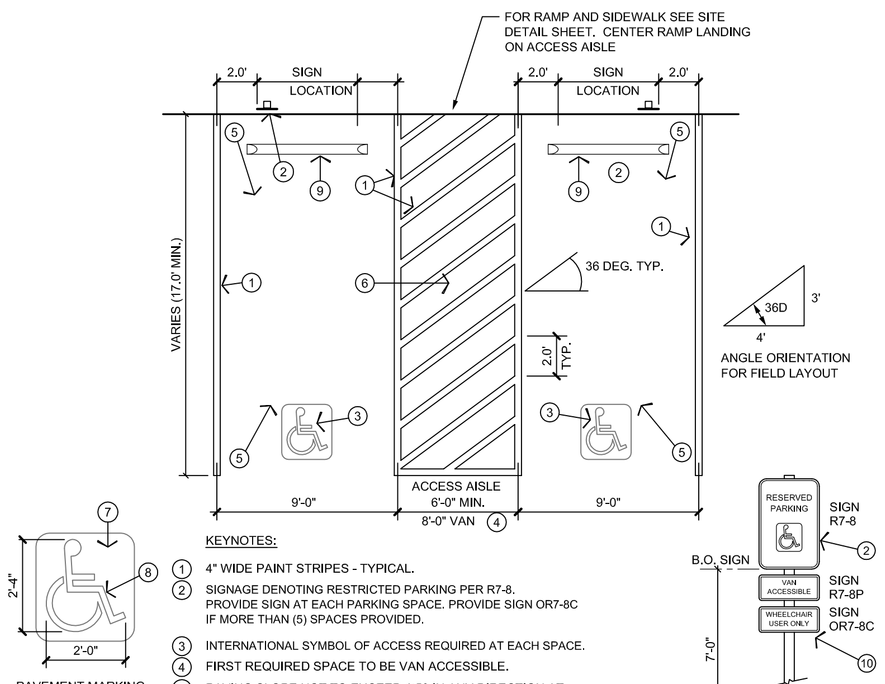
6 G6.0 BIKE RACK FOR THREE — GS108.dwg — 1/2" = 1'-0"




7 G6.0 TYPICAL BOLLARD — GS121.dwg — 1/2" = 1'-0"



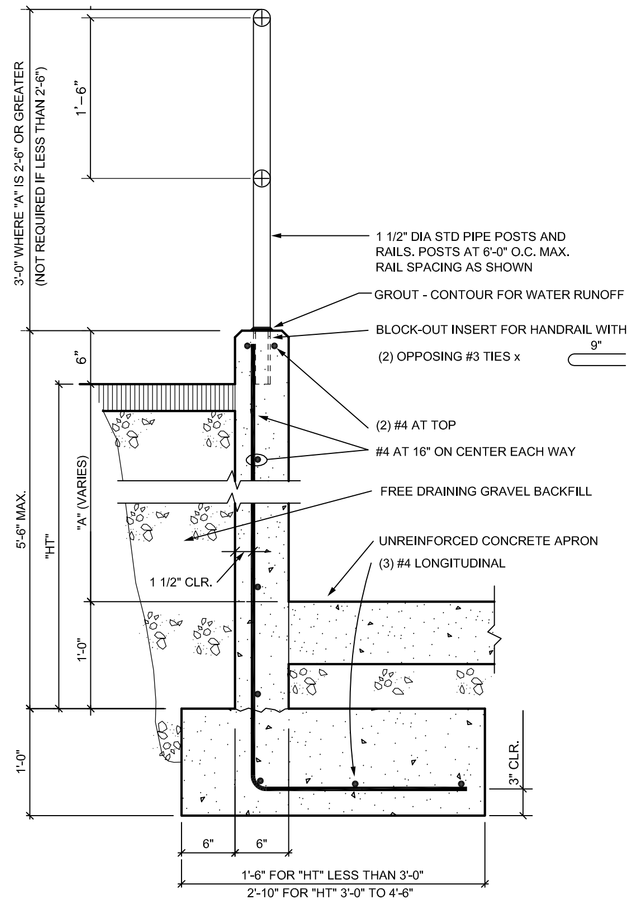

8 G6.0 GARBAGE ENCLOSURE - FENCED — 1/2" = 1'-0"



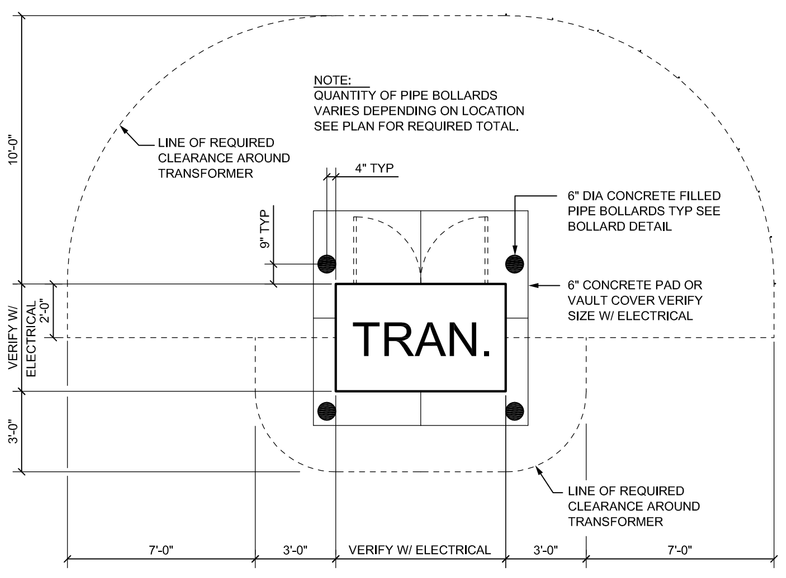

KEYNOTES:

1. 4" WIDE PAINT STRIPES - TYPICAL.
2. SIGNAGE DENOTING RESTRICTED PARKING PER R7-8. PROVIDE SIGN AT EACH PARKING SPACE. PROVIDE SIGN OR7-8C IF MORE THAN (5) SPACES PROVIDED.
3. INTERNATIONAL SYMBOL OF ACCESS REQUIRED AT EACH SPACE.
4. FIRST REQUIRED SPACE TO BE VAN ACCESSIBLE.
5. PAVING SLOPE NOT TO EXCEED 1:50 IN ANY DIRECTION AT HANDICAPPED PARKING SPACES AND LOADING AREA
6. THE ACCESS MUST BE LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACE EXCEPT THAT TWO ADJACENT ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE.
7. BACKGROUND (RETRO-REFLECTIVE BLUE).
8. PAINT STROKE (3" WIDE RETRO-REFLECTIVE WHITE).
9. CONCRETE WHEELSTOP - SEE SITE DETAIL SHEET.
10. WHEELCHAIR SIGNAGE REQUIRED WHERE FIVE (5) OR MORE DISABLED PARKING SPACES ARE REQUIRED. POST SIGN IN SPACE DESIGNATED "VAN" ACCESSIBLE AS SHOWN.

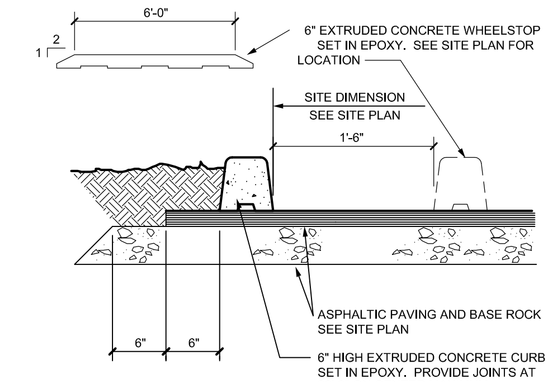
9 G6.0 ACCESSIBLE PARKING — GS104.dwg — 1/4" = 1'-0"



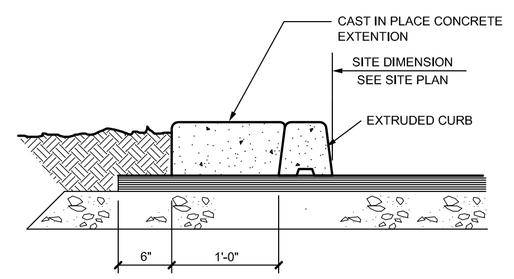

10 G6.0 RETAINING WALL — GS118.dwg — 1" = 1'-0"




11 G6.0 TRANSFORMER CLEARANCES — TRAN-LAYOUT — 1/4" = 1'-0"




12 G6.0 TYPICAL CURB SECTION — GS100.dwg — 1" = 1'-0"




13 G6.0 REINFORCED CURB FOR TRUCKS — GS102.dwg — 1" = 1'-0"

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |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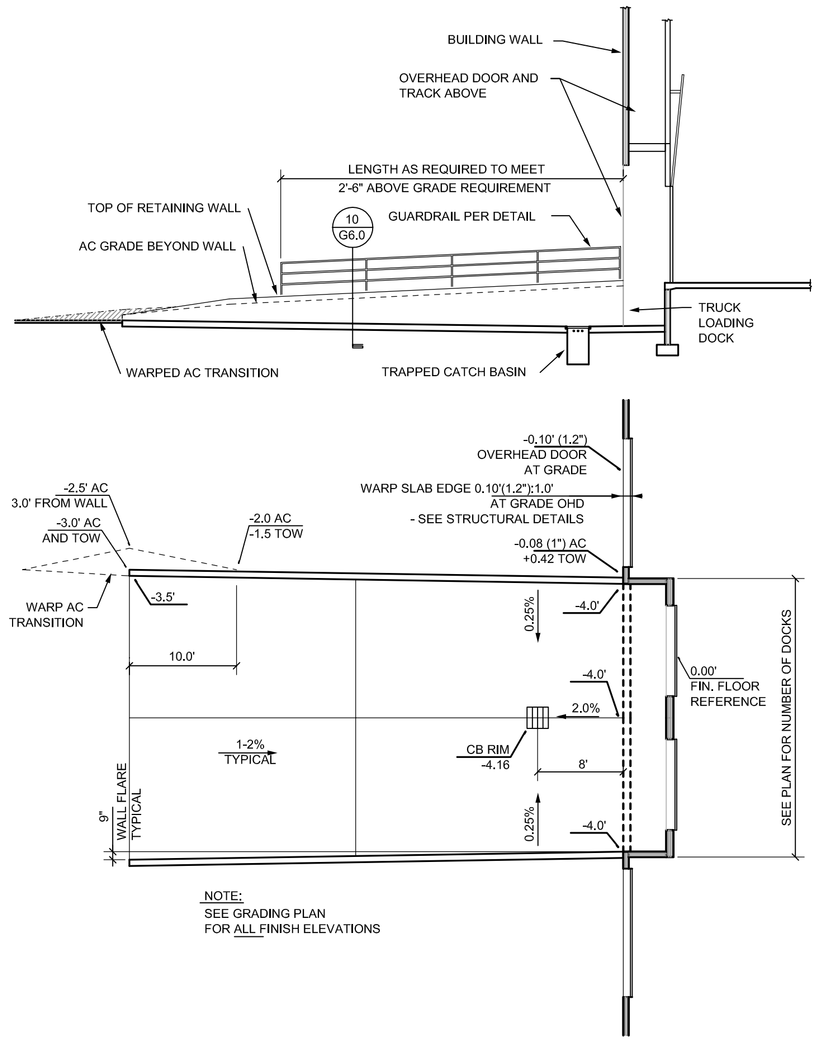
TREND BUILDING "C"
BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

SITE DETAILS

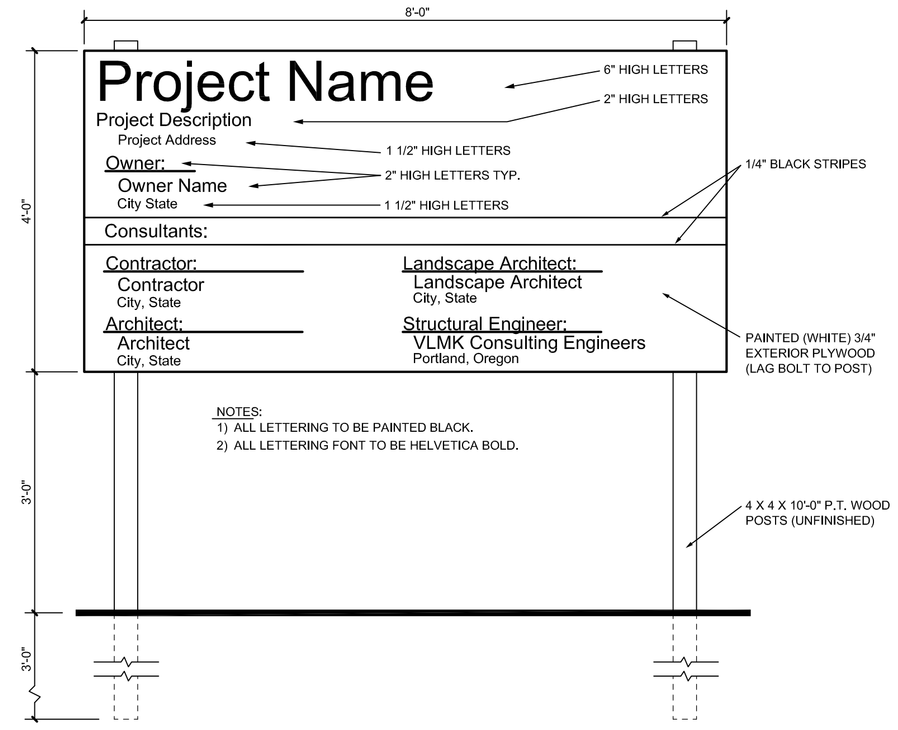
| | |
|---|---|
| DATE | NOVEMBER 2013 |
| SCALE | NOTED |
| PROJECT NO. | 20130584 |
| DRAWN | PSH |
| CHECKED | HGK |
| SHEET NO | G6.0 |
| OF | |

20130584 20130584G6.0.dwg 18 Mar 2014 – 8:43 am path

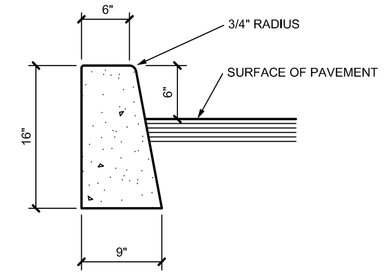
DESIGN REVIEW ONLY - REVISED 3-17-14




3 G6.1 DOCK PLAN AND SECTION — GS119.dwg — 1" = 10'-0"



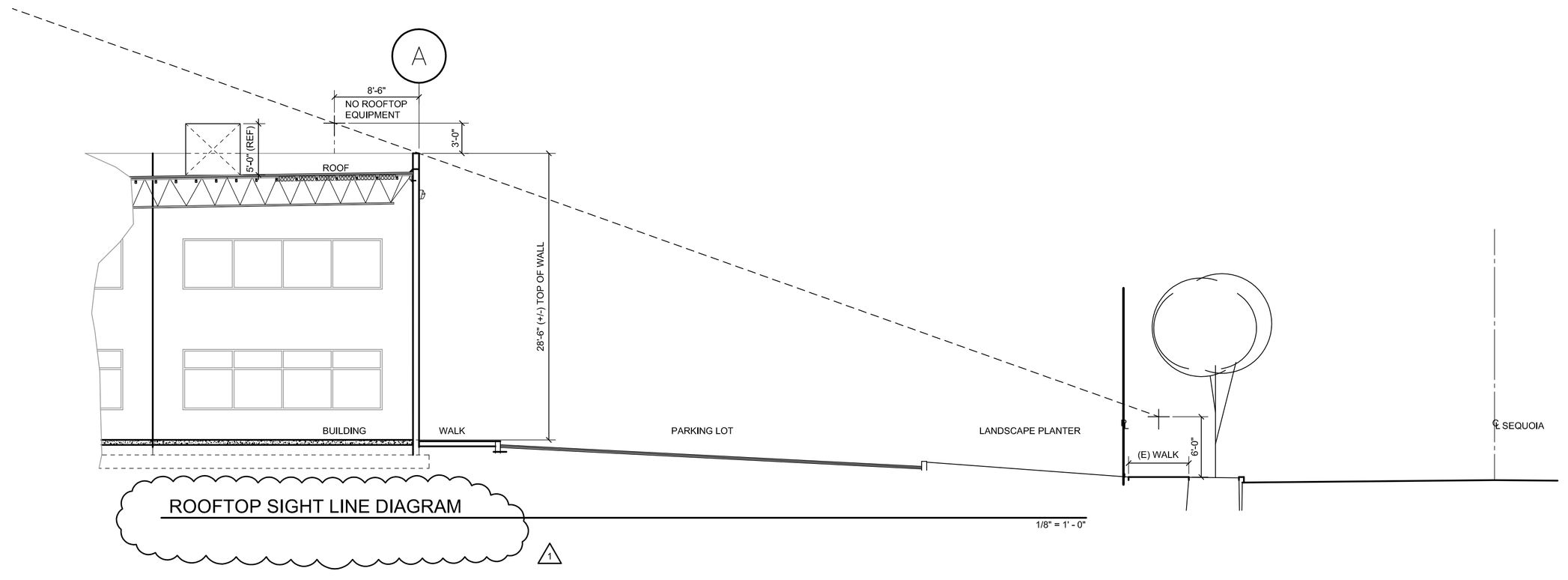

2 G6.1 PROJECT SIGN — GS120.dwg — 3/4" = 1'-0"




CURB NOTES:

1) FACE BATTER NORMAL AS SHOWN FOR CURB TYPE.
2) JOINT SPACING:
   EXPANSION: 45' MAXIMUM AND AT ALL POINTS OF TANGENCY. COLD JOINTS AND STRUCTURES. EXPANSION JOINT TO BE 1/2" PRE-MOLDED, ASPHALT IMPREGNATED, NON-EXTRUDING MATERIAL OF SAME DIMENSION AS CURB.
   CONTRACTION: 15' MAXIMUM. CONTRACTION JOINTS TO BE 1" DEEP TOOLED OR FORMED AROUND PERIMETER AT CURB.
3) TOPS OF CURBS SHALL SLOPE TOWARD THE ROADWAY 1/8" IN 6".
4) USE 3,000 PSI CONCRETE, MAXIMUM 4" SLUMP.

3 G6.1 SECTION AT CURB - CAST IN PLACE — GS101.dwg — 1" = 1'-0"




| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |

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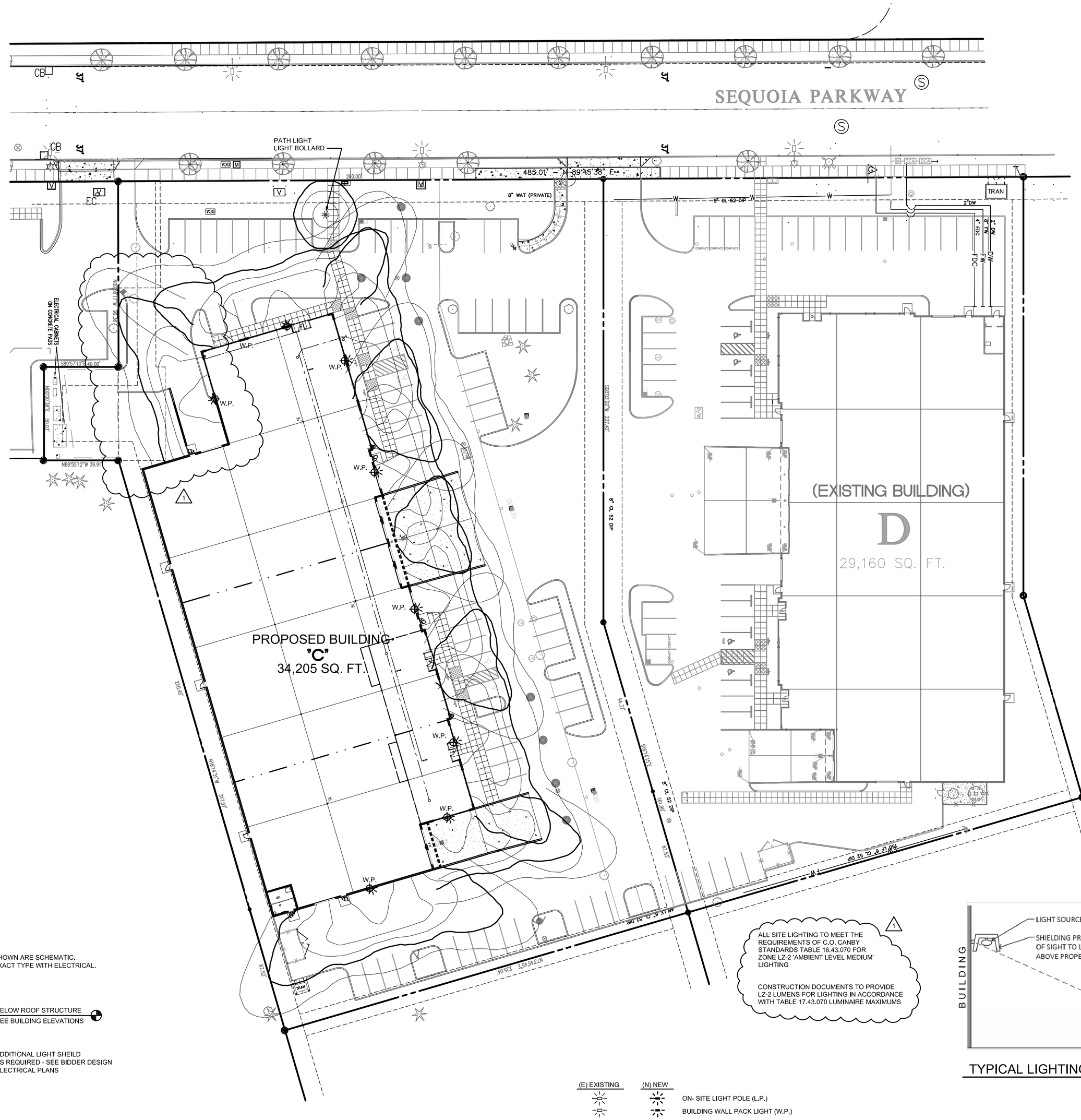
TREND BUSINESS CENTER
BUILDING "C"
341 SEQUOIA PARKWAY
CANBY, OREGON

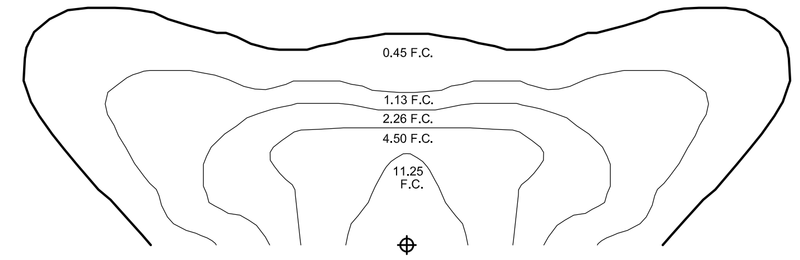
SITE DETAILS

| | |
|---|---|
| DATE | NOVEMBER 2013 |
| SCALE | NOTED |
| PROJECT NO. | 20130584 |
| DRAWN | PSH |
| CHECKED | HGK |
| SHEET NO | G6.1 |
| OF | |

20130584 20130584G6.0.dwg 18 Mar 2014 – 8:43 am path

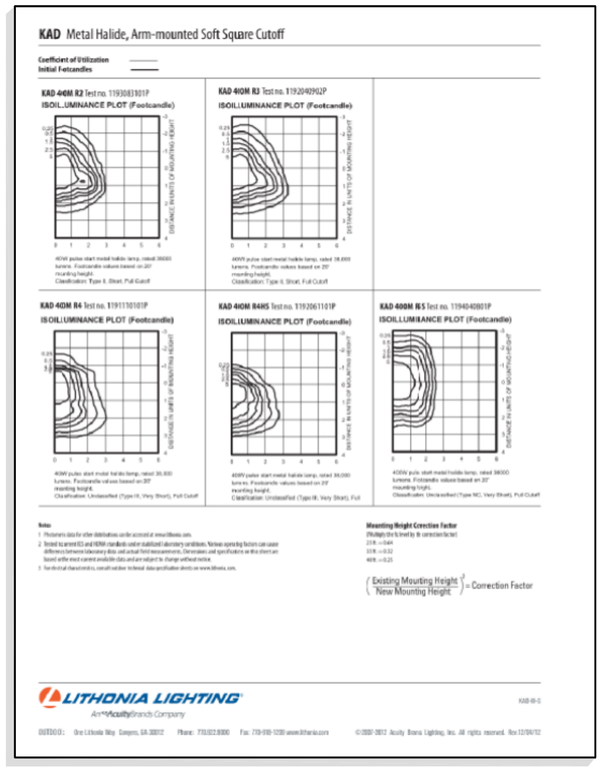
DESIGN REVIEW ONLY - REVISED 3-17-14



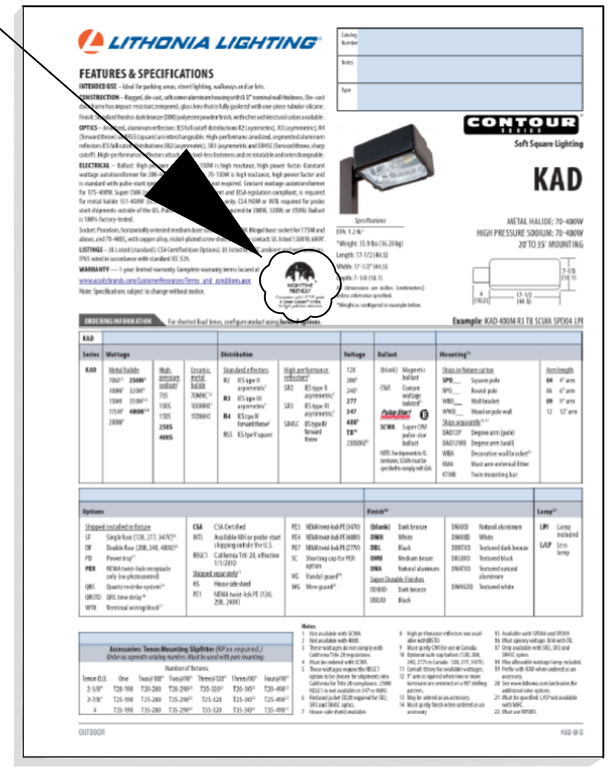



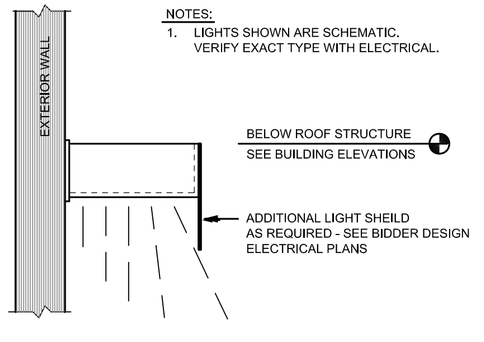

W.P. WALL PACK
(400w)

2 G7.0 TYPICAL WALL PACK LIGHTING WASH
N.T.S.




LIGHT POLLUTION COMPLIANT CERT




NOTES:
1. LIGHTS SHOWN ARE SCHEMATIC. VERIFY EXACT TYPE WITH ELECTRICAL.




TYPICAL LIGHTING SHEILD

1 G7.0 WALL PACK LIGHT DETAIL
GT102.dwg 1" = 1'-0"

SITE LIGHTING PLAN
1" = 30.0'
30 0 30 60 90

3 G7.0 TYPICAL WALL MOUNT (WALL PACK) LIGHTING
W.P. = WALL PACK
NTS
NOTE:
LIGHT SHOWN IS CAPABLE OF BOTH WALL AND POLE MOUNT

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |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TREND BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

BUILDING "C"

SITE LIGHTING PLAN

| DATE | |
|---|---|
| NOVEMBER 2013 | |
| SCALE | PROJECT NO. |
| NOTED | 20130584 |
| DRAWN | CHECKED |

SHEET NO
G7.0
OF

20130584 20130584G7.0.dwg 18 Mar 2014 – 8:44 am path

DESIGN REVIEW ONLY - REVISED 3-17-14

# TREND BUSINESS CENTER

A REPLAT OF LOTS 1 THROUGH 4 OF "BURDEN" (PLAT NO. 3973)
LOCATED IN THE SOUTHEAST 1/4 OF SECTION 34,
TOWNSHIP 3 SOUTH, RANGE 1 EAST, W.M.
CITY OF CANBY, CLACKAMAS COUNTY, OREGON
DATE: JULY 2, 2008

## SURVEYOR'S CERTIFICATE

I, CLINTON H. STUBBS Jr., HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS, THE LANDS REPRESENTED ON THE ANNEXED MAP OF "TREND BUSINESS CENTER", BEING A REPLAT OF LOT 1 THROUGH LOT 4 OF "BURDEN", LOCATED IN THE SOUTHEAST ONE-QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF CANBY, CLACKAMAS COUNTY, OREGON, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE INITIAL POINT, LOCATED AT THE NORTHWEST CORNER OF LOT 5 FROM SAID PLAT OF "BURDEN" AT A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP STAMPED "ZTEC LS 1944", SAID POINT ALSO BEING THE NORTHEAST CORNER OF SAID LOT 4 AND BEING ON THE SOUTHERLY RIGHT-OF-WAY LINE OF SEQUOIA PARKWAY; THENCE ALONG THE EASTERLY LINE OF SAID LOT 4, S00°03'02"W 224.30 FEET; THENCE CONTINUING ALONG THE EASTERLY LINE OF SAID LOT 4 AND THE EASTERLY LINE OF SAID LOT 3, S16°14'15"E 581.78 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3, SAID POINT BEING LOCATED ON THE NORTHERLY RIGHT-OF-WAY LINE OF SW 4TH AVENUE; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING CALLS, ALONG A NON-TANGENT CURVE TO THE LEFT WITH A RADIUS OF 1012.50 FEET, A DELTA ANGLE OF 19°15'21", A LONG CHORD BEARING S83°18'06"W 338.69 FEET AND A LENGTH OF 340.28 FEET; THENCE ALONG A RADIAL LINE S16°19'31"E 3.86 FEET; THENCE S73°26'29"W 65.96 FEET TO A POINT OF CURVATURE; THENCE ALONG A TANGENT CURVE TO THE RIGHT WITH A RADIUS OF 7970.00 FEET, A DELTA ANGLE OF 0°19'24", A LONG CHORD BEARING S73°35'59"W 44.99 FEET, AND A LENGTH OF 44.99 FEET TO THE SOUTHWEST CORNER OF SAID LOT 2; THENCE ALONG THE WESTERLY BOUNDARY LINE OF SAID LOT 2 AND LOT 1, N16°14'31"W 735.49 FEET; THENCE CONTINUING ALONG THE WESTERLY BOUNDARY LINE OF SAID LOT 1 THE FOLLOWING CALLS, N89°55'12"W 39.91 FEET, N00°00'38"E 50.03 FEET, S89°57'10"E 40.00 FEET AND N00°06'17"W 99.36 FEET TO SAID SOUTHERLY RIGHT-OF-WAY LINE OF SEQUOIA PARKWAY; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, N89°45'38"E 485.01 FEET TO THE INITIAL POINT.

CONTAINING 8.697 ACRES, MORE OR LESS.

## DECLARATION

KNOW ALL PERSONS BY THESE PRESENT, THAT TREND BUSINESS CENTER LLC, AN OREGON LIMITED LIABILITY COMPANY AS THE OWNER OF THE LANDS DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE, DOES HEREBY DECLARE THE ANNEXED MAP OF "TREND BUSINESS CENTER" TO BE TRUE AND CORRECT, AND HAVE CAUSED THE SAME TO BE PLATTED INTO LOTS, AND GRANT ALL EASEMENTS SET FORTH FOR THE USES STATED AND AS INDICATED HEREON IN ACCORDANCE WITH PROVISIONS OF ORS 92. ALL RESTRICTIONS SHOWN OR NOTED ON PLAT ARE HEREBY APPROVED.

BY _____
WILLIAM L. McCORMACK, GENERAL MANAGER

## ACKNOWLEDGMENT

STATE OF OREGON )
) S.S
COUNTY OF CLACKAMAS )

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS ____ DAY OF _____, 2008, BY WILLIAM L. McCORMACK, GENERAL MANAGER OF TREND BUSINESS CENTER, LLC, ON ITS BEHALF.

NOTARY SIGNATURE _____

NOTARY PUBLIC FOR OREGON _____

MY COMMISSION EXPIRES: _____

COMMISSION NO. _____

## CITY OF CANBY APPROVALS

APPROVED THIS ____ DAY OF _____, 2008

BY _____
~~CITY OF CANBY COMMUNITY DEVELOPMENT AND PLANNING DIRECTOR~~

## CLACKAMAS COUNTY APPROVALS

APPROVED THIS ____ DAY OF _____, 2008.

CLACKAMAS COUNTY SURVEYOR AND CLACKAMAS COUNTY BOARD OF COMMISSIONERS DELEGATE PER COUNTY CODE CHAPTER 11.02

ALL TAXES, FEES, ASSESSMENTS OF OTHER CHARGES AS PROVIDED BY O.R.S. 92.095 HAVE BEEN PAID THRU JUNE 30, ____.

APPROVED THIS ____ DAY OF _____, 2008.

CLACKAMAS COUNTY ASSESSOR & TAX COLLECTOR

BY: _____
DEPUTY

STATE OF OREGON )
) S.S
COUNTY OF CLACKAMAS )

I DO HEREBY CERTIFY THAT THE ATTACHED PLAT WAS RECEIVED FOR RECORD ON THE ____ DAY OF _____, 2008
AT ____ O'CLOCK ____ M. _____

PLAT NO. _____

DOC. NO. _____

SHERRY HALL, CLACKAMAS COUNTY CLERK

BY: _____
DEPUTY

## PLAT NOTES AND RESTRICTIONS

1) THIS PLAT IS SUBJECT THE CONDITIONS OF APPROVAL FROM THE CITY OF CANBY CASE FILE NUMBER LLA 08-02 LLA 08-03.
2) THIS PLAT IS SUBJECT TO THE DRIVEWAY EASEMENT AND MAINTENANCE AGREEMENT RECORDED AUGUST 31, 2006 IN DOCUMENT NUMBER 2006-080672, CLACKAMAS COUNTY DEED RECORDS. THE EASEMENT IS LOCATED AT THE NORTHWEST CORNER OF LOT 1, THE LOCATION IS DEFINED AS THE EXISTING AND FUTURE SHARED DRIVEWAY WITH THE PROPERTY DESCRIBED IN DOCUMENT NUMBER 97-018738. THERE IS NOT SUFFICIENT INFORMATION TO MAP THE EASEMENT LOCATION, AS IT IS DEPENDENT UPON FUTURE DEVELOPMENT PLANS FOR THE PROPERTY, THE APPROXIMATE LOCATION IS SHOWN ON SHEET 1.
3) THIS PLAT IS SUBJECT TO ALL COVENANTS, CONDITIONS AND RESTRICTIONS, AS SHOWN ON THE PLAT OF BURDEN.
4) LOTS 1-4 OF THIS PLAT ARE SUBJECT TO 6.00 FEET WIDE PUBLIC UTILITY EASEMENTS ON BOTH SIDES OF THE LINES BETWEEN SAID LOTS 1 AND 4 AND LOTS 2 AND 3, AS SHOWN. THE PUBLIC UTILITY EASEMENTS GRANTED PER THE PLAT OF "BURDEN" BETWEEN LOTS 1-4 ARE VACATED BY REPLAT SUBJECT TO ORS 92.185.

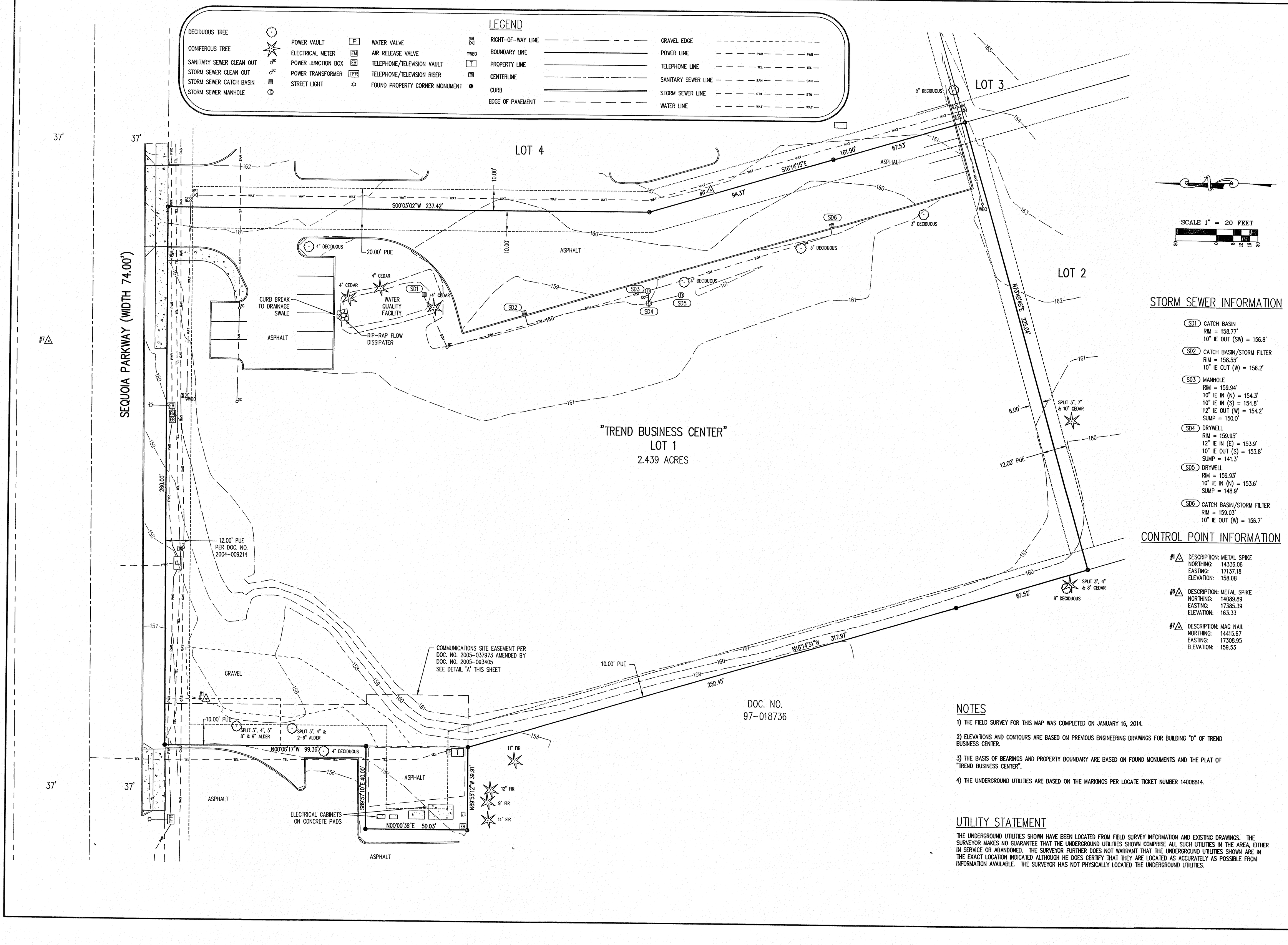
PREPARED FOR
TREND BUSINESS CENTER, LLC
7190 SW SANDBURG STREET
PORTLAND, OR 97223

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JANUARY 15, 2002
CLINTON H. STUBBS JR.
55469LS
RENEWAL DATE: 06/30/10

| | |
|---|---|
| JOB NAME: | TREND BUSINESS CENTER |
| JOB NUMBER: | 425 |
| DRAWN BY: | CHS |
| CHECKED BY: | SFF |
| DRAWING NO: | 425 PLA |

BOUNDARY TOPOGRAPHIC CONSTRUCTION CADASTRAL
NORTHWEST SURVEYING, Inc.
PO BOX 7177 BEAVERTON, OR 97007
PHONE: 503-848-2127 FAX: 503-848-2179
EMAIL: nwsurveying@nwsrvy.com




## STORM SEWER INFORMATION

(SD1) CATCH BASIN
RIM = 158.77'
10" IE OUT (SW) = 156.8'

(SD2) CATCH BASIN/STORM FILTER
RIM = 158.55'
10" IE OUT (W) = 156.2'

(SD3) MANHOLE
RIM = 159.94'
10" IE IN (N) = 154.3'
10" IE IN (S) = 154.8'
12" IE OUT (W) = 154.2'
SUMP = 150.0'

(SD4) DRYWELL
RIM = 159.95'
12" IE IN (E) = 153.9'
10" IE OUT (S) = 153.8'
SUMP = 141.3'

(SD5) DRYWELL
RIM = 159.93'
10" IE IN (N) = 153.6'
SUMP = 148.9'

(SD6) CATCH BASIN/STORM FILTER
RIM = 159.03'
10" IE OUT (W) = 156.7'

## CONTROL POINT INFORMATION

#1 △ DESCRIPTION: METAL SPIKE
NORTHING: 14336.06
EASTING: 17137.18
ELEVATION: 158.08

#6 △ DESCRIPTION: METAL SPIKE
NORTHING: 14089.89
EASTING: 17385.39
ELEVATION: 163.33

#7 △ DESCRIPTION: MAG NAIL
NORTHING: 14415.67
EASTING: 17308.95
ELEVATION: 159.53

## NOTES

1) THE FIELD SURVEY FOR THIS MAP WAS COMPLETED ON JANUARY 16, 2014.

2) ELEVATIONS AND CONTOURS ARE BASED ON PREVIOUS ENGINEERING DRAWINGS FOR BUILDING "D" OF TREND BUSINESS CENTER.

3) THE BASIS OF BEARINGS AND PROPERTY BOUNDARY ARE BASED ON FOUND MONUMENTS AND THE PLAT OF "TREND BUSINESS CENTER".

4) THE UNDERGROUND UTILITIES ARE BASED ON THE MARKINGS PER LOCATE TICKET NUMBER 14008814.

## UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.


NORTHWEST SURVEYING, INC.
1615 NW 169th PLACE, SUITE 2090
BEAVERTON, OR 97006
PH: (503) 848-2127 FAX: (503) 848-2179
EMAIL: nwsurveying@nwsry.com


LOT 1 OF "TREND BUSINESS CENTER" LOCATED IN THE SOUTHEAST 1/4 OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 1 EAST, W.M. CITY OF CANBY, CLACKAMAS COUNTY, OREGON

# TOPOGRAPHIC SURVEY

CANBY, OREGON
TAX LOT 1711
TAX MAP 3-1E-34

DRAWING NO.: 425 TOPO BLDG C
SCALE: AS NOTED
DRAWING GENERATED BY LD2004
DRAWN BY: CDW
CHECKED BY: CHS

**PREPARED FOR:**
TRENT BUSINESS CENTER, LLC
7190 SW SANDBURG STREET
TIGARD, OR 97223

REVISIONS:
INITIAL RELEASE JAN. 28, 2014
REVISED FEB. 2, 2014

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JANUARY 15, 2002
CLINTON H. STIBBS JR.
55469LS
RENEWAL DATE: 06/30/14

JOB NUMBER
425

SHEET
1 OF 1

## OUTLINE SPECIFICATIONS PLANTING AND SEEDING:

**GENERAL:** All plants shall conform to all applicable standards of the latest edition of the "American Association of Nurserymen Standards", A.N.S.I. Z60.1 – 1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified fit for sale in Oregon.

The apparent silence of the Specifications and Plans as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of first quality are to be used. All interpretations of these Specifications shall be made upon the basis above stated.

Landscape contractor shall perform a site visit prior to bidding to view existing conditions.

**PERFORMANCE QUALITY ASSURANCE:** Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this section.

**NOTIFICATION:** Give Landscape Architect minimum of 2 days advance notice of times for inspections. Inspections at growing site does not preclude Landscape Architect's right of rejection of deficient materials at project site. Each plant failing to meet the above mentioned "Standards" or otherwise failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

**SUBSTITUTIONS:** Only as approved by the Landscape Architect or the Owner's Representative.

**GUARANTEE AND REPLACEMENT:** All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen peculiarities of the planting site, or lost due to vandalism). Guarantee to replace, at no cost to Owner, unacceptable plant materials with plants of same variety, age, size and quality as plant originally specified. Conditions of guarantee on replacement plant shall be same as for original plant.

Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

**PROTECTION** Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

**PLANT QUALITY ASSURANCE:** Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery, if not to be planted within four hours.

Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full foliaged, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All Plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plants in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1942 Edition.

Container grown stock: Small container–grown plants, furnished in removable containers, shall be well rooted to ensure healthy growth. **Grow container plants in containers a minimum of one year** prior to delivery, with roots filling container but not root bound. Bare root stock: Roots well–branched and fibrous. Balled and burlapped (B&B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the burlap sound. No loose or made ball will be acceptable.

**TOPSOIL AND FINAL GRADES:** Landscape Contractor is to verify with the General Contractor if the on site topsoil is or is not conducive to proper plant growth. Supply alternate bid for imported topsoil.

Landscape Contractor is to supply and place 12" of topsoil in planting beds and 6" in lawn areas. If topsoil stockpiled on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount. Landscape Contractor is to submit samples of the imported soil and/or soil amendments to the Landscape Architect. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth.

Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc., to allow for bark application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

## PLANTING SPECIFICATIONS:

**HERBICIDES:** Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round–up in strict accordance with the manufacturer's instructions.

**SOIL PREPARATION:** Work all areas by rototilling to a minimum depth of 8". Remove all stones (over 1½" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter turned up in working. Soil shall be of a homogeneous fine texture. Level, smooth and lightly compact area to plus or minus .10 of required grades.

In groundcover areas add 2" of compost (or as approved) and till in to the top 6" of soil.

**PLANTING HOLE:** Lay out all plant locations and excavate all soils from planting holes to 2 1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any "subsoil" or debris from excavation. Check drainage of planting hole with water, and adjust any area showing drainage problems.

**SOIL MIX:** Prepare soil mix in each planting hole by mixing:
2 part native topsoil (no subsoil)
1 part compost (as approved)

Thoroughly mix in planting hole and add fertilizers at the following rates:
Small shrubs – 1/8 lb./ plant
Shrubs – 1/3 to 1/2 lb./ plant
Trees – 1/3 to 1 lb./ plant

**FERTILIZER:** For trees and shrubs use Commercial Fertilizer "A" Inorganic (5–4–3) with micro–nutrients and 50% slow releasing nitrogen. For initial application in fine seed lawn areas use Commercial Fertilizer "B" (8–16–8) with micro–nutrients and 50% slow–releasing nitrogen. For lawn maintenance use Commercial Fertilizer "C" (22–16–8) with micro–nutrients and 50% slow–releasing nitrogen. DO NOT apply fertilizer to Water Quality Swale.

**PLANTING TREES AND SHRUBS:** Plant upright and face to give best appearance or relationship to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twine binding and burlap from top 1/2 of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with soil mix while working each layer to eliminate voids.

When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surrounding grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

**STAKING OF TREES:** Stake or guy all trees. Stakes shall be 2" X 2" (nom.) quality tree stakes with point. They shall be of Douglas Fir, clear and sturdy. Stake to be minimum 2/3 the height of the tree, not to exceed 8'–0". Drive stake firmly 1'–6" below the planting hole. Tree ties for deciduous trees shall be "Chainlock" (or better). For Evergreen trees use "Gro–Strait" Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2 strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright.

**MULCHING OF PLANTINGS:** Mulch planting areas with dark, aged, medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2½" in shrub beds. Apply evenly, not higher than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

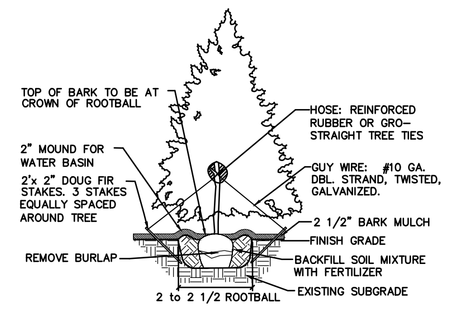
**FINE LAWN AREAS:** In fine lawn area apply Commercial Fertilizer Mix "B" at 4.5 lbs. Per 1,000 sq.ft. and rake into soil surface. Establish an even, fine textured seedbed meeting grades, surfaces and texture. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

**SEED:** Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis.
**Fine Lawn Seed Mix:** To contain 50% Top Hat Perennial Ryegrass, 30% Derby Supreme Ryegrass, 20% Longfellow Chewings Fescue (Hobbs and Hopkins Pro–Time 303 Lawn Mix or as approved) Sow Seed at 5 lbs. / 1000 sq. ft.

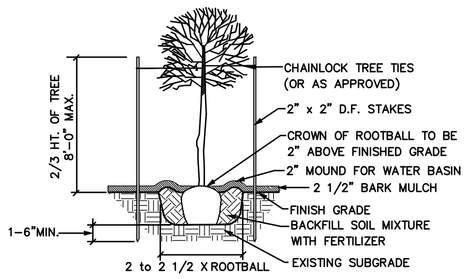
**MAINTENANCE OF SEEDED AREAS:**
**Fine Lawn Areas:** The lawn areas shall be maintained by watering, mowing, reseeding, and weeding for a minimum of 60 days after seeding. After 30 days, or after the second mowing, apply Commercial Fertilizer Mix "C" at 5 lbs. per 1,000 sq. ft. Mow and keep at 1½" to 2" in height. Remove clippings and dispose of off site.

**GENERAL MAINTENANCE:** Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, reset plants to proper grade or upright position, remove dead wood and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials, and to promote healthy growth.

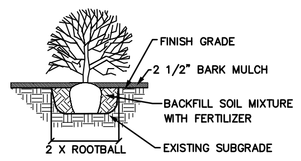
**CLEAN–UP:** At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.




EVERGREEN TREE STAKING DETAIL
NOT TO SCALE




DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE




SHRUB PLANTING DETAIL
NOT TO SCALE

**PLANT LIST:**

| # | SYM. | LATIN NAME/ Common Name | SIZE | SPACING | MATURE HEIGHT |
|---|---|---|---|---|---|
| | | GROUNDCOVER & PERENNIALS | | | |
| 235 | AUU | ARCTOSTAPHYLOS UVA–URSI "MASS." Massachusetts Kinnikinnick | 1 gal. | 3' o.c. | |
| 308 | CDE | COTONEASTER DAMMERI "EICHOLZ" Eicholz Cotoneaster | 1 gal. | 4' o.c. | |
| 18 | COE | CAREX OSHIMENSIS 'EVERGOLD' Evergold Sedge | 1 gal. | 2' o.c. | |
| 77 | EFC | EUONYMUS FORT. "COLORATUS" Purple Wintercreeper | 1 gal. | 3' o.c. | |
| 72 | PAH | PENNISETUM ALOPECUROIDES "HAMELN" Hameln Dwarf Fountain Grass | 1 gal. | 2' o.c. | |
| 205 | PTG | PACHYSANDRA TERM. "GREEN CARPET" Green Carpet Japanese Spurge | 4" pot | 18" o.c. | |
| | | SHRUBS | | | |
| 11 | AUC | ARBUTUS UNEDO "COMPACTA" Compact Strawberry Tree | 5 gal. | 6' o.c. | |
| 9 | EAC | EUONYMUS ALATA "COMPACTA" Dwarf–Winged Euonymus | 5 gal. | 4' o.c. | |
| 24 | END | ESCALLONIA "NEWPORT DWARF" Newport Dwarf Escallonia | 2 gal. | 3' o.c. | |
| 46 | ICG | ILEX CRENATA 'GREEN ISLAND' Green Island Japanese Holly | 2 gal. | 3' o.c. | |
| 24 | LJT | LIGUSTRUM JAPONICUM "TEXANUM" Texan Japanese Privet | 5 gal. | 4' o.c. | |
| 27 | NDG | NANDINA DOMESTICA "GULF STREAM" Gulf Stream Nandina | 2 gal. | 3' o.c. | |
| 33 | RD | RHODODENDRON "DAPHNOIDES" Daphnoides Rhododendron | 15–18" | 4' o.c. | |
| 23 | RDA | RHODODENDRON "DORA AMATEIS" Dora Amateis Rhododendron | 12–15" | 3' o.c. | |
| 12 | SBG | SPIRAEA X BUM. "GOLDMOUND" Goldmound Spirea | 2 gal. | 3' o.c. | |
| 8 | TMH | TAXUS x MEDIA "HICKSII Hicks Yew | 3' ht. | 4' o.c. | |
| 100 | VD | VIBURNUM DAVIDII David Viburnum | 2 gal. | 3' o.c. | |
| | | TREES | | | |
| 4 | ARK | ACER RUBRUM "KARPICK" Karpick Red Maple | 2" cal. | As Shown | 40' |
| 6 | CD | CALOCEDRUS DECURRENS Incense Cedar | 5–6' ht. | As shown | 45' |
| 14 | FPS | FRAXINUS PENN. "SUMMIT" Potmore Ash | 2" cal. | As shown | 45' |
| 9 | PCC | PYRUS CALLERYANA "CHANTICLEER" Chanticleer Flowering Pear | 2" cal. | As shown | 40' |

PARKING & LOADING TREE CALCULATIONS:

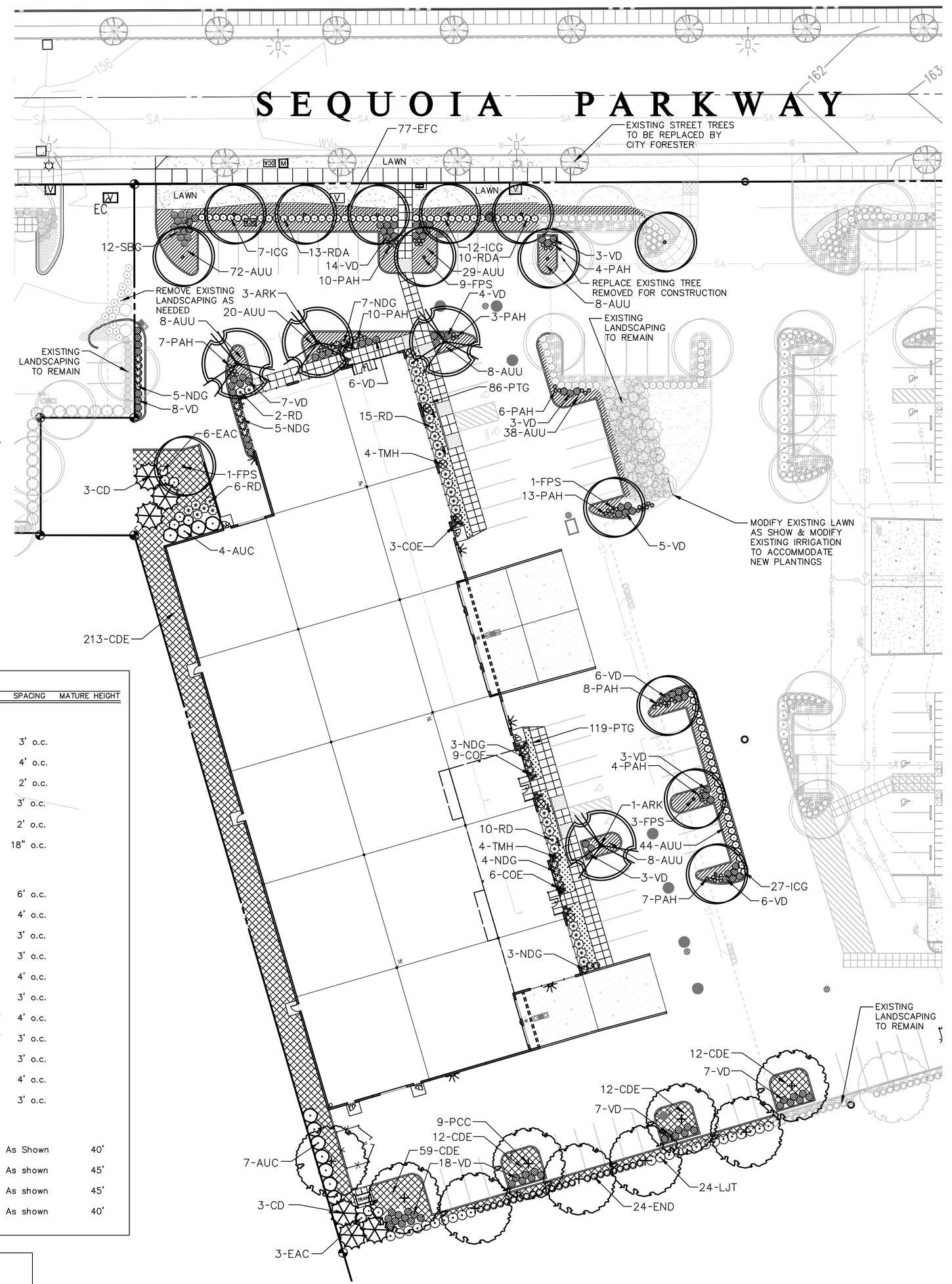
SOUTH PARKING AREA
PERIMETER LENGTH= 287'
PERIMETER TREES REQUIRED= 7
PERIMETER TREES PROPOSED= 8

EAST LOADING AREA
PERIMETER LENGTH= 37'
PERIMETER TREES REQUIRED= 1
PERIMETER TREES PROPOSED= 4

NORTH PARKING AREA
PERIMETER LENGTH= 231'
PERIMETER TREES REQUIRED= 6
EXISTING PERIMETER TREES= 1
NEW PERIMETER TREES PROPOSED= 5

ALL PARKING AREAS
TOTAL PARKING ISLANDS PROVIDED= 18
EXISTING PARKING TREES= 2
NEW PARKING ISLAND TREES PROPOSED= 16

BASE PARKING TREE REQUIREMENT= 32
(Parking Island + Required Perimeter Trees)
TOTAL NEW & EXISTING PARKING TREES= 36
PERCENTAGE OVER BASE REQUIREMENT= 112.5%




## LANDSCAPE PLAN
SCALE 1" = 30'–0"

**GENERAL NOTES:**
1. Contractor is to verify all plant quantities.
2. Adjust plantings in the field as necessary.
3. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. System is to be design/build by Landscape Contractor. Guarantee system for a minimum one year. Show drip systems as alternate bid only.
4. All plants are to be fully foliaged, well branched and true to form.

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3–17–14 | REVISED PER OWNER & PLANNING DEPARTMENT |


OTTEN LANDSCAPE ARCHITECTS Inc
3933 SW Kelly Avenue • Suite B • Portland, Oregon 97239-4393
Phone (503) 972-0311 • Fax (503) 972-0314 • www.ottenla.com

VLMK CONSULTING ENGINEERS
3933 SW Kelly Avenue • Portland • Oregon 97239-4393
503.222.4453
503.248.9263
vlmk@vlmk.com
www.vlmk.com


TREND BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

BUILDING "C"
LANDSCAPE PLAN

DATE: NOVEMBER 2013
SCALE: NOTED
PROJ. NO.: 20130584
DRAWN: EH
CHECKED: JLO

SHEET NO
L1.0
1 OF 1

DESIGN REVIEW ONLY - REVISED 3-17-14

20130584 20130584A1.0.dwg 18 Mar 2014 - 8:47 am path

# FLOOR PLAN

## BUILDING "C"

TREND BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

VLMK CONSULTING ENGINEERS
3933 SW Kelly Avenue • Portland • Oregon 97239-4393
503.222.4453
503.248.9263
vlmk@vlmk.com
www.vlmk.com

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |

DATE NOVEMBER 2013
SCALE
PROJECT NO. 20130584
DRAWN PSH
CHECKED HGK
SHEET NO A1.0
OF

## FLOOR PLAN

33,248 SQ. FT. (DRIPLINE)
22'-0" CLEAR HT.

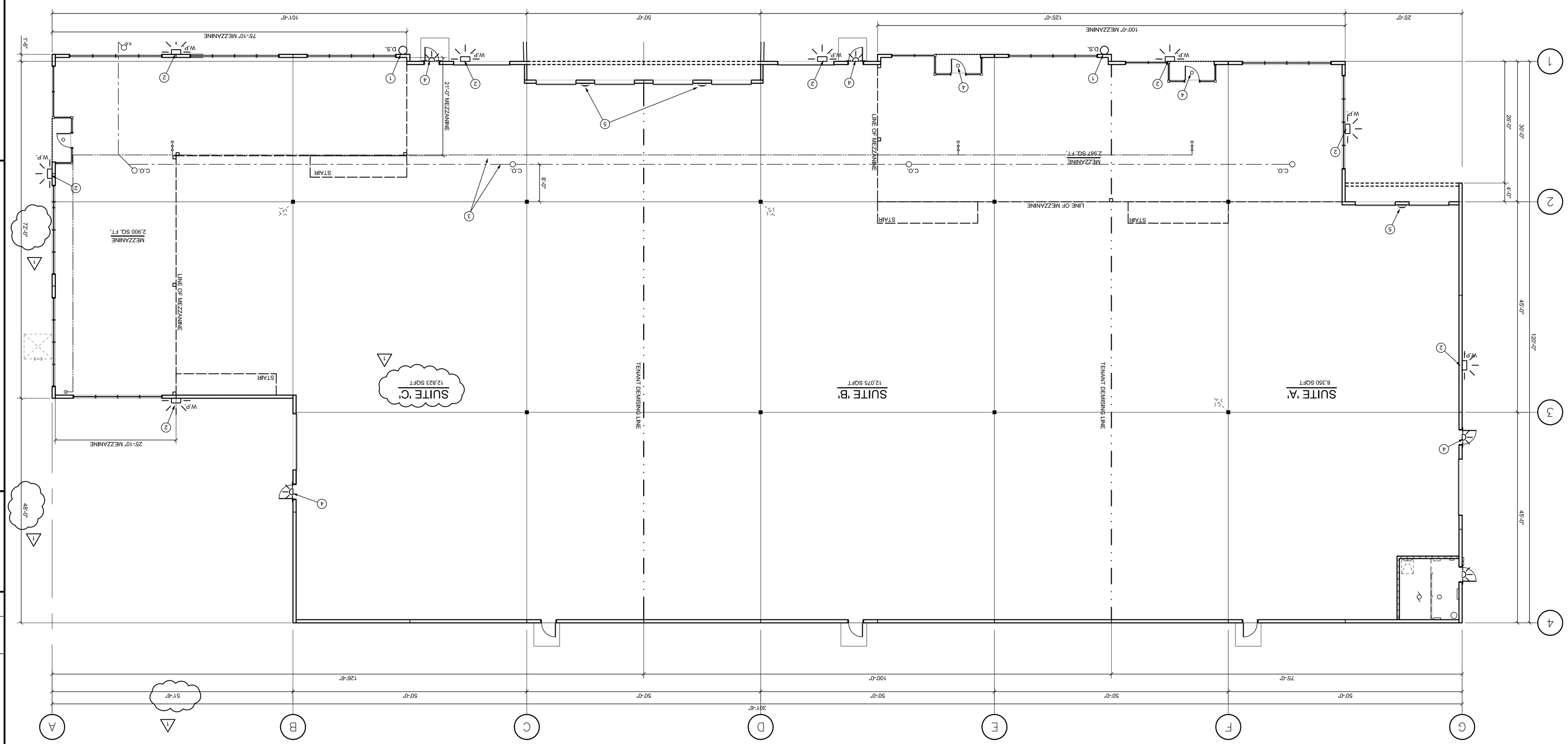
3/32" = 1'-0"

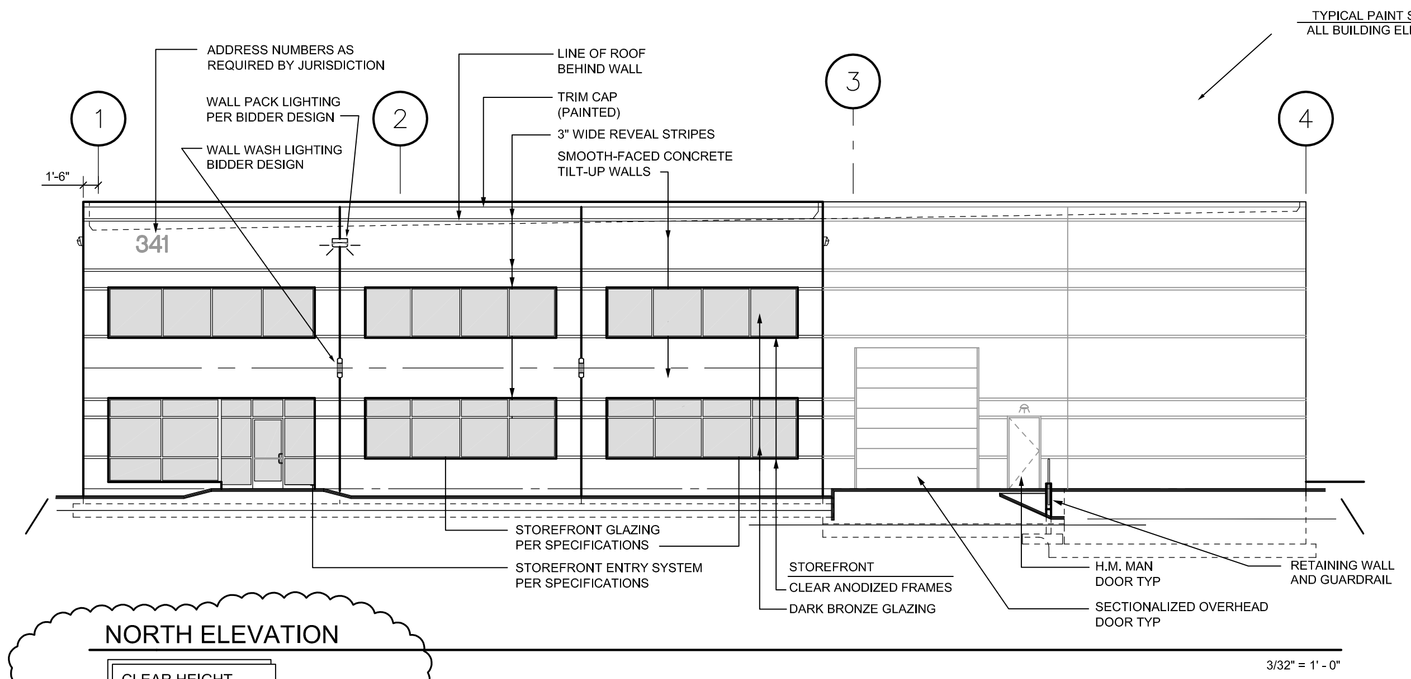
### SUITE DEMISING NOTE:

SUITES 'A', 'B' AND 'C' ARE SHOWN FOR REFERENCE ONLY AND ARE SPECULATIVE. ALL TENANT DEMISING / IMPROVEMENTS ARE TO BE SUBMITTED AT LATER DATES UNDER SEPARATE PERMITS FOR EACH.

### KEY NOTES:

1. DOWNSPOUTS (D.S.) SEE SEE SITE PLAN SHEET G1.0, SEE ALSO UTILITY PLAN (S3.0) FOR STORM TIE IN.
2. WALL PACK TYPE LIGHTS (W.P.) - PER ELECTRICAL (BIDDER DESIGN). SEE EXTERIOR ELEVATIONS FOR ALL HEIGHT LOCATION.
3. INSTALL DOMESTIC WATER LINE TIGHT TO ROOF DECK DIRECTLY ABOVE SANITARY LINE LOCATION. PROVIDE VALVE AND TEE AT EACH STOREFRONT ENTRY AS SHOWN. SIZE OF LINES PER BIDDER DESIGN.
4. EMERGENCY EGRESS LIGHT OVER REQUIRED EXIT DOORS TYP
5. EMERGENCY SHUTOFF FOR DOCK SPILL CONTAINMENT - SEE UTILITY PLAN



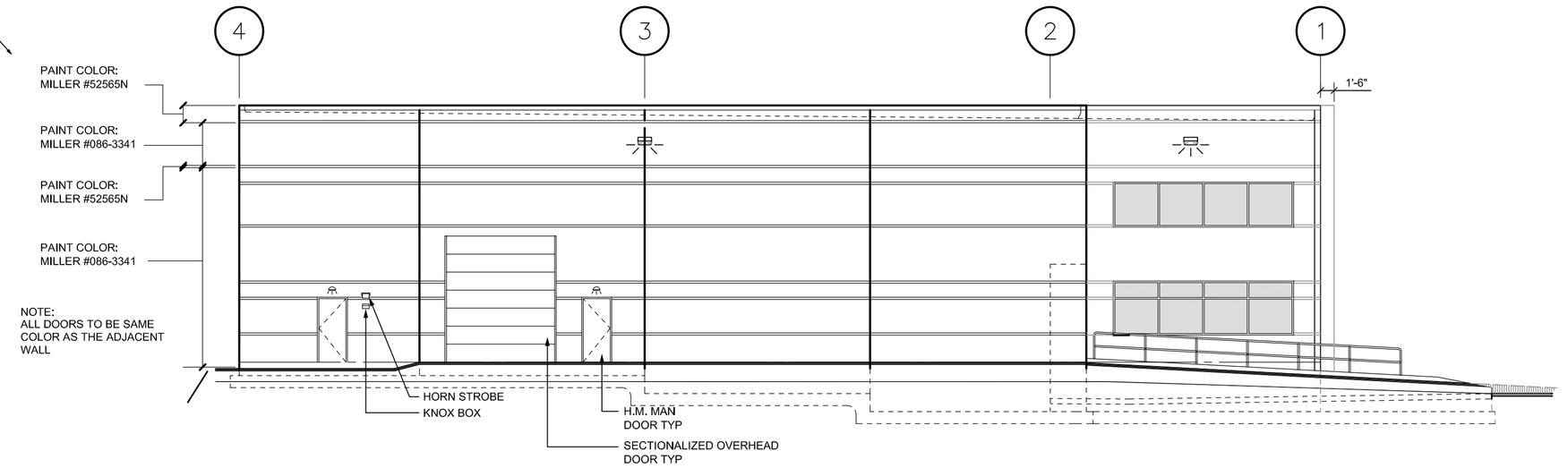



NORTH ELEVATION

CLEAR HEIGHT
LOWEST PT. = 22'-0"

3/32" = 1' - 0"

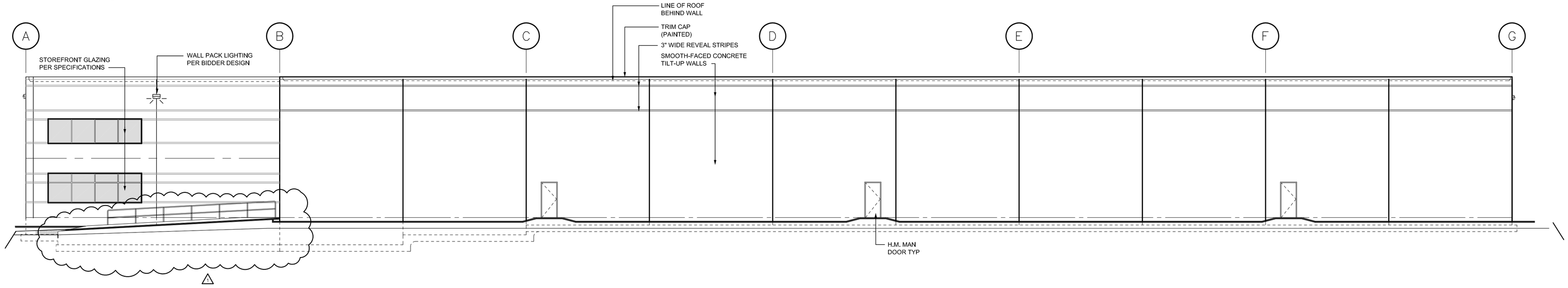
TYPICAL PAINT SCHEME
ALL BUILDING ELEVATIONS




SOUTH ELEVATION

CLEAR HEIGHT
LOWEST PT. = 22'-0"

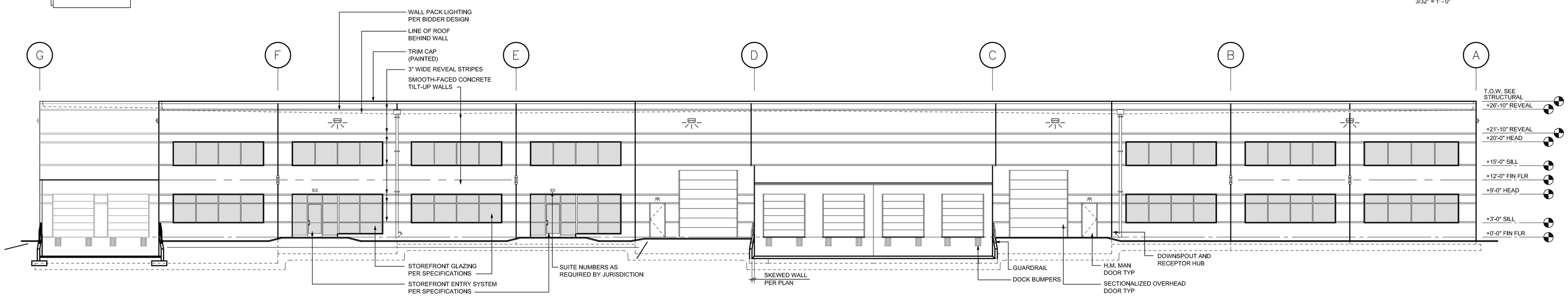
3/32" = 1' - 0"




WEST ELEVATION

CLEAR HEIGHT
LOWEST PT. = 22'-0"

3/32" = 1' - 0"




EAST ELEVATION

CLEAR HEIGHT
LOWEST PT. = 22'-0"

3/32" = 1' - 0"

| NO. | DATE | REVISIONS |
|---|---|---|
| 1 | 3-17-14 | REVISED PER OWNER REQUEST AND PLANNING COMMENTS |

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www.vlmk.com

TREND BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

BUILDING "C"

# BUILDING ELEVATIONS

| | |
|---|---|
| DATE | NOVEMBER 2013 |
| SCALE | NOTED |
| PROJECT NO. | 20130584 |
| DRAWN | PSH |
| CHECKED | HGK |

SHEET NO
A2.0
OF

20130584 20130584A2.0.dwg 18 Mar 2014 – 8:48 am path

DESIGN REVIEW ONLY - REVISED 3-17-14

TYPICAL PAINT SCHEME
ALL BUILDING ELEVATIONS

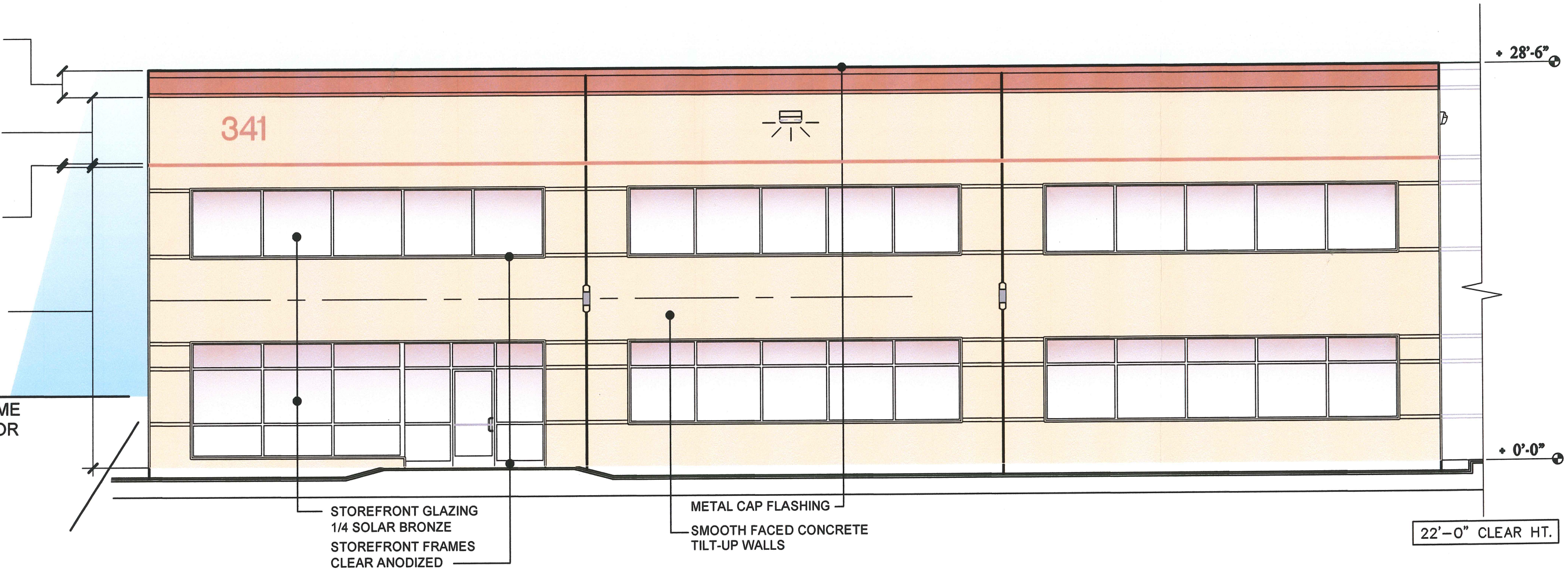
PAINT COLOR:
MILLER #52565N
BRONZE

PAINT COLOR:
MILLER #086-3341
SANDY BEIGE

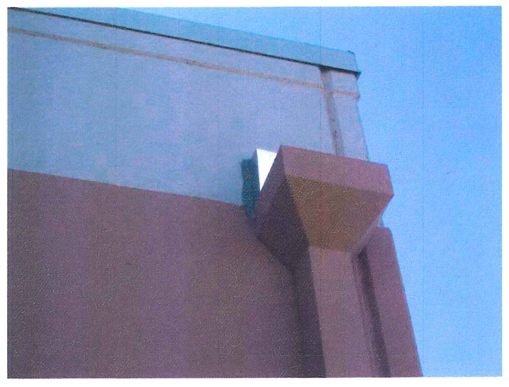
PAINT COLOR:
MILLER #52565N
BRONZE

PAINT COLOR:
MILLER #086-3341
SANDY BEIGE

NOTE:
ALL DOORS TO BE SAME
COLOR AS WALL COLOR




# BUILDING 'C' - NORTH ELEVATION



(FLASHING)

(STOREFRONT)

(TILT-UP WALLS)

TREND
BUSINESS CENTER
341 SEQUOIA PARKWAY
CANBY, OREGON

VLMK CONSULTING ENGINEERS
3933 SW Kelly Avenue • Portland • Oregon 97239-4393
P 503.222.4453
F 503.248.9263
vlmk@vlmk.com
www.vlmk.com

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TYPICAL PAINT SCHEME
ALL BUILDING ELEVATIONS

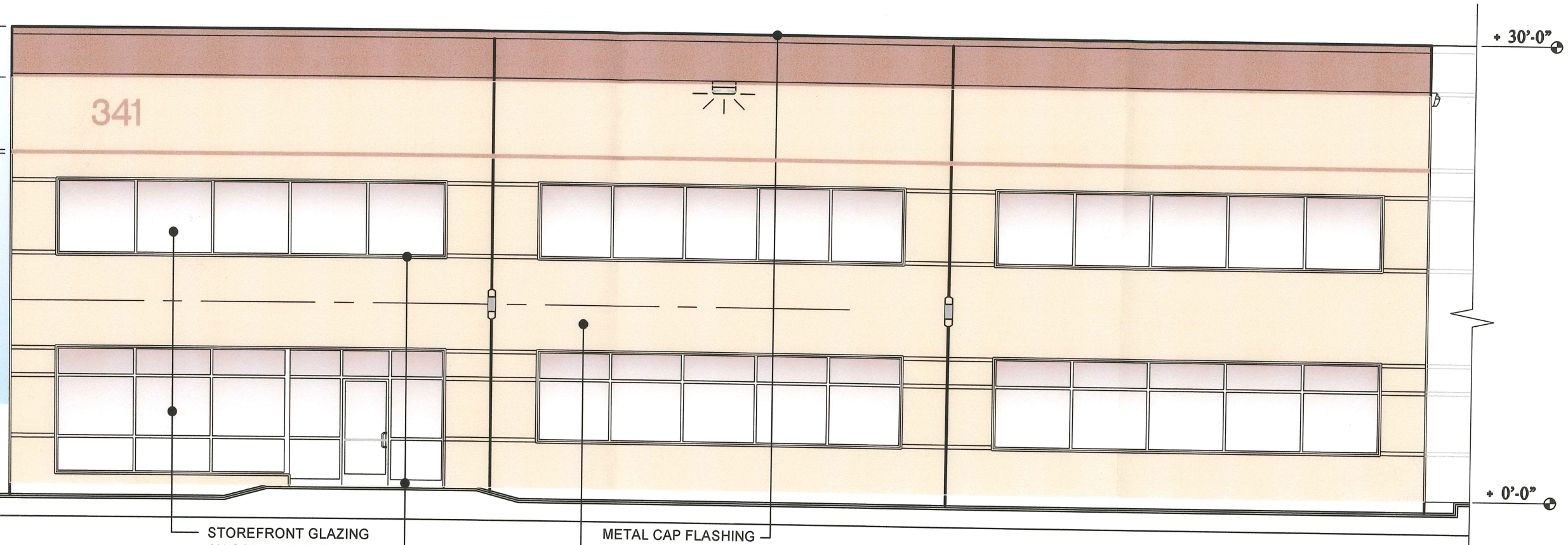
PAINT COLOR:
MILLER #52565N
BRONZE

PAINT COLOR:
MILLER #086-3341
SANDY BEIGE

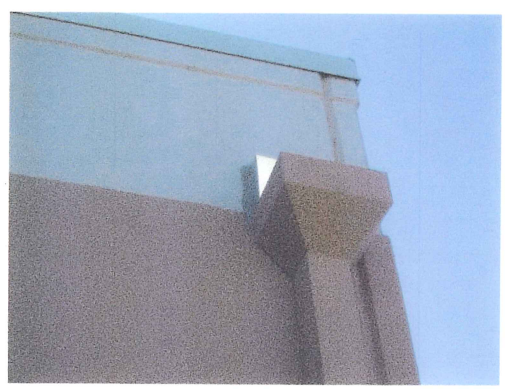
PAINT COLOR:
MILLER #52565N
BRONZE

PAINT COLOR:
MILLER #086-3341
SANDY BEIGE

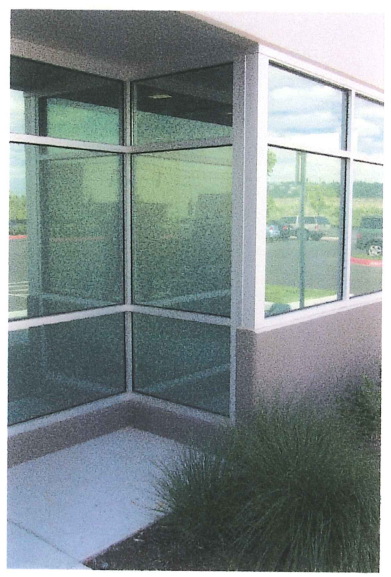
NOTE:
ALL DOORS TO BE SAME
COLOR AS WALL COLOR



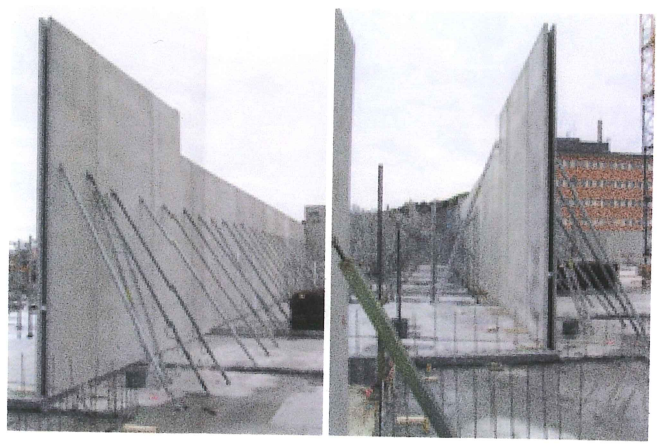

# BUILDING 'C' - NORTH ELEVATION



(FLASHING)



(STOREFRONT)



(TILT-UP WALLS)

TREND
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CANBY, OREGON

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E vlmk@vlmk.com
W www.vlmk.com

20130584

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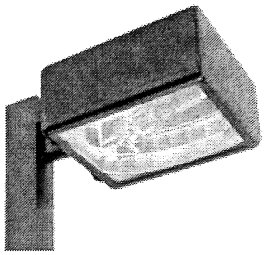
LITHONIA LIGHTING®

| Catalog Number | |
|---|---|
| Notes | |
| Type | |

CONTOUR SERIES

Soft Square Lighting

# KAD



*Specifications*

EPA: 1.2 ft.²

*Weight: 35.9 lbs (16.28 kg)

Length: 17-1/2 (44.5)

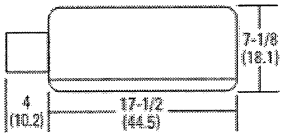
Width: 17-1/2" (44.5)

Depth: 7-1/8 (18.1)

All dimensions are inches (centimeters) unless otherwise specified.

*Weight as configured in example below.

METAL HALIDE: 70-400W
HIGH PRESSURE SODIUM: 70-400W
20' TO 35' MOUNTING




## FEATURES & SPECIFICATIONS

**INTENDED USE** – Ideal for parking areas, street lighting, walkways and car lots.

**CONSTRUCTION** – Rugged, die-cast, soft corner aluminum housing with 0.12" nominal wall thickness. Die-cast door frame has impact-resistant, tempered, glass lens that is fully gasketed with one-piece tubular silicone.

Finish: Standard finish is dark bronze (DDB) polyester powder finish, with other architectural colors available.

**OPTICS** – Anodized, aluminum reflectors: IES full cutoff distributions R2 (asymmetric), R3 (asymmetric), R4 (forward throw) and R5S (square) are interchangeable. High-performance anodized, segmented aluminum reflectors IES full cutoff distributions SR2 (asymmetric), SR3 (asymmetric) and SR4SC (forward throw, sharp cutoff). High-performance reflectors attach with tool-less fasteners and are rotatable and interchangeable.

**ELECTRICAL** – Ballast: High pressure sodium: 70-150W is high reactance, high power factor. Constant wattage autotransformer for 200-400W. Metal halide: 70-150W is high reactance, high power factor and is standard with pulse-start ignitor technology. "SCWA" not required. Constant wattage autotransformer for 175-400W. Super CWA (pulse start ballast), 88% efficient and EISA legislation compliant, is required for metal halide 151-400W (SCWA option) for US shipments only. CSA, NOM or INTL required for probe start shipments outside of the US. Pulse-start ballast (SCWA) required for 200W, 320W, or 350W. Ballast is 100% factory-tested.

Socket: Porcelain, horizontally oriented medium base socket for 70-150M. Mogul base socket for 175M and above, and 70-400S, with copper alloy, nickel-plated screw shell and center contact. UL listed 1500W, 600V.

**LISTINGS** – UL Listed (standard). CSA Certified (see Options). UL listed for 25°C ambient and wet locations. IP65 rated in accordance with standard IEC 529.

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

Note: Specifications subject to change without notice.

NIGHTTIME FRIENDLY™

Consistent with IESNA* goals & Green Globes™ criteria for light pollution reduction

## ORDERING INFORMATION

For shortest lead times, configure product using **bolded options**.

**Example:** KAD 400M R3 TB SCWA SPD04 LPI

| KAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Series** | **Wattage** | | | **Distribution** | | **Voltage** | **Ballast** | **Mounting**[12] | |
| **KAD** | Metal halide<br>70M[1,2] **250M**[3]<br>100M[3] 320M[4]<br>150M 350M[3,4]<br>175M[3] **400M**[5,6]<br>200M[4] | High pressure sodium[2]<br>70S<br>100S<br>150S<br>**250S**<br>**400S** | Ceramic metal halide<br>70MHC[1,2]<br>100MHC[1]<br>150MHC | Standard reflectors<br>R2 IES type II asymmetric[7]<br>**R3** IES type III asymmetric[7]<br>**R4** IES type IV forward throw[7]<br>R5S IES type V square | High performance reflectors[8]<br>SR2 IES type II asymmetric[7]<br>SR3 IES type III asymmetric[7]<br>SR4SC IES type IV forward throw | 120<br>208[9]<br>240[9]<br>**277**<br>**347**<br>**480**[3]<br>**TB**[10]<br>230SOHZ[11] | (blank) Magnetic ballast<br>CWI Contant wattage isolated[13]<br>Pulse Start<br>**SCWA** Super CWA pulse-start ballast<br>NOTE: For shipments to U.S. territories, SCWA must be specified to comply with EISA. | Ships in fixture carton<br>**SPD**___ Square pole<br>RPD___ Round pole<br>WBD___ Wall bracket<br>WWD___ Wood or pole wall<br>Ships separately[13,14]<br>DAD12P Degree arm (pole)<br>DAD12WB Degree arm (wall)<br>WBA Decorative wall bracket[15]<br>KMA Mast arm external fitter<br>KTMB Twin mounting bar | Arm length<br>**04** 4" arm<br>06 6" arm<br>**09** 9" arm<br>12 12" arm |

| Options | | | | Finish[21] | | Lamp[21] |
|---|---|---|---|---|---|---|
| Shipped installed in fixture<br>SF Single fuse (120, 277, 347V)[16]<br>DF Double fuse (208, 240, 480V)[16]<br>PD Power tray[17]<br>**PER** NEMA twist-lock receptacle only (no photocontrol)<br>QRS Quartz restrike system[18]<br>QRSTD QRS time delay[18]<br>WTB Terminal wiring block[17] | **CSA** CSA Certified<br>INTL Available MH for probe start shipping outside the U.S.<br>REGC1 California Title 20, effective 1/1/2010<br>Shipped separately[13]<br>HS House side shield<br>PE1 NEMA twist-lock PE (120, 208, 240V) | PE3 NEMA twist-lock PE (347V)<br>PE4 NEMA twist-lock PE (480V)<br>PE7 NEMA twist-lock PE (277V)<br>SC Shorting cap for PER option<br>VG Vandal guard[19]<br>WG Wire guard[19] | **(blank)** Dark bronze<br>**DWH** White<br>**DBL** Black<br>**DMB** Medium bronze<br>**DNA** Natural aluminum<br>Super Durable Finishes<br>DDBXD Dark bronze<br>DBLXD Black | DNAXD Natural aluminum<br>DWHXD White<br>DDBTXD Textured dark bronze<br>DBLBXD Textured black<br>DNATXD Textured natural aluminum<br>DWHGXD Textured white | **LPI** Lamp included<br>**L/LP** Less lamp |

**Accessories: Tenon Mounting Slipfitter** *(RPxx required.)*
*Order as seperate catalog number. Must be used with pole mounting.*

| Tenon O.D. | Number of fixtures: One | Two@180° | Two@90° | Three@120° | Three@90° | Four@90° |
|---|---|---|---|---|---|---|
| 2-3/8" | T20-190 | T20-280 | T20-290[22] | T20-320[22] | T20-390[22] | T20-490[22] |
| 2-7/8" | T25-190 | T25-280 | T25-290[22] | T25-320 | T25-390[22] | T25-490[22] |
| 4 | T35-190 | T35-280 | T35-290[22] | T35-320 | T35-390[22] | T35-490[22] |

**Notes**

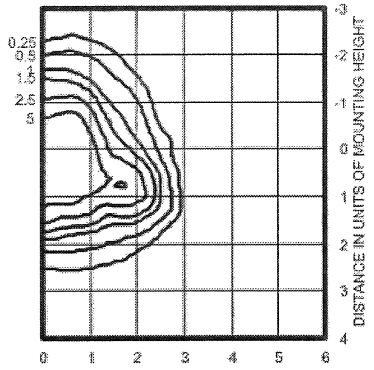
1 Not available with SCWA.
2 Not available with 480V.
3 These wattages do not comply with California Title 20 regulations.
4 Must be ordered with SCWA.
5 These wattages require the REGC1 option to be chosen for shipments into California for Title 20 compliance. 250M: REGC1 is not available in 347 or 480V.
6 Reduced jacket ED28 required for SR2, SR3 and SR4SC optics.
7 House-side shield available.
8 High performance reflectors not available with QRSTD.
9 Must specify CWI for use in Canada.
10 Optional multi-tap ballast (120, 208, 240, 277V, in Canada: 120, 277, 347V).
11 Consult factory for available wattages.
12 9" arm is required when two or more luminaires are oriented on a 90° drilling pattern.
13 May be ordered as an accessory.
14 Must specify finish when ordered as an accessory.
15 Available with SPD04 and SPD09.
16 Must specify voltage. N/A with TB.
17 Only available with SR2, SR3 and SR4SC optics.
18 Max allowable wattage lamp included.
19 Prefix with KAD when ordered as an accessory.
20 See www.lithonia.com/archcolors for additional color options.
21 Must be specified. L/LP not available with MHC.
22 Must use RP009.

# KAD Metal Halide, Arm-mounted Soft Square Cutoff

**Coefficient of Utilization** ————
**Initial Footcandles** ————

**KAD 400M R2** Test no. 1193083101P

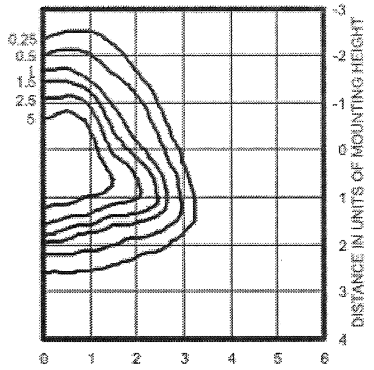
**ISOILLUMINANCE PLOT (Footcandle)**




400W pulse start metal halide lamp, rated 38000 lumens. Footcandle values based on 20' mounting height.
Classification: Type II, Short, Full Cutoff

**KAD 400M R3** Test no. 1192040902P

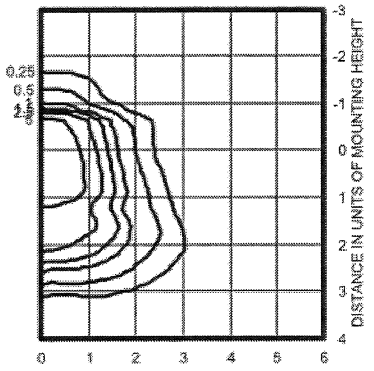
**ISOILLUMINANCE PLOT (Footcandle)**




400W pulse start metal halide lamp, rated 38,000 lumens. Footcandle values based on 20' mounting height.
Classification: Type II, Short, Full Cutoff

**KAD 400M R4** Test no. 1191110101P

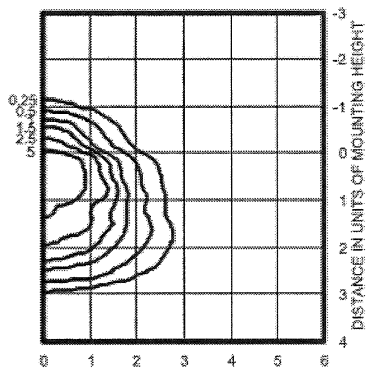
**ISOILLUMINANCE PLOT (Footcandle)**




400W pulse start metal halide lamp, rated 38,000 lumens. Footcandle values based on 20' mounting height.
Classification: Unclassified (Type III, Very Short), Full Cutoff

**KAD 400M R4HS** Test no. 1192061101P

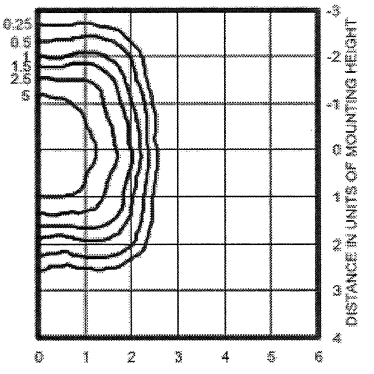
**ISOILLUMINANCE PLOT (Footcandle)**




400W pulse start metal halide lamp, rated 38,000 lumens. Footcandle values based on 20' mounting height.
Classification: Unclassified (Type III, Very Short), Full

**KAD 400M R5S** Test no. 1194040801P

**ISOILLUMINANCE PLOT (Footcandle)**




400W pulse start metal halide lamp, rated 38000 lumens. Footcandle values based on 20' mounting height.
Classification: Unclassified (Type NC, Very Short), Full Cutoff

**Notes**

1 Photometric data for other distributions can be accessed at www.lithonia.com.
2 Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory data and actual field measurements. Dimensions and specifications on this sheet are based on the most current available data and are subject to change without notice.
3 For electrical characteristics, consult outdoor technical data specification sheets on www.lithonia.com.

**Mounting Height Correction Factor**
(Multiply the fc level by the correction factor)
25 ft. = 0.64
35 ft. = 0.32
40 ft. = 0.25

$$\left(\frac{\text{Existing Mounting Height}}{\text{New Mounting Height}}\right)^2 = \text{Correction Factor}$$

LITHONIA LIGHTING®
An AcuityBrands Company

KAD-III-S

PLAT BOOK 139 PAGE 014

RECORDED AS DOCUMENT NO. 4242

SHEET 1 OF 2

# TREND BUSINESS CENTER

A REPLAT OF LOTS 1 THROUGH 4 OF "BURDEN" (PLAT NO. 3973)
LOCATED IN THE SOUTHEAST 1/4 OF SECTION 34,
TOWNSHIP 3 SOUTH, RANGE 1 EAST, W.M.
CITY OF CANBY, CLACKAMAS COUNTY, OREGON
DATE: JULY 2, 2008

PREPARED FOR
TREND BUSINESS CENTER, LLC
7190 SW SANDBURG STREET
PORTLAND, OR 97223


SCALE 1" = 60 FEET

60 0 24 36 48 60




## LEGEND

- ○ SET 5/8" X 30" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "NORTHWEST SURVEYING, INC.", ON MAY 23, 2008
- ■ FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "DAVIS LS 840"; PER SN 2004-375; HELD UNLESS NOTED
- ● FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "ZTEC LS 1944"; PER PLAT OF BURDEN; HELD UNLESS NOTED
- ◪ FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "ZTEC LS 1944"; PER SN 2005-196; HELD UNLESS NOTED

SN SURVEY NUMBER, CLACKAMAS COUNTY SURVEY RECORDS
PUE PUBLIC UTILITY EASEMENT
( ) RECORD INFORMATION PER PLAT OF "BURDEN", PLAT NO. 3973, CLACKAMAS COUNTY SURVEY RECORDS
DOC. NO. DOCUMENT NUMBER, CLACKAMAS DEED RECORDS

## NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO FINALIZE TWO PROPERTY LINE ADJUSTMENTS APPROVED BY THE CITY OF CANBY AS CASE FILE LLA 08-02 AND LLA 08-03. IN ACCORDANCE WITH CITY AND COUNTY REQUIREMENTS THE ADJUSTMENTS REQUIRED A REPLAT OF THE AFFECTED LOTS.
FOR THE BASIS OF BEARINGS I HELD THE FOUND MONUMENTS ALONG THE EASTERLY LINE OF THE PLAT, PER THE PLAT OF BURDEN, AS SHOWN.
I HELD THE RECORD MONUMENTS PER THE PLAT OF BURDEN FOR THE OUTER BOUNDARY OF LOTS 1-4, EXCEPT THE NORTHWEST CORNER OF LOT 1 AND THE SOUTHWEST CORNER OF LOT 2. I ESTABLISHED THE NORTHWEST CORNER OF LOT 1 BY HOLDING RECORD PLAT BEARING AND DISTANCE FROM THE FOUND MONUMENT AT THE NORTHEAST CORNER OF LOT 1. I ESTABLISHED THE SOUTHWEST CORNER OF LOT 2 BY HOLDING THE FOUND MONUMENT FOR LINE AND THE RECORD CURVE RADIUS FROM THE RIGHT-OF-WAY TANGENT TO THE EAST. MONUMENTS WERE SET TO MARK THE LOCATION OF THE NEW LINE BETWEEN LOTS 1 AND 2 AND LOTS 3 AND 4.

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD |
| C1(C1) | 44.99' (45.05') | 7970.00' (7970.00') | 0°19'24" (0°19'26") | S73°35'59"W (S73°36'00"W) | 44.99' (45.05') |
| C2(C2) | 114.26' (114.26') | 1012.50' (1012.50') | 6°27'56" (6°27'56") | S76°54'23"W (S76°54'23"W) | 114.20' (114.20') |
| C3(C3) | 226.02' (226.02') | 1012.50' (1012.50') | 12°47'25" (12°47'25") | S86°32'03"W (S86°32'05"W) | 225.55' (225.55') |
| C4 | 340.28' | 1012.50' (1012.50') | 19°15'21" | S83°18'06"W | 338.69' |

7/3/08
REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JANUARY 15, 2002
CLINTON H. STUBBS JR.
55469LS
RENEWAL DATE: 06/30/10

| | |
|---|---|
| JOB NAME: | TREND BUSINESS CENTER |
| JOB NUMBER: | 425 |
| DRAWN BY: | CHS |
| CHECKED BY: | SFF |
| DRAWING NO: | 425 PLA |


BOUNDARY TOPOGRAPHIC CONSTRUCTION CADASTRAL
NORTHWEST SURVEYING, Inc.
PO BOX 7177 BEAVERTON, OR 97007
PHONE: 503-848-2127 FAX: 503-848-2179
EMAIL: nwsurveying@nwsrvy.com

PLAT BOOK 139 PAGE 014
RECORDED AS DOCUMENT NO. 4242
SHEET 2 OF 2

# TREND BUSINESS CENTER

**A REPLAT OF LOTS 1 THROUGH 4 OF "BURDEN" (PLAT NO. 3973)**
**LOCATED IN THE SOUTHEAST 1/4 OF SECTION 34,**
**TOWNSHIP 3 SOUTH, RANGE 1 EAST, W.M.**
**CITY OF CANBY, CLACKAMAS COUNTY, OREGON**
**DATE: JULY 2, 2008**

PREPARED FOR
TREND BUSINESS CENTER, LLC
7190 SW SANDBURG STREET
PORTLAND, OR 97223

## SURVEYOR'S CERTIFICATE

I, CLINTON H. STUBBS Jr., HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS, THE LANDS REPRESENTED ON THE ANNEXED MAP OF "TREND BUSINESS CENTER", BEING A REPLAT OF LOT 1 THROUGH LOT 4 OF "BURDEN", LOCATED IN THE SOUTHEAST ONE-QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF CANBY, CLACKAMAS COUNTY, OREGON, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT THE INITIAL POINT, LOCATED AT THE NORTHWEST CORNER OF LOT 5 FROM SAID PLAT OF "BURDEN" AT A 5/8 INCH IRON ROD WITH A YELLOW PLASTIC CAP STAMPED "ZTEC LS 1944", SAID POINT ALSO BEING THE NORTHEAST CORNER OF SAID LOT 4 AND BEING ON THE SOUTHERLY RIGHT-OF-WAY LINE OF SEQUOIA PARKWAY; THENCE ALONG THE EASTERLY LINE OF SAID LOT 4, S00°03'02"W 224.30 FEET; THENCE CONTINUING ALONG THE EASTERLY LINE OF SAID LOT 4 AND THE EASTERLY LINE OF SAID LOT 3, S16°14'15"E 581.78 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3, SAID POINT BEING LOCATED ON THE NORTHERLY RIGHT-OF-WAY LINE OF SW 4TH AVENUE; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING CALLS, ALONG A NON-TANGENT CURVE TO THE LEFT WITH A RADIUS OF 1012.50 FEET, A DELTA ANGLE OF 19°15'21", A LONG CHORD BEARING S83°18'06"W 338.69 FEET AND A LENGTH OF 340.28 FEET; THENCE ALONG A RADIAL LINE S16°19'31"E 3.86 FEET; THENCE S73°26'29"W 65.96 FEET TO A POINT OF CURVATURE; THENCE ALONG A TANGENT CURVE TO THE RIGHT WITH A RADIUS OF 7970.00 FEET, A DELTA ANGLE OF 0°19'24", A LONG CHORD BEARING S73°35'59"W 44.99 FEET, AND A LENGTH OF 44.99 FEET TO THE SOUTHWEST CORNER OF SAID LOT 2; THENCE ALONG THE WESTERLY BOUNDARY LINE OF SAID LOT 2 AND LOT 1, N16°14'31"W 735.49 FEET; THENCE CONTINUING ALONG THE WESTERLY BOUNDARY LINE OF SAID LOT 1 THE FOLLOWING CALLS, N89°55'12"W 39.91 FEET, N00°00'38"E 50.03 FEET, S89°57'10"E 40.00 FEET AND N00°06'17"W 99.36 FEET TO SAID SOUTHERLY RIGHT-OF-WAY LINE OF SEQUOIA PARKWAY; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, N89°45'38"E 485.01 FEET TO THE INITIAL POINT.

CONTAINING 8.697 ACRES, MORE OR LESS.

## DECLARATION

KNOW ALL PERSONS BY THESE PRESENT, THAT TREND BUSINESS CENTER LLC, AN OREGON LIMITED LIABILITY COMPANY AS THE OWNER OF THE LANDS DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE, DOES HEREBY DECLARE THE ANNEXED MAP OF "TREND BUSINESS CENTER" TO BE TRUE AND CORRECT, AND HAVE CAUSED THE SAME TO BE PLATTED INTO LOTS, AND GRANT ALL EASEMENTS SET FORTH FOR THE USES STATED AND AS INDICATED HEREON IN ACCORDANCE WITH PROVISIONS OF ORS 92. ALL RESTRICTIONS SHOWN OR NOTED ON PLAT ARE HEREBY APPROVED.

BY William L. McCormack
WILLIAM L. McCORMACK, GENERAL MANAGER

## ACKNOWLEDGMENT

STATE OF OREGON
S.S
COUNTY OF CLACKAMAS

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 7th DAY OF July, 2008, BY WILLIAM L. McCORMACK, GENERAL MANAGER OF TREND BUSINESS CENTER, LLC, ON ITS BEHALF.

NOTARY SIGNATURE Jodi Williams
NOTARY PUBLIC FOR OREGON Yes
MY COMMISSION EXPIRES: 7/5/2011
COMMISSION NO. 418285

## CITY OF CANBY APPROVALS

APPROVED THIS 7th DAY OF July, 2008

BY Melissa Hardy, Assoc. Planner for Planning Director
CITY OF CANBY COMMUNITY DEVELOPMENT AND PLANNING DIRECTOR

## CLACKAMAS COUNTY APPROVALS

APPROVED THIS 9TH DAY OF JULY, 2008.

Carl R. Clinton, DEPUTY
CLACKAMAS COUNTY SURVEYOR; AND CLACKAMAS COUNTY BOARD OF COMMISSIONERS DELEGATE PER COUNTY CODE CHAPTER 11.02

ALL TAXES, FEES, ASSESSMENTS OF OTHER CHARGES AS PROVIDED BY O.R.S. 92.095 HAVE BEEN PAID THRU JUNE 30, 2009.

APPROVED THIS 10th DAY OF July, 2008.

CLACKAMAS COUNTY ASSESSOR & TAX COLLECTOR

BY: Elsie Hussey
DEPUTY

STATE OF OREGON
S.S
COUNTY OF CLACKAMAS

I DO HEREBY CERTIFY THAT THE ATTACHED PLAT WAS RECEIVED FOR RECORD ON THE 10 DAY OF JULY, 2008
AT 3:01 O'CLOCK P M.

PLAT NO. BK 139 PG 014 NO 4242
DOC. NO. 2008-49481

SHERRY HALL, CLACKAMAS COUNTY CLERK
BY: Karen Hoss
DEPUTY

## PLAT NOTES AND RESTRICTIONS

1) THIS PLAT IS SUBJECT THE CONDITIONS OF APPROVAL FROM THE CITY OF CANBY CASE FILE NUMBER LLA 08-02 LLA 08-03.
2) THIS PLAT IS SUBJECT TO THE DRIVEWAY EASEMENT AND MAINTENANCE AGREEMENT RECORDED AUGUST 31, 2006 IN DOCUMENT NUMBER 2006-080672, CLACKAMAS COUNTY DEED RECORDS. THE EASEMENT IS LOCATED AT THE NORTHWEST CORNER OF LOT 1, THE LOCATION IS DEFINED AS THE EXISTING AND FUTURE SHARED DRIVEWAY WITH THE PROPERTY DESCRIBED IN DOCUMENT NUMBER 97-018736. THERE IS NOT SUFFICIENT INFORMATION TO MAP THE EASEMENT LOCATION, AS IT IS DEPENDENT UPON FUTURE DEVELOPMENT PLANS FOR THE PROPERTY, THE APPROXIMATE LOCATION IS SHOWN ON SHEET 1.
3) THIS PLAT IS SUBJECT TO ALL COVENANTS, CONDITIONS AND RESTRICTIONS, AS SHOWN ON THE PLAT OF BURDEN.
4) LOTS 1-4 OF THIS PLAT ARE SUBJECT TO 6.00 FEET WIDE PUBLIC UTILITY EASEMENTS ON BOTH SIDES OF THE LINES BETWEEN SAID LOTS 1 AND 4 AND LOTS 2 AND 3, AS SHOWN. THE PUBLIC UTILITY EASEMENTS GRANTED PER THE PLAT OF "BURDEN" BETWEEN LOTS 1-4 ARE VACATED BY REPLAT SUBJECT TO ORS 92.185.

7/3/08
REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JANUARY 15, 2002
CLINTON H. STUBBS JR.
55469LS
RENEWAL DATE: 06/30/10

| | |
|---|---|
| JOB NAME: | TREND BUSINESS CENTER |
| JOB NUMBER: | 425 |
| DRAWN BY: | CHS |
| CHECKED BY: | SFF |
| DRAWING NO: | 425 PLA |


BOUNDARY TOPOGRAPHIC CONSTRUCTION CADASTRAL
NORTHWEST SURVEYING, Inc.
PO BOX 7177 BEAVERTON, OR 97007
PHONE: 503-848-2127 FAX: 503-848-2179
EMAIL: nwsurveying@nwsrvy.com

GEODESIGN INC

November 23, 2004

Trend Construction Company
7190 SW Sandburg Street
Tigard, Oregon 97223

Attention: Mr. Bill McCormack

**Report of Geotechnical Engineering Services**
Trend Development at Canby Pioneer Industrial Park
Canby, Oregon
GeoDesign Project: TrendConst-4-01

GeoDesign, Inc. is pleased to submit our geotechnical engineering report for the proposed development of the approximately 10.4-acre site located between the end of SE Sequoia Parkway and SE 4th Avenue in Canby, Oregon. Our services for this project were conducted in accordance with our proposal dated June 18, 2004. This report presents the results of our surface reconnaissance, subsurface exploration, details of subsurface conditions, results of laboratory analyses, conclusions, and design recommendations regarding the project.

We appreciate the opportunity to be of continued service to you. Please call if you have questions regarding this report.

Sincerely,

GeoDesign, Inc.

Scott V. Mills, P.E.
Principal Geotechnical Engineer

cc: Mr. Havlin Kemp, VLMK Consulting Engineers

SMD:SVM:kt
Attachments
Three copies submitted
Document ID: TrendConst-4-01-112304-geor

GEODESIGN INC

February 13, 2008

Trend Business Center, L.L.C.
7190 SW Sandburg Street
Tigard, OR 97223

Attention: Mr. Scott McCormack

**Report of Geotechnical Engineering Services**
**Infiltration Testing**
Trend Business Center at Canby Pioneer Industrial Park
SE Sequoia Parkway and SE 4th Avenue
Canby, Oregon
GeoDesign Project: TrendBC-2-01

## INTRODUCTION

GeoDesign, Inc. is pleased to submit our report of infiltration testing for the Trend Business Center at the Canby Pioneer Industrial Park. We previously completed a geotechnical engineering report for the proposed development dated January 5, 2005[1] and provided construction observation services for Buildings "A" and "B" for the development. Our infiltration testing services for this project were conducted in accordance with our proposal dated January 23, 2008.

The approximately 10.4-acre site is located between SE Sequoia Parkway and the end of SE 4th Avenue in Canby, Oregon. The site relative to existing topographic features is presented on Figure 1. Mr. Brian Dubal at VLMK Consulting Engineers provided us with preliminary project information, including a site plan showing the proposed infiltration testing location. We understand that current plans are to construct dry wells in the proposed parking lot area on the east side of the site between proposed Buildings "C" and "D."

## PURPOSE AND SCOPE

The purpose of this evaluation was to provide in-situ infiltration testing for use in design of the proposed stormwater infiltration system. Specifically, we have performed the following scope of services:

[1] GeoDesign, Inc., *Report of Geotechnical Engineering Services, Trend Development at Canby Pioneer Industrial Park, Canby, Oregon*, dated January 5, 2005. GeoDesign Project: TrendConst-4-01

# TREND INDUSTRIAL PARK PHASE II

## TRAFFIC IMPACT STUDY

CANBY, OREGON

PREPARED BY
LANCASTER ENGINEERING

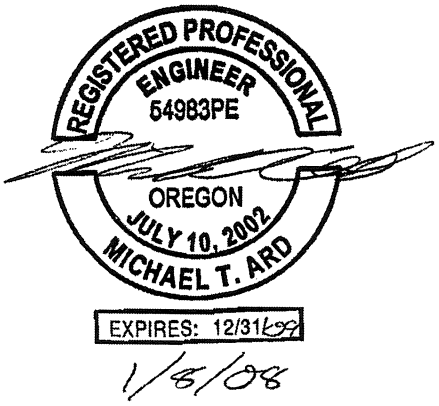
JANUARY 2008

LANCASTER
engineering

# TREND INDUSTRIAL PARK PHASE II

## Traffic Impact Study

Canby, Oregon




Prepared By

CATRIONA SUMRAIN, TOPS

MICHAEL T. ARD, PE

January, 2008



321 SW 4th Ave. Suite 400 Portland, OR 97204 Phone: 503.248.0313 Fax: 503.248.9251

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## TABLE OF CONTENTS

## *EXECUTIVE SUMMARY*

1. Phase II of the Trend Industrial Park development is proposed to be developed. The site is located on the south side of Sequoia Parkway adjacent to the existing Phase I of the project. Phase II will consist of two buildings, C and D, totaling 61,320 square feet of industrial use. Access to the site is proposed through two driveways onto Sequoia Parkway, one of which will be shared with the access to Building B from Phase I.

2. Phase II of the project is expected to generate 51 trips during the morning peak hour, 53 trips during the evening peak hour, and 426 trips during an average weekday.

3. The intersection of Highway 99E and Sequoia Parkway/Redwood Street is currently operating within ODOT's v/c standards and will continue to operate acceptably through development of Phase II of the site.

4. The intersections of Sequoia Parkway at the site driveways are expected to operate with very low delays through development of Phase II of the project.

5. Sight distance was measured in excess of 350 feet at all proposed driveway locations. Sight distance is adequate in both directions for the proposed site access points, including potentially shared accesses.

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## *INTRODUCTION*

Phase II of the Trend Industrial Park is proposed for development in the City of Canby. Phase I of the development has been completed. The site is located on the south side of Sequoia Parkway. Phase II of the project is proposed to consist of two industrial buildings, totaling 61,320 square feet of industrial use.

The purpose of this study is to assess the traffic impact of the proposed development on the nearby street system and to recommend any required mitigative measures. The analysis will include level of service calculations and a discussion of site access.

Detailed information on level of service, traffic counts, trip generation calculations, and level of service calculations is included in the appendix to this report.

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## LOCATION DESCRIPTION

Phase I of the Trend Industrial Park has been developed and Phase II is proposed. There are two buildings (Buildings C and D) proposed for Phase II, which will be located east of and adjacent to Phase I. At the request of City staff, the impacts of each building were analyzed separately. A vicinity map showing the existing lane configurations and traffic control devices at the study area intersections is shown on page seven.

The site plan for the project shows shared access with Phase I and a driveway between Buildings C and D. Access is not proposed to SE 4th Avenue as part of this phase.

The intersection of Highway 99E at Sequoia Parkway/Redwood Street and the driveways onto Sequoia Parkway were analyzed in this report.

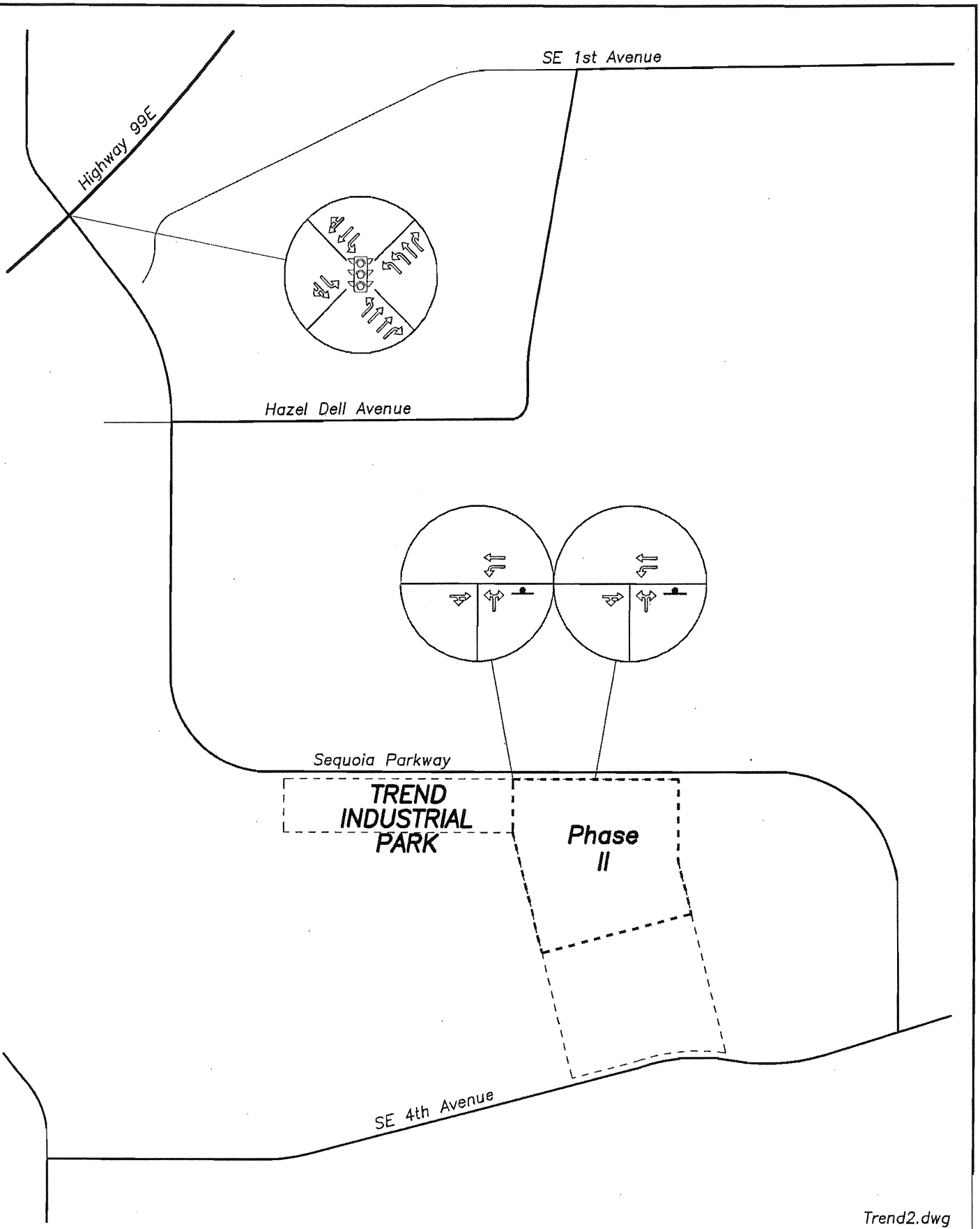
Sequoia Parkway is under the jurisdiction of and maintained by the City of Canby. It is classified by the City as a Collector in the City's Transportation System Plan (TSP) and has been constructed as a three-lane section with two travel lanes and a center turn lane in the vicinity of the site. There are curbs, gutters, sidewalks and bike lanes on both sides of the road. The facility currently terminates at SE 4th Avenue, but will soon be extended to S Township Road. The posted speed is 25 mph and the road width is about 45 feet.

Highway 99E is under the jurisdiction of the Oregon Department of Transportation (ODOT) and is classified by ODOT as a Regional Highway. The City classifies the road as an Arterial. There are curbs, sidewalks and bike lanes on both sides of the highway to the west of Sequoia Parkway, and shoulders to the east. The posted speed near the site is 45 mph and the road is about 72 feet wide. The speed becomes 35 mph west of Redwood Street.

There is public transit near the site. The Canby Area Transit (CAT) Route 1, *Canby-Oregon City*, travels between the Cities of Canby and Oregon City with a stop at Canby Market Center. Service is every hour from about 7:00 AM to about 7:00 PM on weekdays and about 9:30 AM to about 5:30 PM on Saturdays. There is no Sunday service. In addition, the Southern Metro Area Rapid Transit (SMART) provides service to Wilsonville and the South Clackamas Transit District provides service to Molalla.

Manual turning movement counts were made at the intersection of Highway 99E and Sequoia Parkway/Redwood Street during December 2007 from 7:00 to 9:00 AM and 4:00 to 6:00 PM. The peak hours occurred from 7:15 to 8:15 AM and from 4:15 to 5:15 PM. The

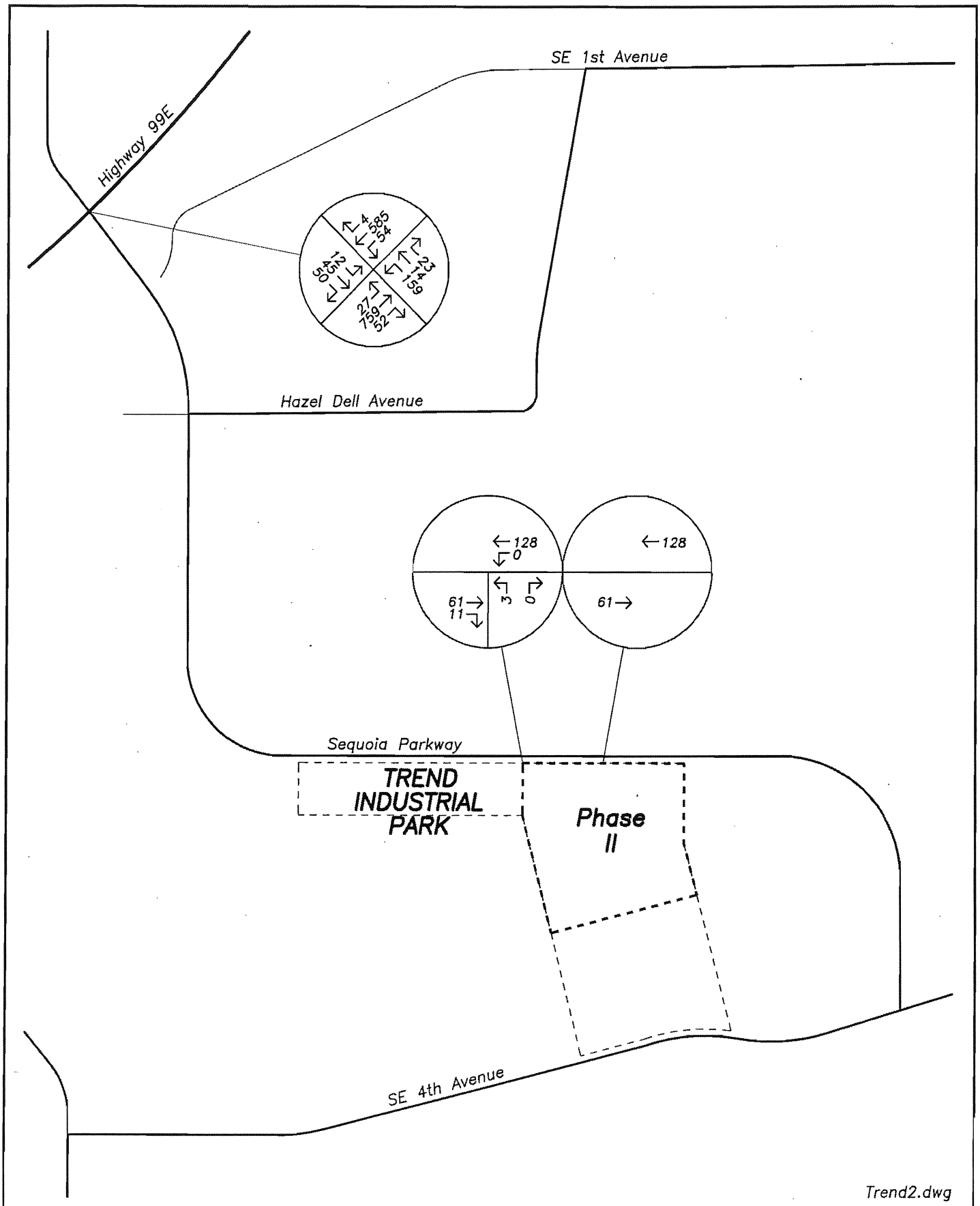
volumes for the morning and evening peak hours are shown in the traffic flow diagrams on pages eight and nine.




VICINITY MAP
Existing Lane Configurations
& Traffic Control Devices

FIGURE 1

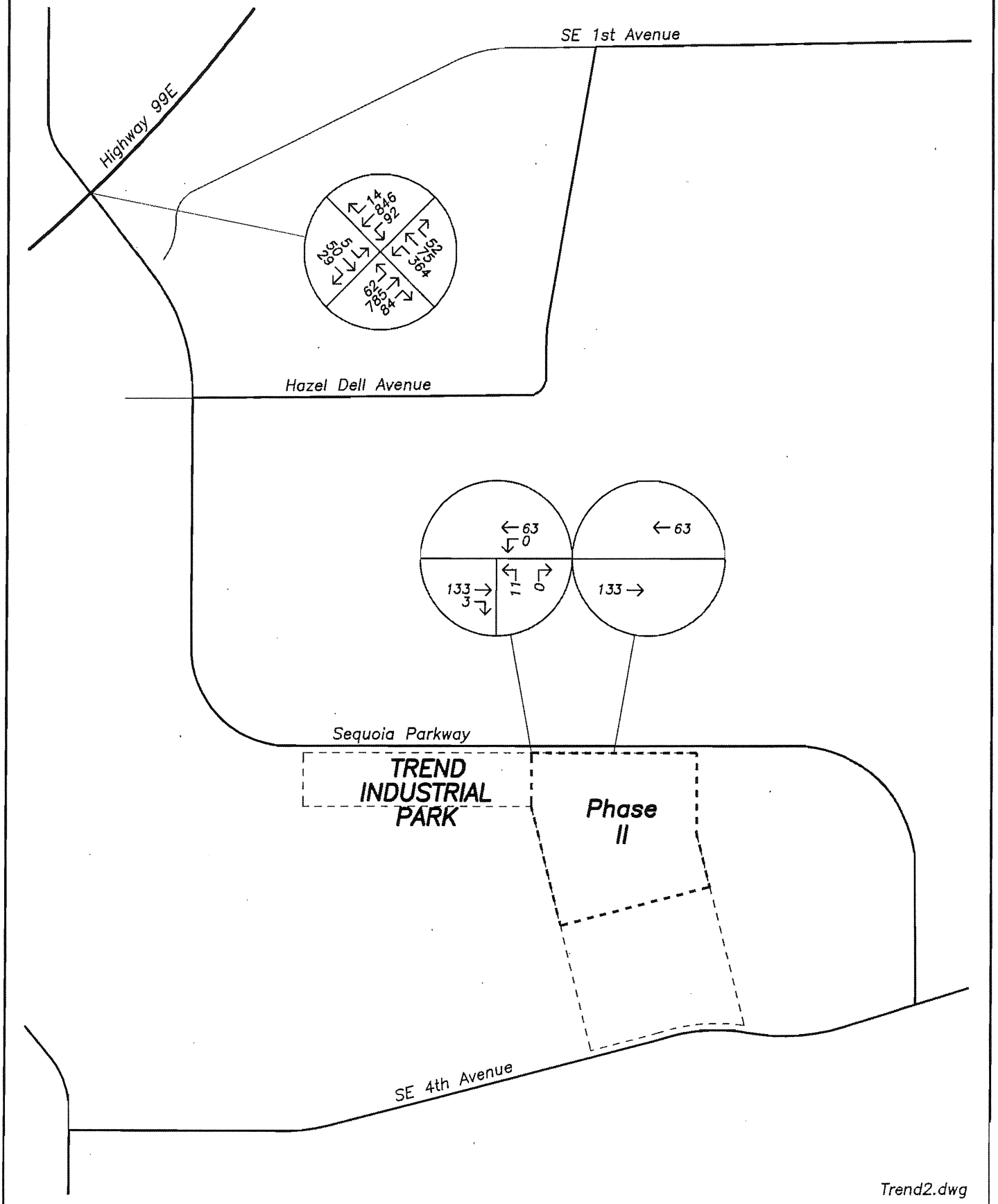
no scale




TRAFFIC VOLUMES
Existing Conditions
AM Peak Hour

FIGURE 2

no scale




TRAFFIC VOLUMES
Existing Conditions
PM Peak Hour

FIGURE 3

no scale

1e

## *TRIP GENERATION*

To estimate the number of trips that will be generated by the proposed industrial development, trip rates from *TRIP GENERATION,* Seventh Edition, published by the Institute of Transportation Engineers (ITE), were used. The trip rates used were for land-use code 130, *Industrial Park.* The trip generation rates are based on the gross square footage and were calculated for each building in Phase II separately. Building C is proposed to be 32,160 square feet and Building D will be 29,160 square feet.

The trip generation calculations indicate that there will be an estimated total of 51 trips generated by Phase II of the industrial development during the morning peak hour. Of these, 42 will be entering and 9 will be exiting the site. During the evening peak hour, there are 53 trips expected, with 11 entering and 42 exiting the site. A total of 426 weekday trips are expected, with half entering and half exiting.

An industrial development typically does not generate pass-by trips and no reduction in the trip generation volumes was taken. Although there is transit service near the site, for a worst-case analysis, no reduction in the number of trips was taken for transit use.

A summary of the trip generation calculations for the industrial development is shown in the following table. Detailed trip generation calculations are included in the appendix to this report.

**TRIP GENERATION SUMMARY**

**Trend Industrial Park Phase II**

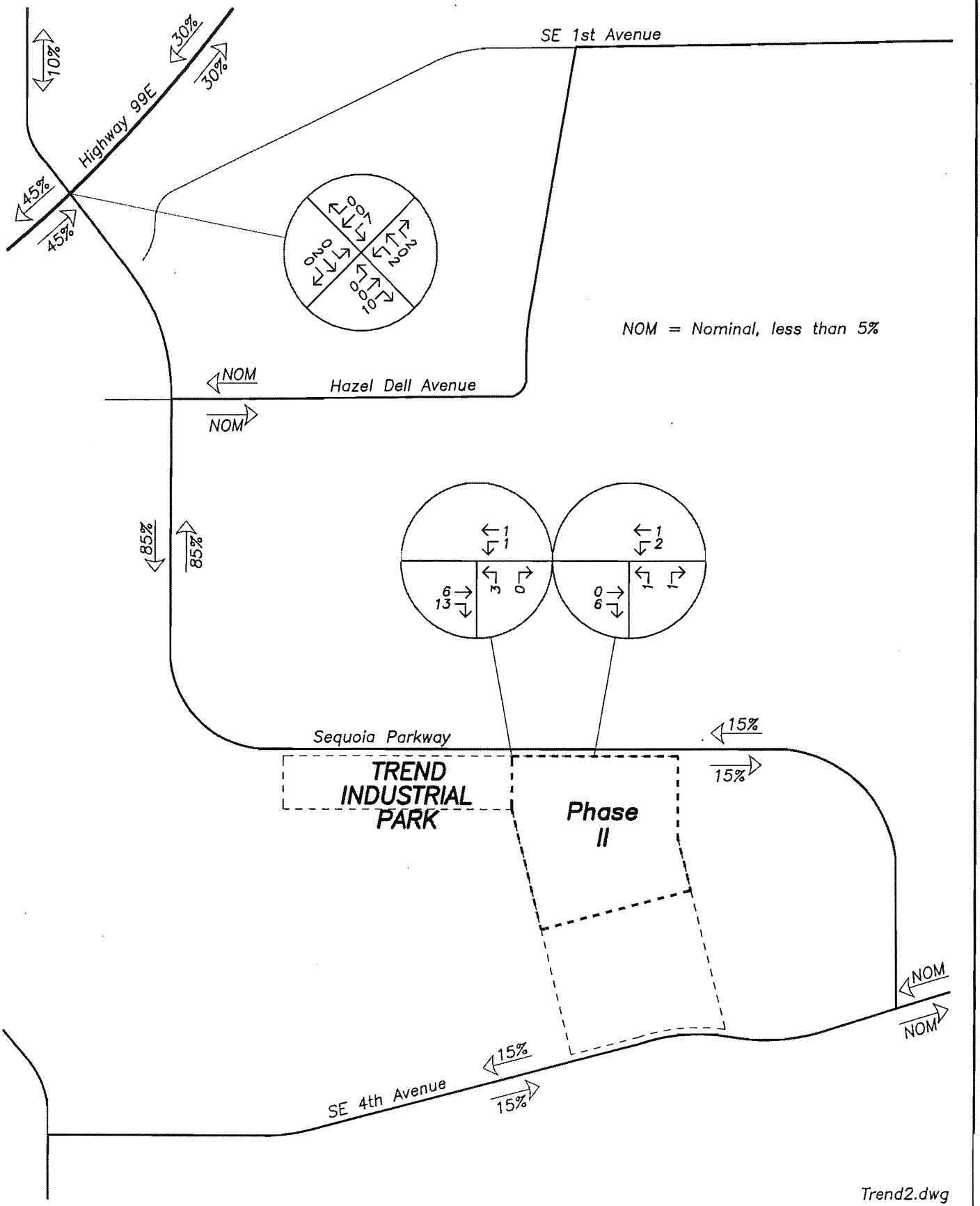
| LAND USE | SIZE | VAR | AM PEAK HOUR | | | PM PEAK HOUR | | | WEEKDAY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | In | Out | Total | In | Out | Total | In | Out | Total |
| Building C | 32.2 ksf | | 22 | 5 | 27 | 6 | 22 | 28 | 112 | 112 | 224 |
| Building D | 29.2 ksf | | 20 | 4 | 24 | 5 | 20 | 25 | 101 | 101 | 202 |
| | | | **42** | **9** | **51** | **11** | **42** | **53** | **213** | **213** | **426** |

## *TRIP DISTRIBUTION*

An industrial site will have a mixture of trips at the site access points. The majority of the trips during the peak hours are trips to or from residential areas while some of the trips are typically heavy vehicles traveling to and from other industrial and commercial areas. It was assumed the majority of the entering trips during the morning peak hour and the exiting trips during the evening peak hour were trips to or from residential areas and the trip distribution was based on the relative densities of the residential areas likely to serve the site. Routes to and from Highway 99E and I-5 to the Metro areas were included in the distribution.

The heavy vehicles trips were distributed through the area based on the existing distribution of heavy vehicles at the intersection of Highway 99E and Sequoia Parkway/Redwood Street.

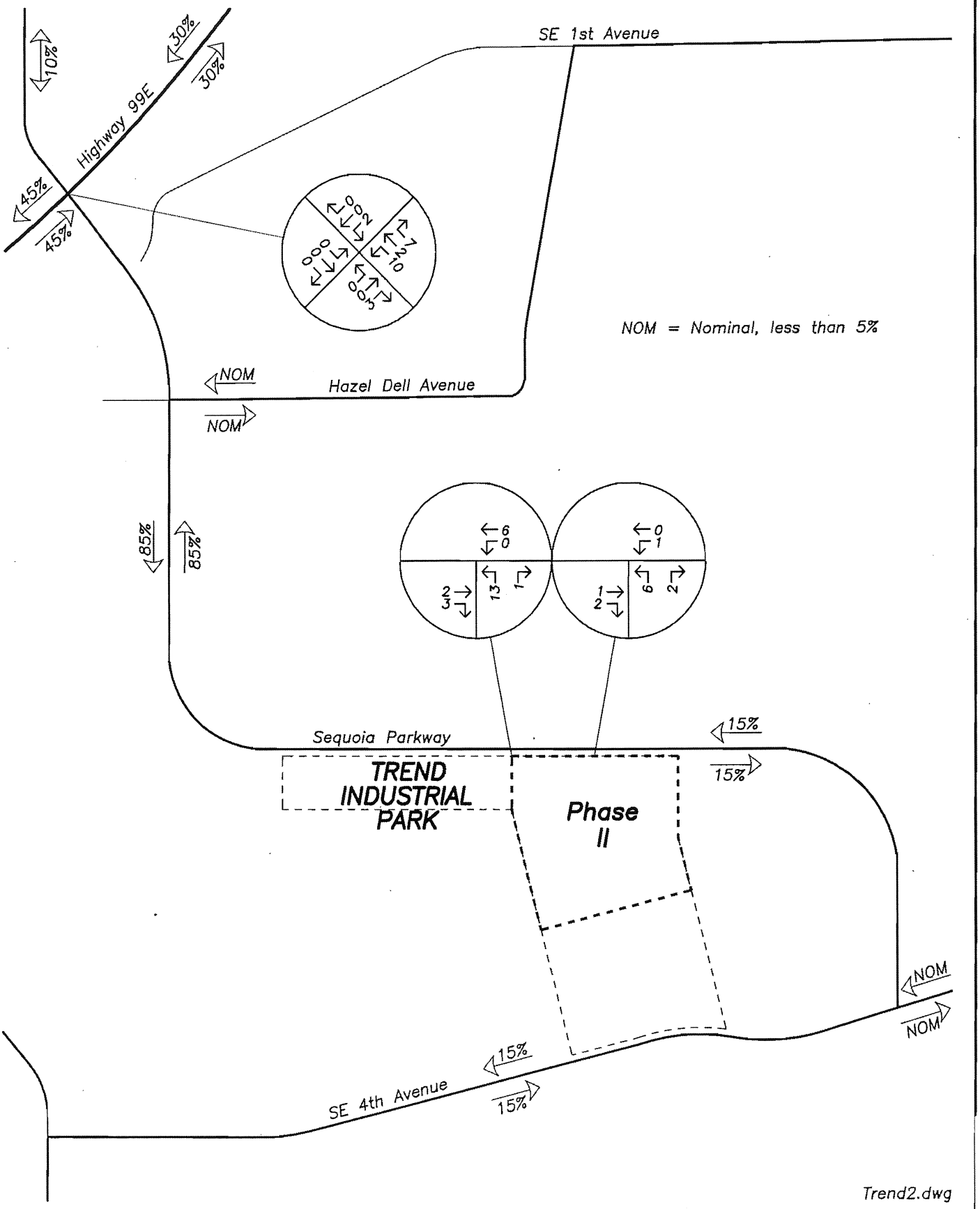
Figures 4 through 7 on pages 12 through 15 show the distribution and assignment of the site trips to the roadway network during the morning and evening peak hours. Figures 4 and 5 show the distribution and assignment of the trips from Building C and Figures 6 and 7 show the distribution and assignment of the trips from Building D.




SITE-GENERATED TRAFFIC (BUILDING C)
Proposed Development Plan
AM Peak Hour

FIGURE 4

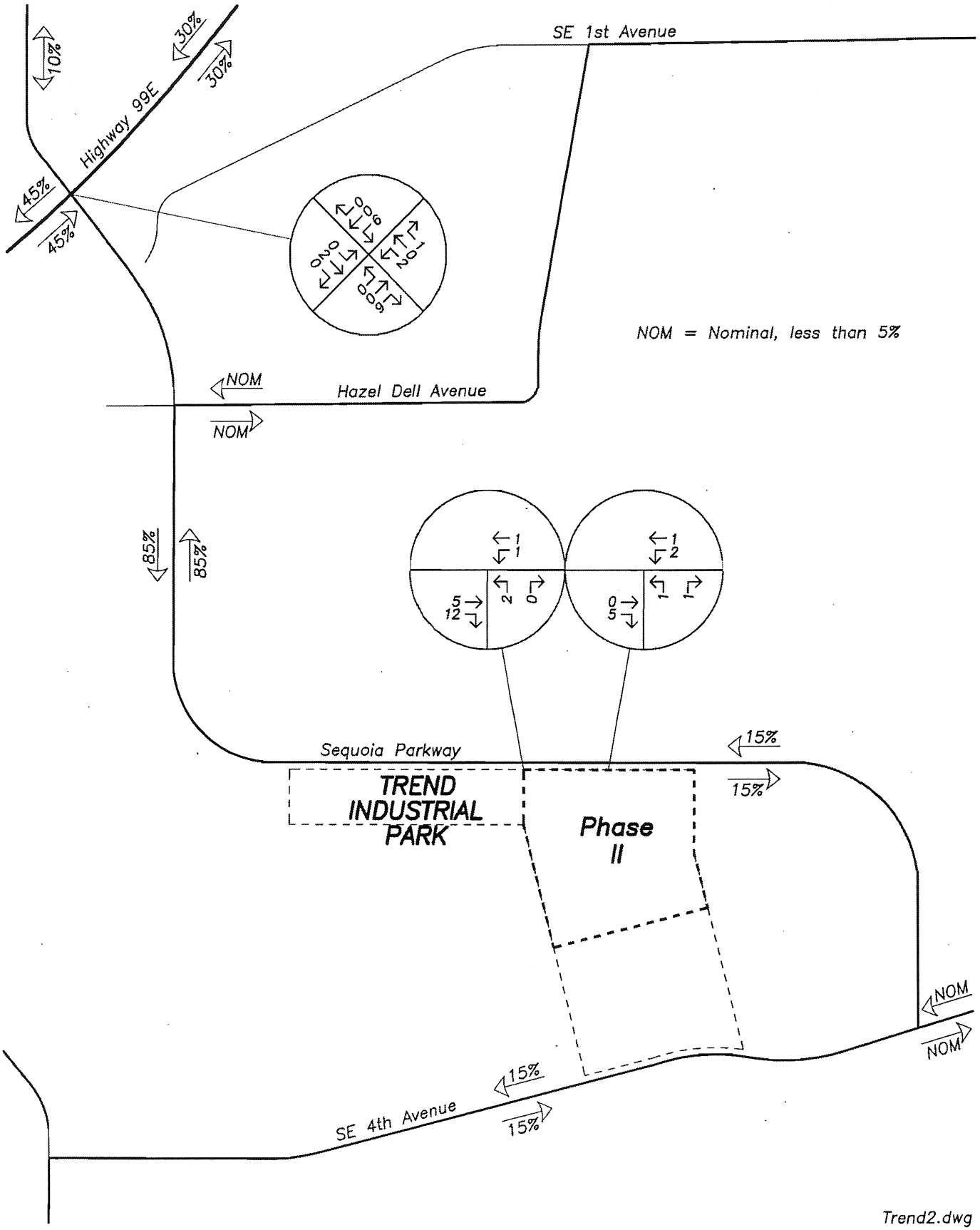
no scale




SITE-GENERATED TRAFFIC (BUILDING C)
Proposed Development Plan
PM Peak Hour

no scale

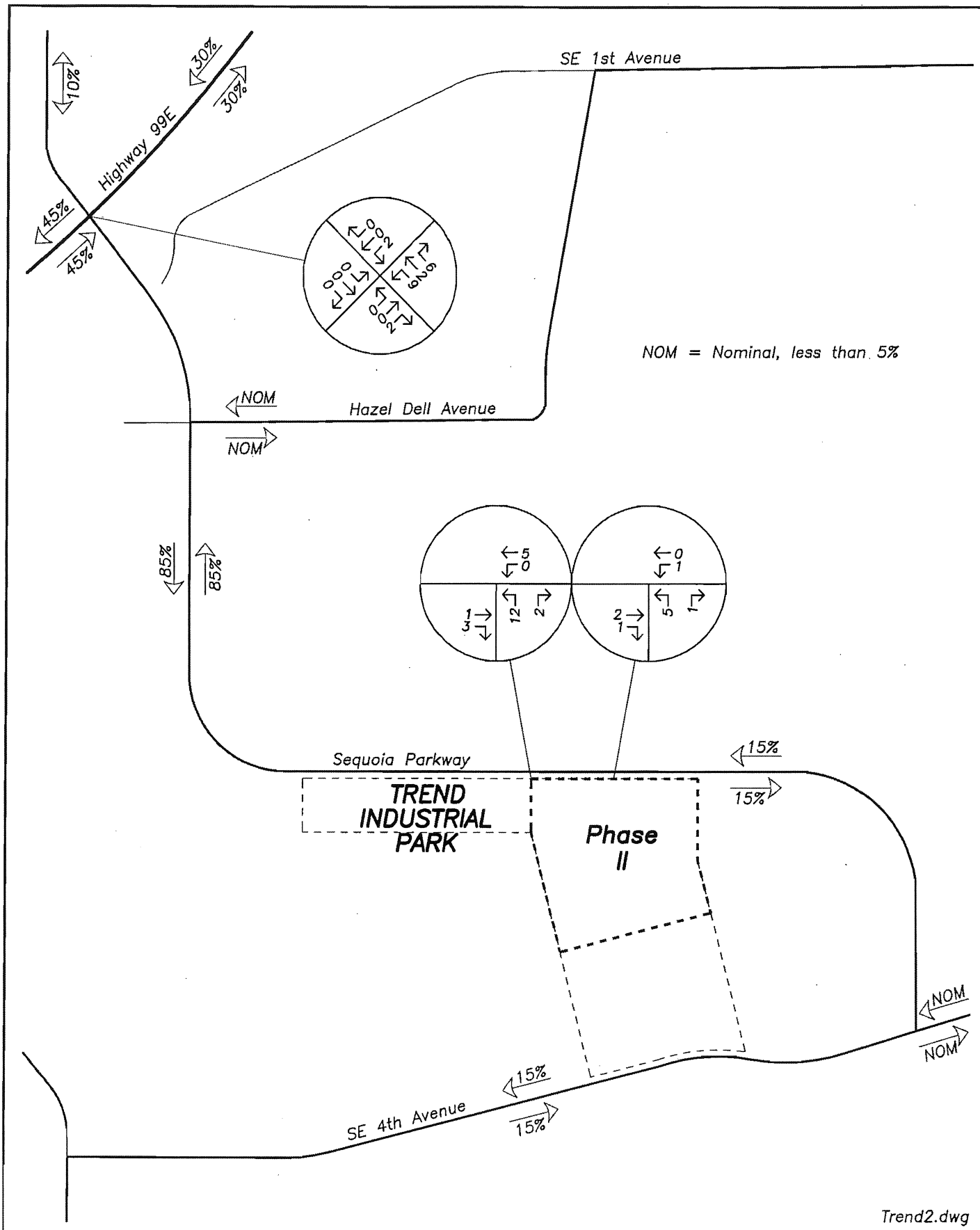
FIGURE 5




SITE-GENERATED TRAFFIC (BUILDING D)
Proposed Development Plan
AM Peak Hour

FIGURE 6

no scale




SITE-GENERATED TRAFFIC (BUILDING D)
Proposed Development Plan
PM Peak Hour

no scale

FIGURE 7

1e

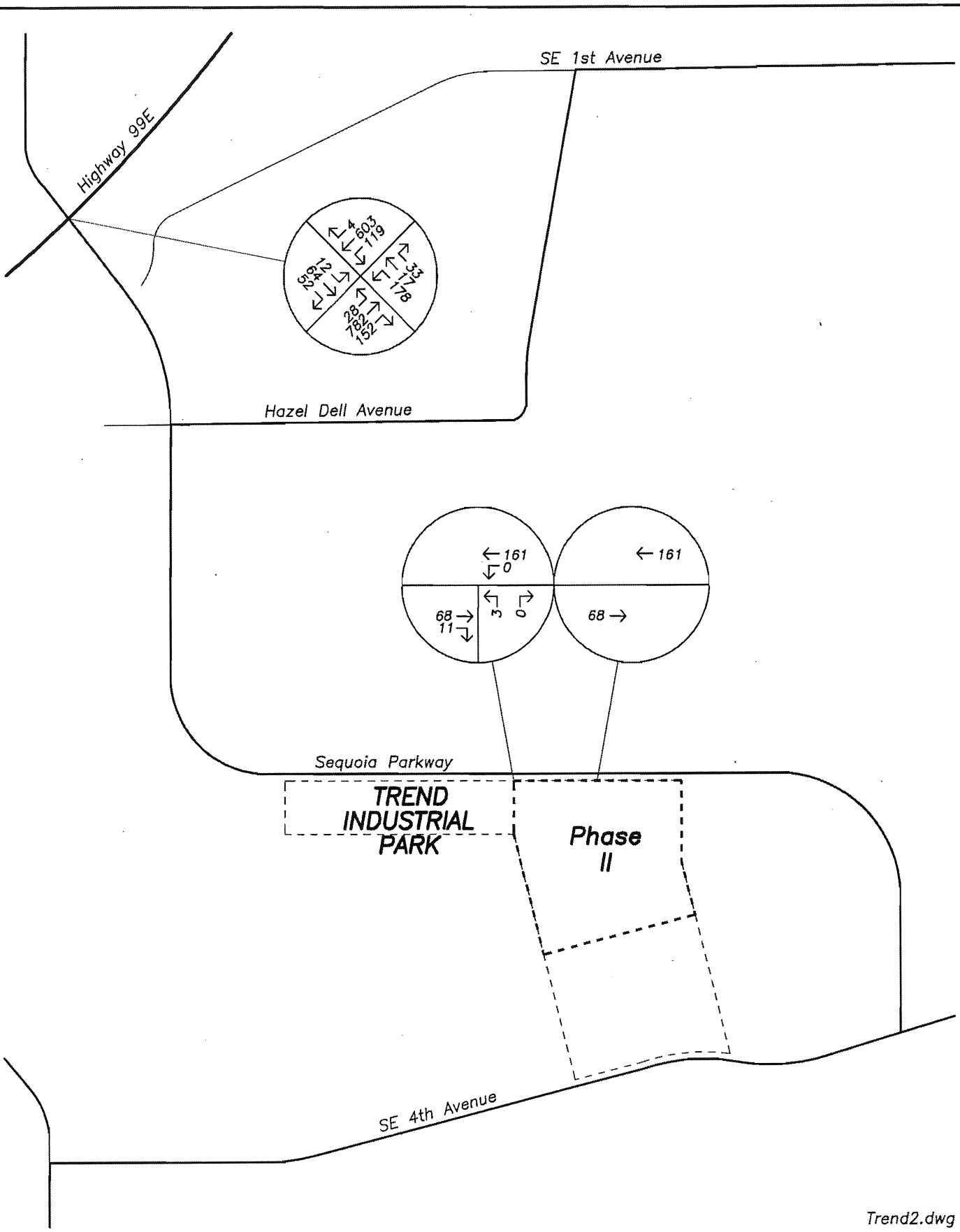
## OPERATIONAL ANALYSIS

*Background Traffic*

There are some developments in the industrial area that have been approved by the City, but have not been constructed yet. The Wilco store and Kendall Floral developments will contribute traffic to the study intersections. The trips from these developments were included as other development traffic. Figures 16 and 17 in the technical appendix show the other development traffic.

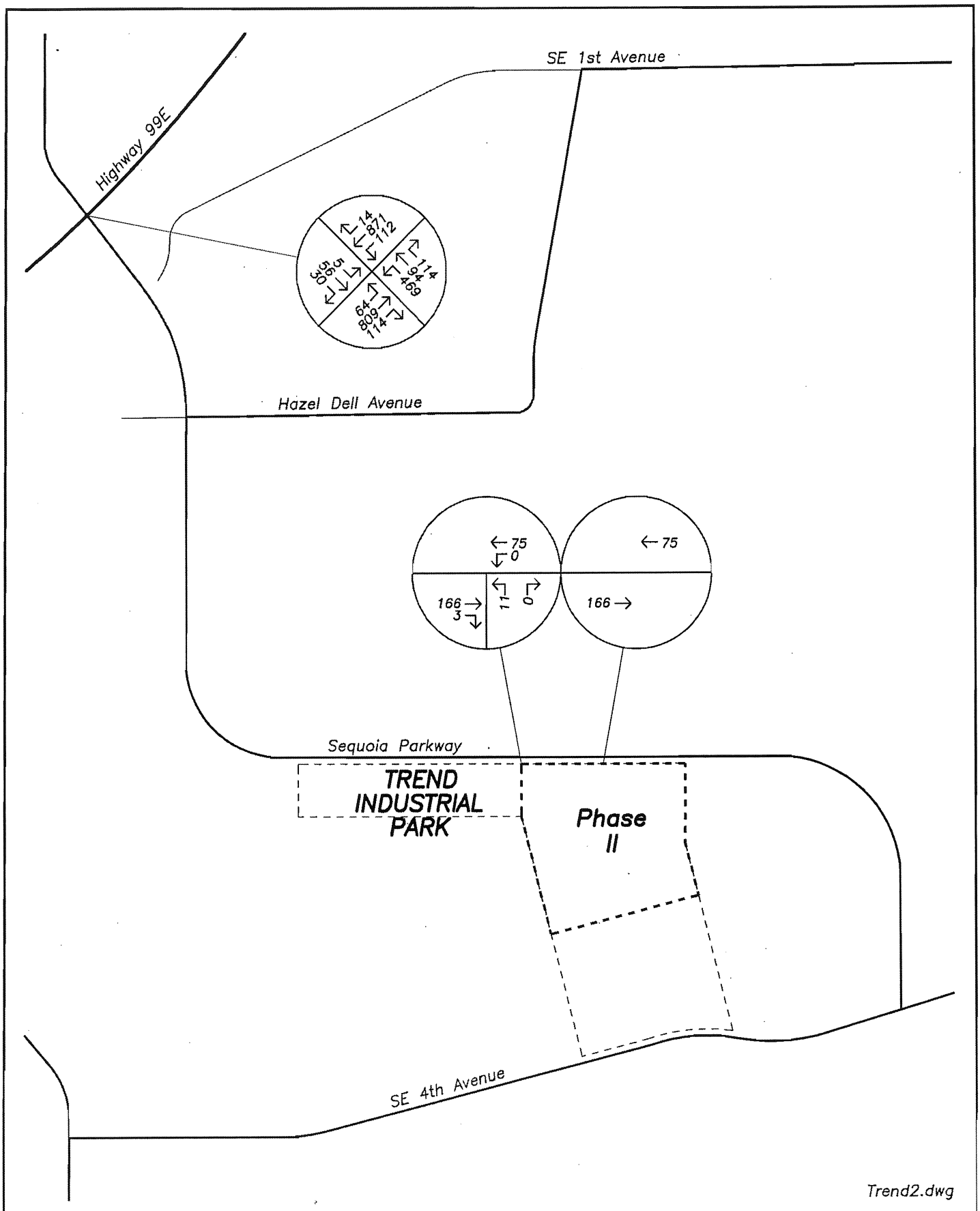
There is other development in the City that is not in the immediate vicinity of the site, but could still add traffic to the study intersections. To account for this other development, a growth rate of three percent per year was applied to the volumes on the nearby streets. This growth rate was calculated from historical traffic counts at the Sequoia Parkway/Highway 99E intersection. The growth rate was applied for a period of one year.

The background traffic volumes comprise the existing traffic with growth rate applied and the other development traffic added. Figures 8 and 9 on pages 17 and 18 show the background traffic during the morning and evening peak hours. Figures 10 through 15 on pages 19 through 24 show the background traffic with the site trips added. Figures 10 and 11 show the background plus site trips from Building C. Figures 12 and 13 show the background plus site trips from Building D. Figures 14 and 15 show the background plus site trips from both buildings.




TRAFFIC VOLUMES
Year 2008 Background Conditions
AM Peak Hour

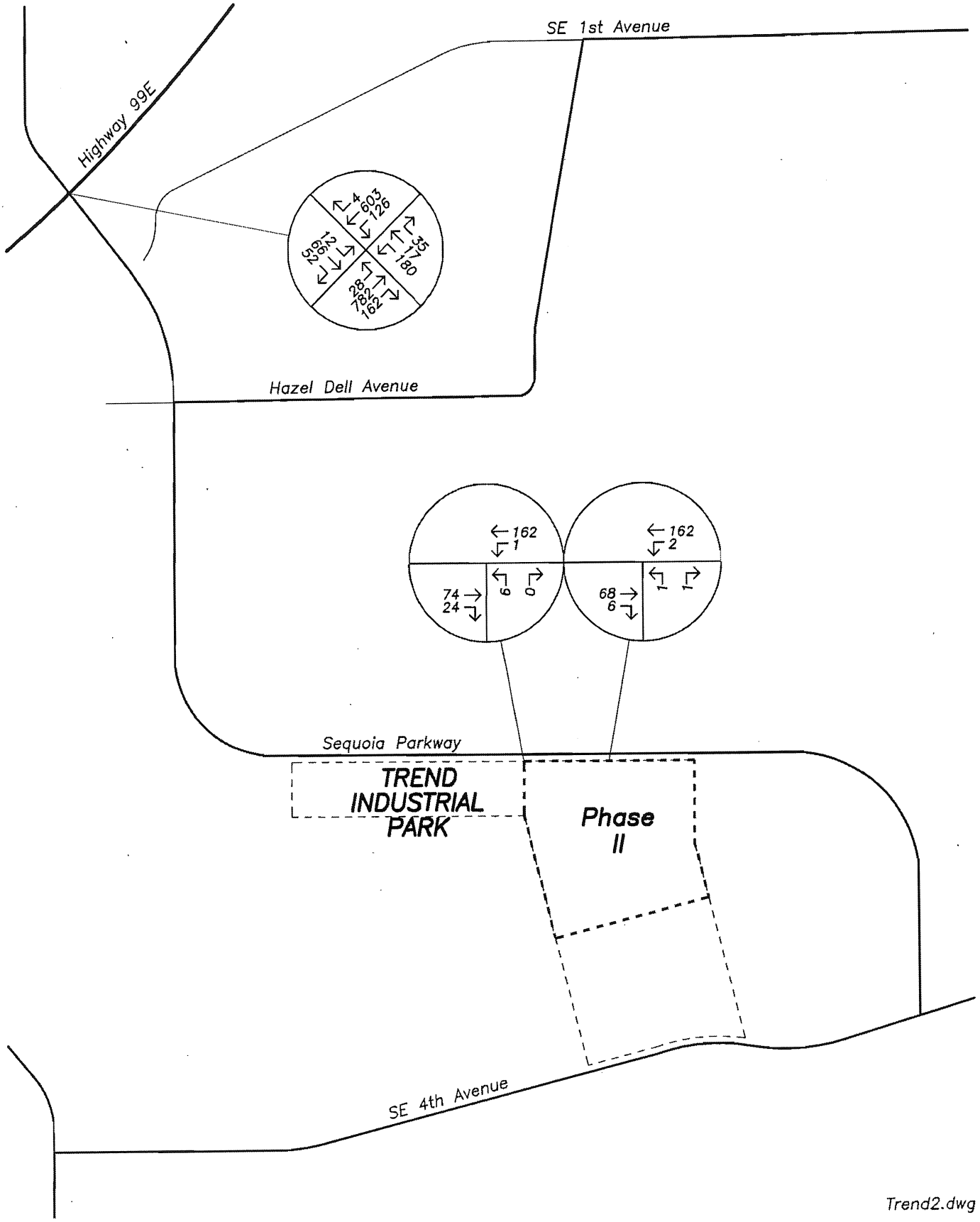
FIGURE 8




# TRAFFIC VOLUMES
## Year 2008 Background Conditions
## PM Peak Hour

FIGURE 9

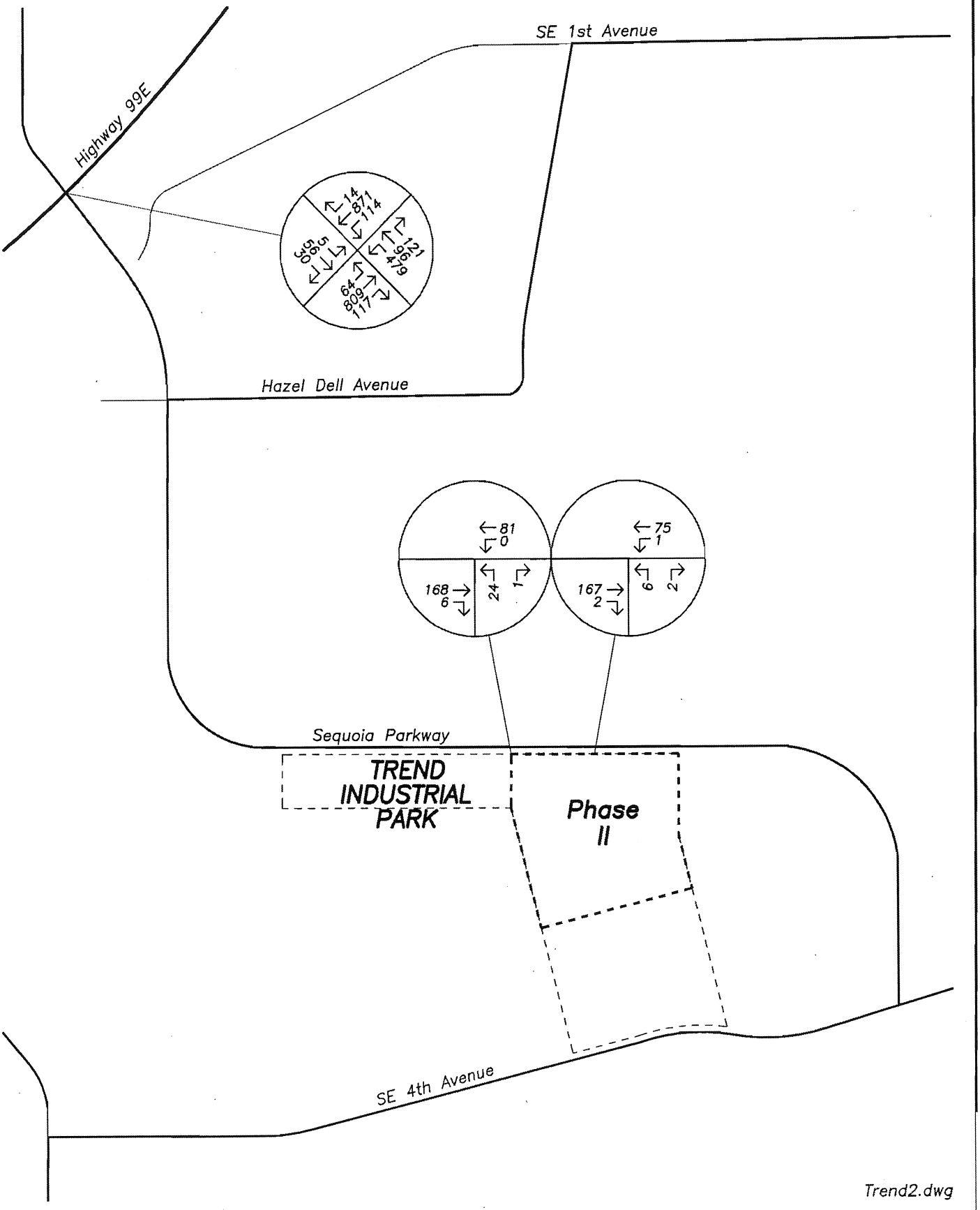
PAGE 18




TRAFFIC VOLUMES
Year 2008 Background + Site Trips (Building C)
AM Peak Hour

FIGURE 10

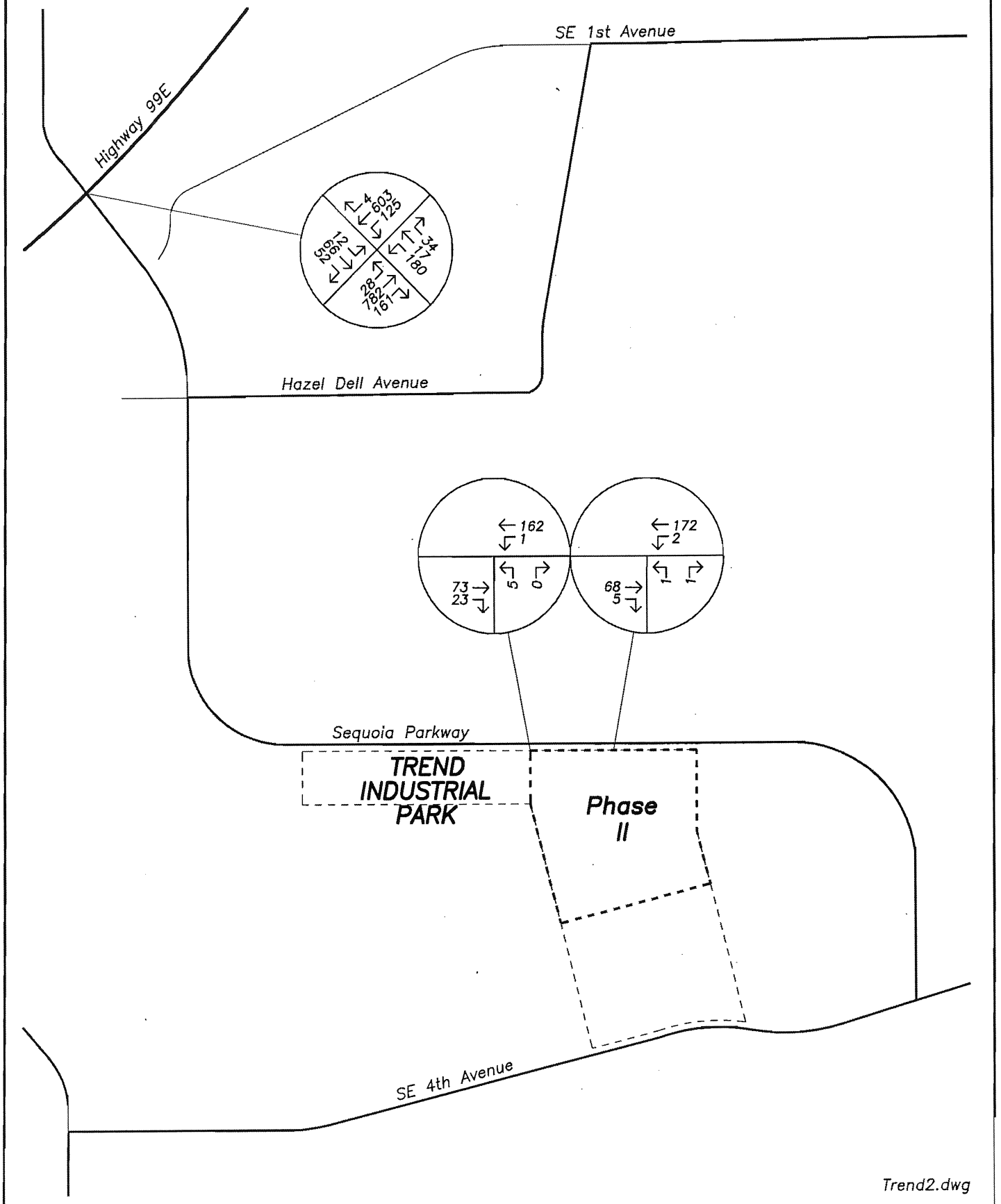
no scale




TRAFFIC VOLUMES
Year 2008 Background + Site Trips (Building C)
PM Peak Hour

FIGURE 11

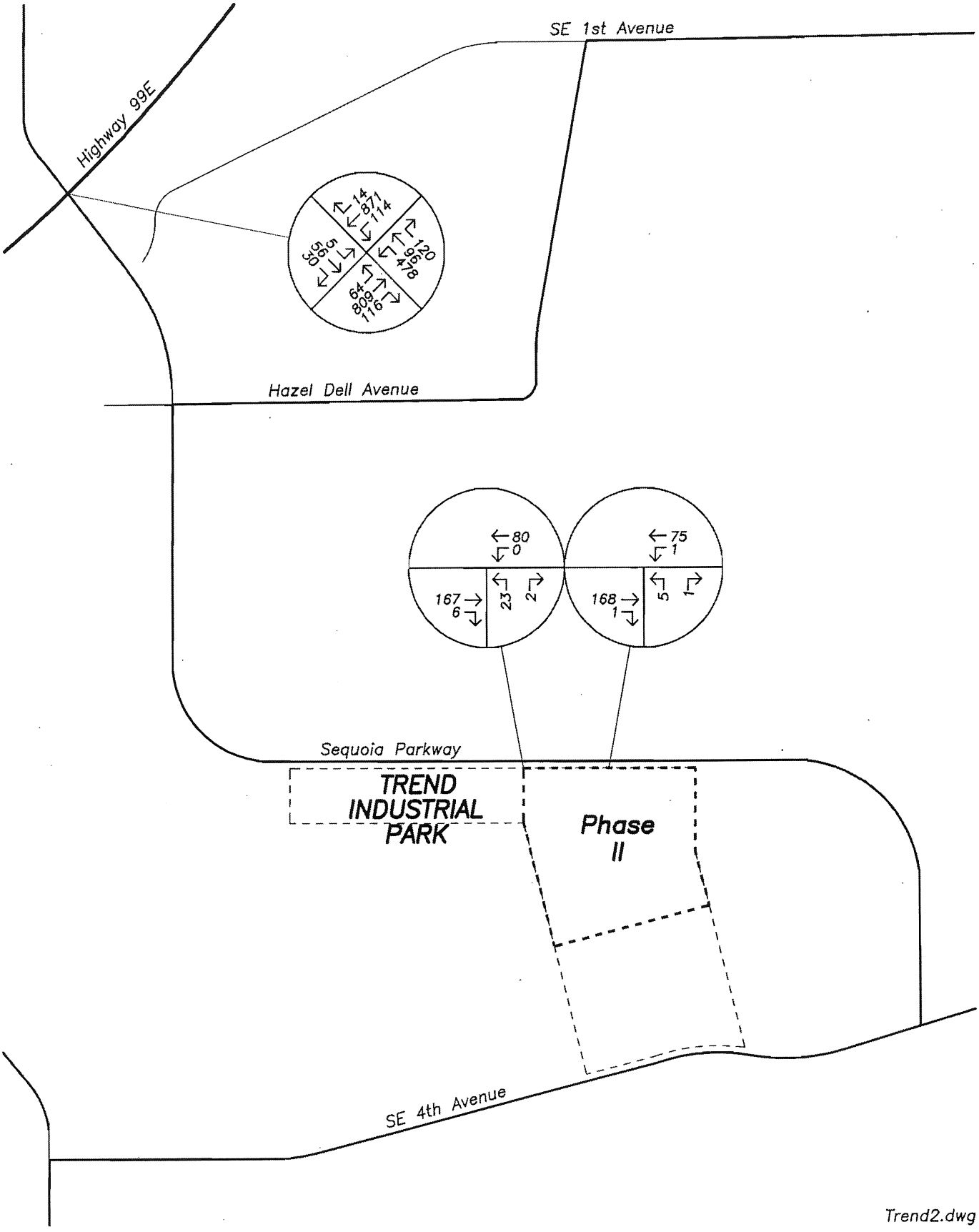
Scale: NTS




TRAFFIC VOLUMES
Year 2008 Background + Site Trips (Building D)
AM Peak Hour

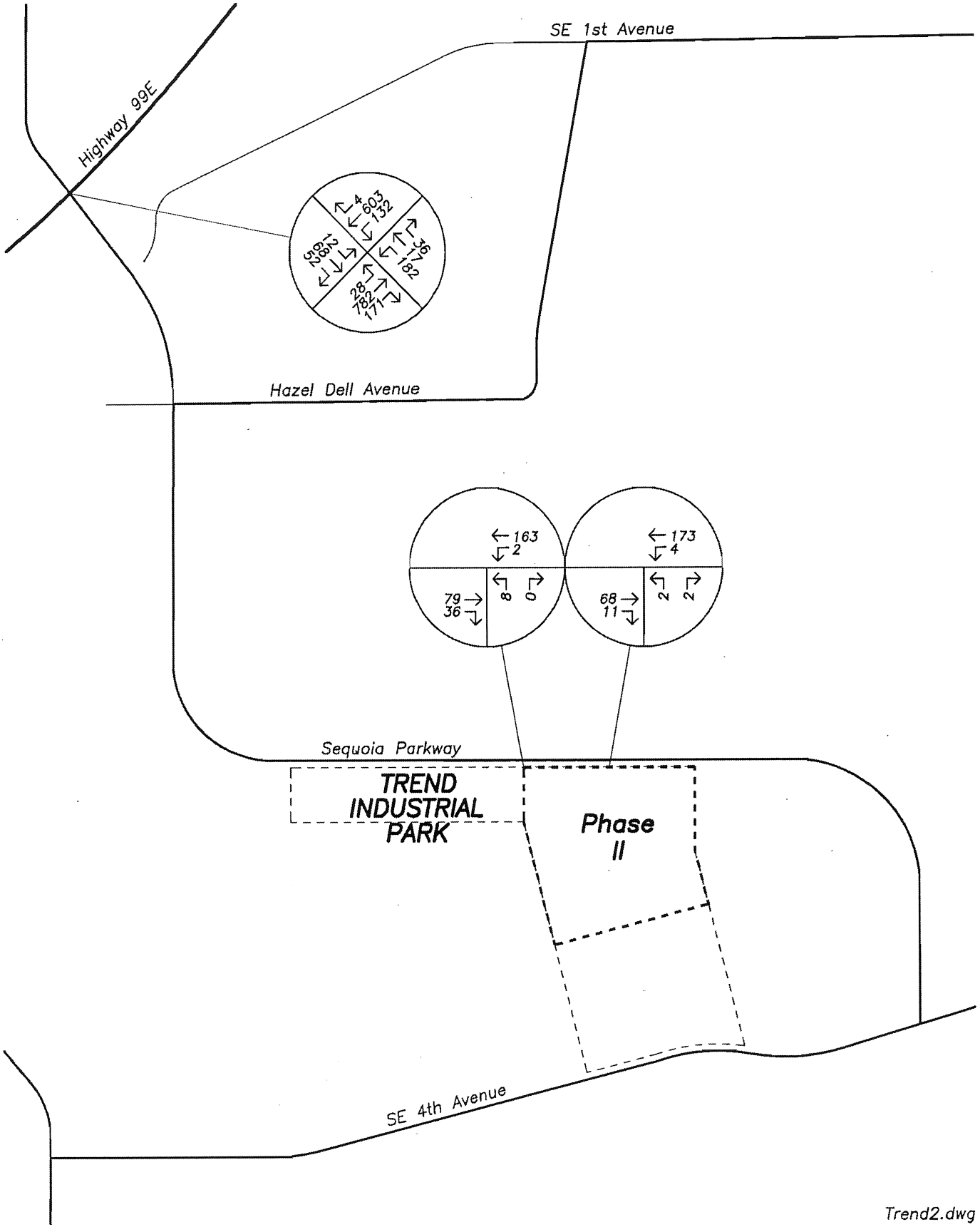
FIGURE 12

no scale



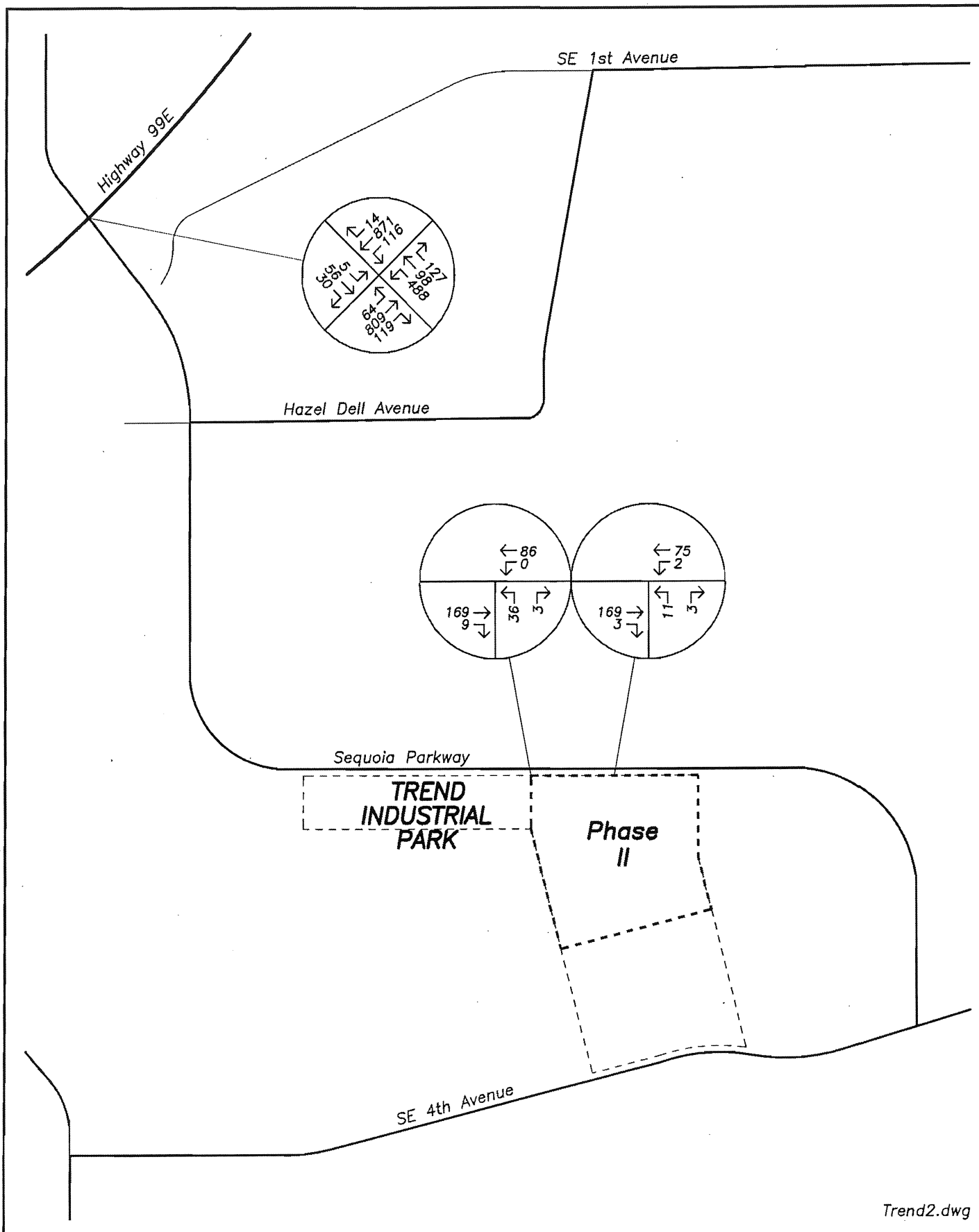

TRAFFIC VOLUMES
Year 2008 Background + Site Trips (Building D)
PM Peak Hour

FIGURE 13




TRAFFIC VOLUMES
Year 2008 Background + Site Trips (Both Buildings)
AM Peak Hour

FIGURE 14




TRAFFIC VOLUMES
Year 2008 Background + Site Trips (Both Buildings)
PM Peak Hour

FIGURE 15

*Capacity Analysis*

To determine the level of service at the study area intersections, a capacity analysis was conducted. The level of service can range from A, which indicates very little or no delay, to level F, which indicates a high degree of congestion and delay. The City of Canby has no formally adopted level of service standards, but typically level of service D or better is acceptable at signalized intersections and E or better at unsignalized intersections.

The study area intersections were analyzed using the signalized and unsignalized intersection analysis methods in the *HIGHWAY CAPACITY MANUAL* published in 2000 by the Transportation Research Board. The analysis was made for the morning and evening peak hours for existing conditions, background conditions, and background plus site trips conditions.

The intersection of Sequoia Parkway and Highway 99E is under ODOT jurisdiction. ODOT standards are based on a volume-to-capacity ratio (v/c) instead of average vehicle delay and level of service. The v/c ratio compares the actual (or demand) travel volumes to the potential capacity to determine the available capacity of the intersection, and is typically expressed as a percentage of the total capacity. For an Urban Regional Highway outside of the Metro region, the maximum v/c ratio is 0.75 during the peak hour, which means up to 75-percent of the capacity of the intersection can be utilized. The remaining study intersection is under City of Canby jurisdiction and was analyzed with respect to delay and level of service.

The results of the capacity analysis showed that the signalized intersection of Sequoia Parkway/Redwood Street and Highway 99E is currently functioning at a v/c ratio of 0.46 during the morning peak hour and 0.54 during the evening peak hour. Approved development in the area will degrade the v/c ratio to 0.54 during the morning peak hour and 0.60 during the evening peak hour. Development of either Building C or Building D will degrade the v/c ratio slightly, to 0.55 during the morning peak hour and 0.61 during the evening peak hour. Development of both buildings will result in a v/c ratio of 0.56 during the morning peak hour, but has the same impact as development of a single building during the evening peak hour.

Access to the site will be through a driveway shared with Phase I as well as a separate driveway located between Buildings C and D. The shared driveway will be the critical driveway since it will have the highest volumes. The shared driveway was analyzed in this report.

The unsignalized intersection of the shared site access on Sequoia Parkway is forecast to operate at level of service B during both the morning and evening peak hours. The level of service describes the delay experienced by the northbound traffic exiting the site. The level of service remains the same for development of Building C or Building D. The level of service also remains the same with the development of both buildings.

The results of the capacity analysis, along with the Levels of Service (LOS), Delay and V/C Ratios are shown in the following table. Tables showing the relationships between delay and level of service are included in the appendix to this report.

**LEVEL OF SERVICE SUMMARY**

**Trend Industrial Park Phase II**

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | LOS | Delay | V/C | LOS | Delay | V/C |
| *Sequoia Parkway/Redwood Street at Highway 99E* | | | | | | |
| Existing Conditions | C | 25 | 0.46 | C | 29 | 0.54 |
| Background Conditions | C | 27 | 0.54 | C | 32 | 0.60 |
| Background + Site (Building C) | C | 28 | 0.55 | C | 32 | 0.61 |
| Background + Site (Building D) | C | 28 | 0.55 | C | 32 | 0.61 |
| Background + Site (Both Buildings) | C | 28 | 0.56 | C | 33 | 0.61 |
| *Sequoia Parkway & Site Access* | | | | | | |
| Background + Site (Building C) | B | 11 | -- | B | 10 | -- |
| Background + Site (Building D) | B | 10 | -- | B | 10 | -- |
| Background + Site (Both Buildings) | B | 11 | -- | B | 10 | -- |

LOS = Level of Service
Delay = Average Delay per Vehicle in Seconds
V/C = Volume-to-Capacity Ratio

*Site Access*

The City of Canby requires a distance of at least 150 feet between access points for a Collector, such as Sequoia Parkway. The site plan for the project shows a total of two driveways for Phase II of the project, with an existing shared driveway near the western boundary of the site and one proposed driveway between buildings C and D.

There is a distance of about 220 feet shown in the site plan between the existing shared driveway at the western boundary and the proposed site driveway. This distance is adequate to accommodate the vehicles on Sequoia Parkway and at the site access points.

*Sight Distance*

Sight distance was examined at the proposed locations of the site access points onto Sequoia Parkway. Sight distance was measured in accordance with guidelines from *A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS*, published in 2001 by the American Association of State Highway and Transportation Officials (AASHTO). Since many of the vehicles expected to use the site access would be heavy vehicles, sight distance was measured at a point 15 feet from the edge of the travel lane from a driver's eye height of 3.5 feet (for passenger vehicles) and 7.5 feet (for heavy vehicles) to an oncoming driver's eye height of 3.5 feet. The posted speed on Sequoia Parkway is 25 mph, requiring at least 350 feet of sight distance in either direction to accommodate the large trucks and 280 feet in either direction for passenger vehicles.

The street trees along Sequoia Parkway are located very close to the proposed access locations. The trees will need to be kept trimmed so that the branches do not interfere with sight distance at the driveways.

*Conclusions and Recommendations*

The Highway 99E intersection is presently operating within ODOT's v/c standards and with low delays and will continue to function well through site development. No recommendations are made for this intersection.

The site driveways are expected to operate safely and with minimal delays. No recommendations are made.

*APPENDIX*

## *LEVEL OF SERVICE*

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

*Level of service A:* Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

*Level of service B:* Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

*Level of service C:* Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

*Level of service D:* Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

*Level of service E:* Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

*Level of service F:* Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

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## *LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS*

| LEVEL OF SERVICE | CONTROL DELAY PER VEHICLE (Seconds) |
|---|---|
| A | < 10 |
| B | 10-20 |
| C | 20-35 |
| D | 35-55 |
| E | 55-80 |
| F | > 80 |

## *LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS*

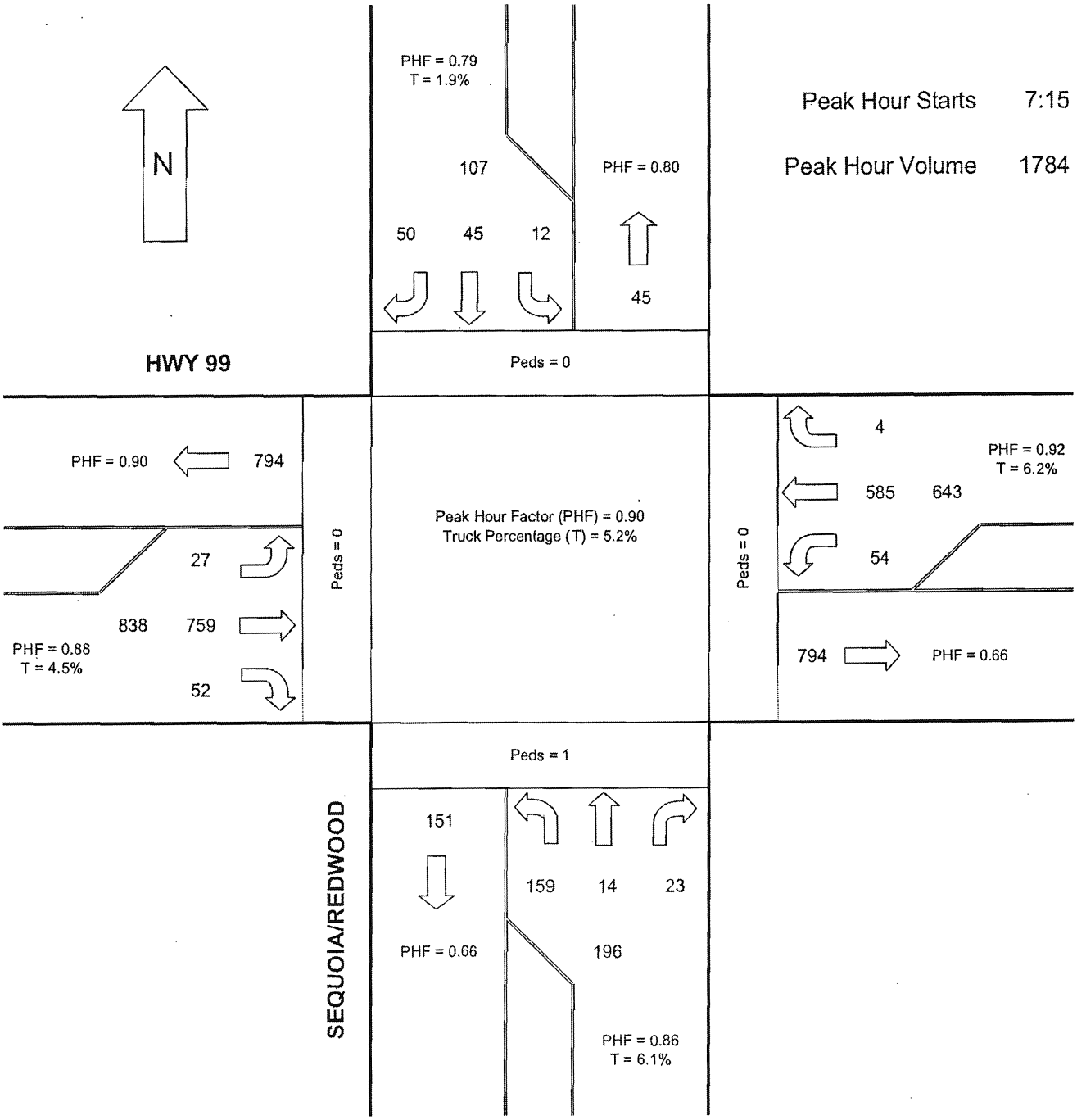
| LEVEL OF SERVICE | CONTROL DELAY PER VEHICLE (Seconds) |
|---|---|
| A | < 10 |
| B | 10-15 |
| C | 15-25 |
| D | 25-35 |
| E | 35-50 |
| F | > 50 |

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 646-2942
Fax: (503) 526-0628

# Intersection Turning Movement

## Peak Hour Diagram

**Location** HWY 99 AT SEQUOIA/REDWOOD
**Date** 12/4/2007
**Day of Week** Tuesday
**Time Begin** 7:00
**Reviewed By:** SDS




Peak Hour Starts 7:15

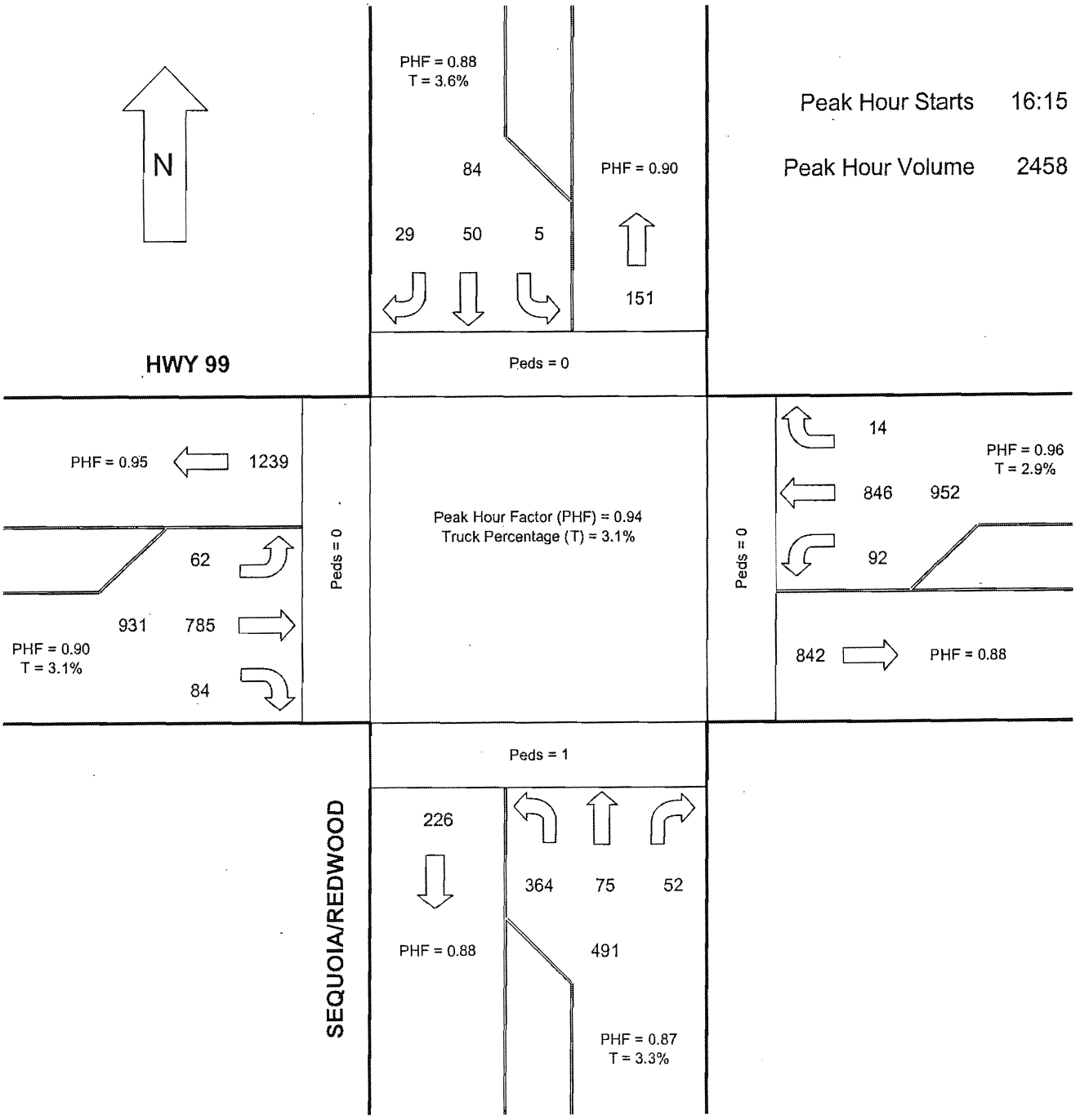
Peak Hour Volume 1784

TRAFSTATS
PO Box 13699
Salem, OR 97309
Tel: (503) 646-2942
Fax: (503) 526-0628

# Intersection Turning Movement

## Peak Hour Diagram

**Location** HWY 99 AT SEQUOIA/REDWOOD
**Date** 12/4/2007
**Day of Week** Tuesday
**Time Begin** 16:00
**Reviewed By:** BV



1c

# TRIP GENERATION CALCULATIONS

*Land Use:* Industrial Park
*Land Use Code:* 130
*Variable:* 1000 Sq Ft Gross Floor area
*Variable Quantity:* 32.2
Building C

## AM PEAK HOUR

*Trip Rate:* 0.84

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 82% | 18% | |
| Trip Ends | **22** | **5** | **27** |

## PM PEAK HOUR

*Trip Rate:* 0.86

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 21% | 79% | |
| Trip Ends | **6** | **22** | **28** |

## WEEKDAY

*Trip Rate:* 6.96

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 50% | 50% | |
| Trip Ends | **112** | **112** | **224** |

## SATURDAY

*Trip Rate:* 2.49

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 50% | 50% | |
| Trip Ends | **40** | **40** | **80** |

Source: TRIP GENERATION, Seventh Edition

1e

# TRIP GENERATION CALCULATIONS

*Land Use:* Industrial Park
*Land Use Code:* 130
*Variable:* 1000 Sq Ft Gross Floor area
*Variable Quantity:* 29.2
Building D

## AM PEAK HOUR

*Trip Rate:* 0.84

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 82% | 18% | |
| Trip Ends | **20** | **4** | **24** |

## PM PEAK HOUR

*Trip Rate:* 0.86

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 21% | 79% | |
| Trip Ends | **5** | **20** | **25** |

## WEEKDAY

*Trip Rate:* 6.96

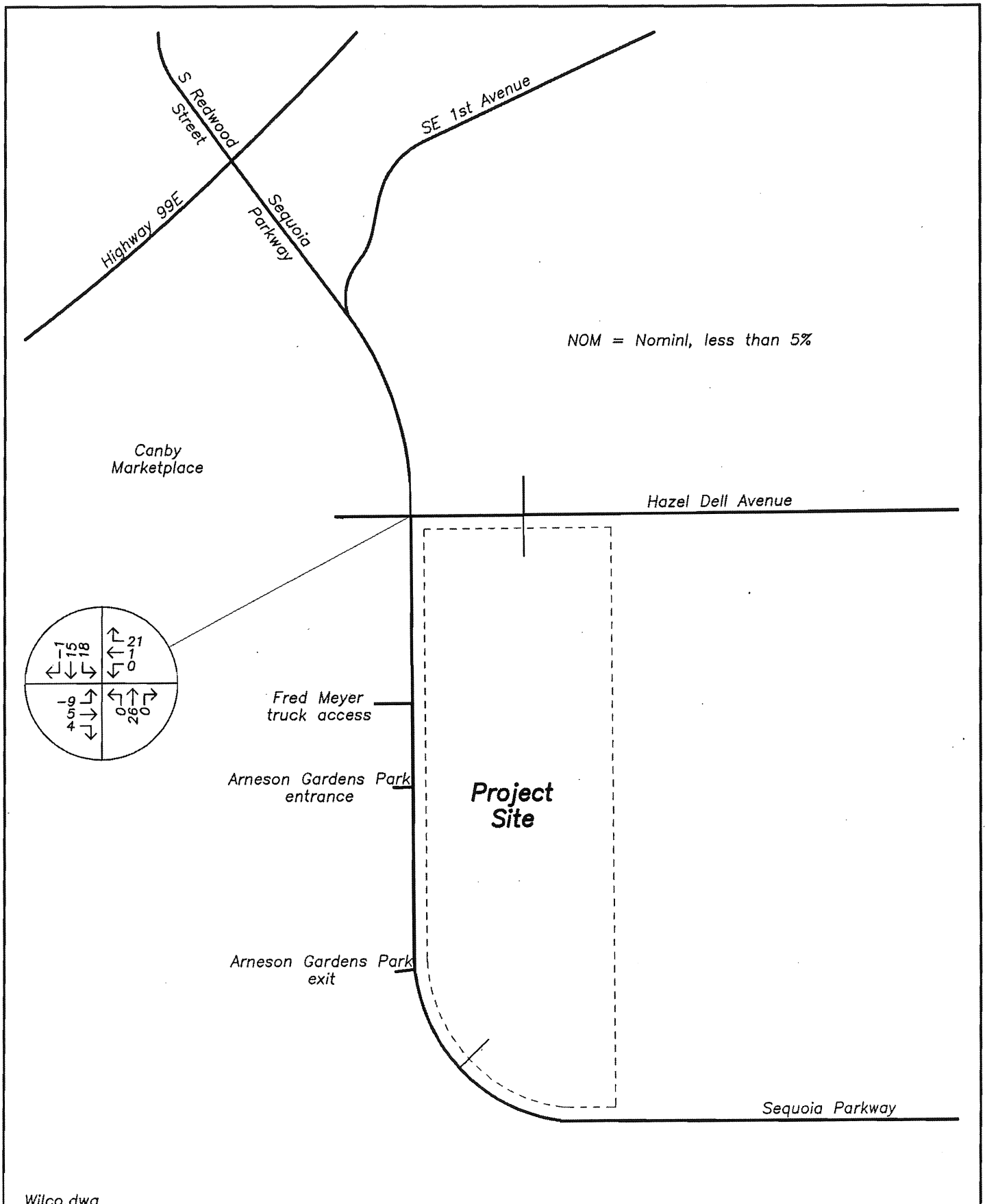
| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 50% | 50% | |
| Trip Ends | **101** | **101** | **202** |

## SATURDAY

*Trip Rate:* 2.49

| | Enter | Exit | Total |
|---|---|---|---|
| Directional Distribution | 50% | 50% | |
| Trip Ends | **36** | **36** | **72** |

Source: TRIP GENERATION, Seventh Edition



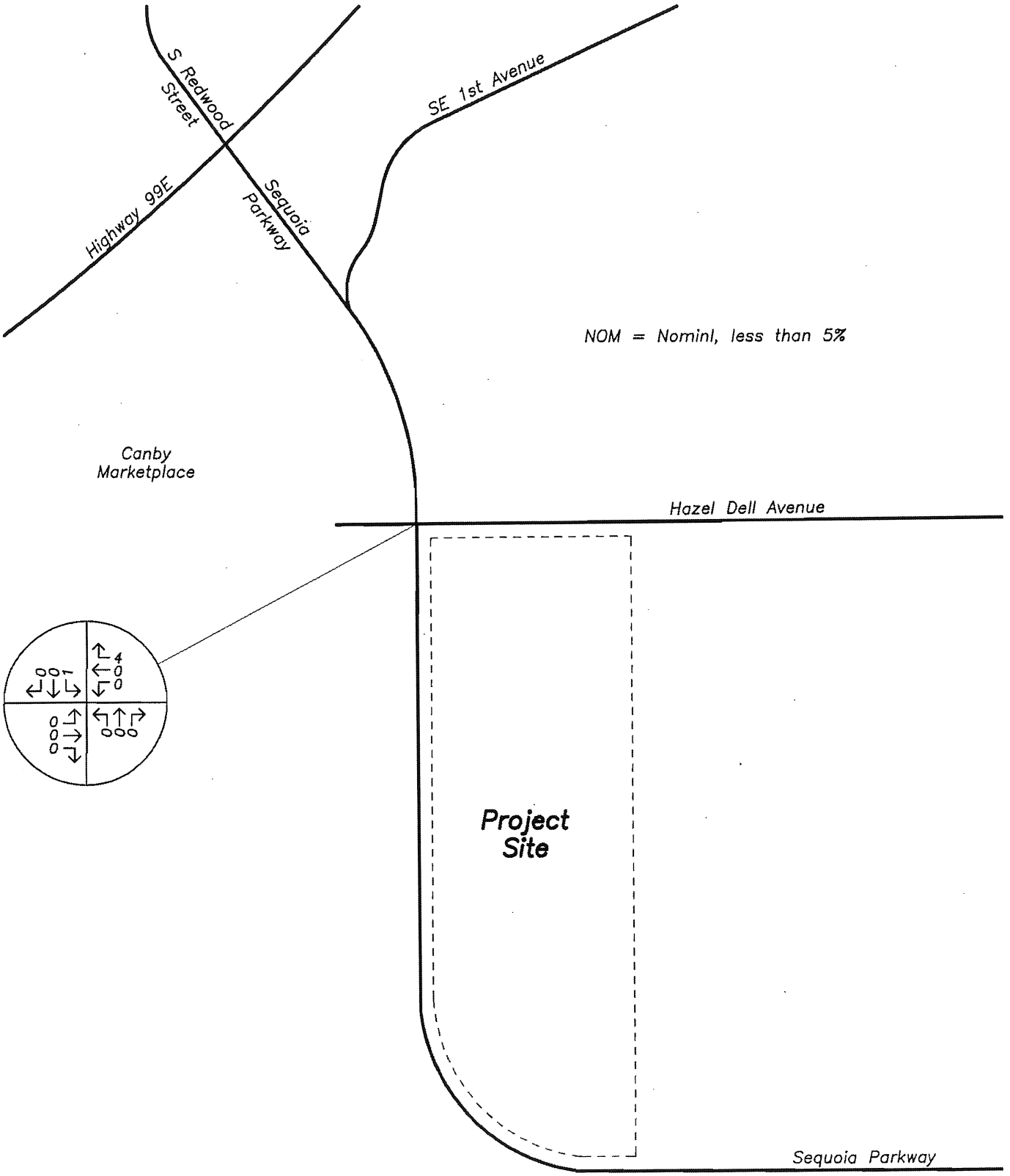

Wilco.dwg

# SITE-GENERATED TRAFFIC (WILCO)
## Proposed Development Plan
## PM Peak Hour

FIGURE 5

APPENDIX

no scale

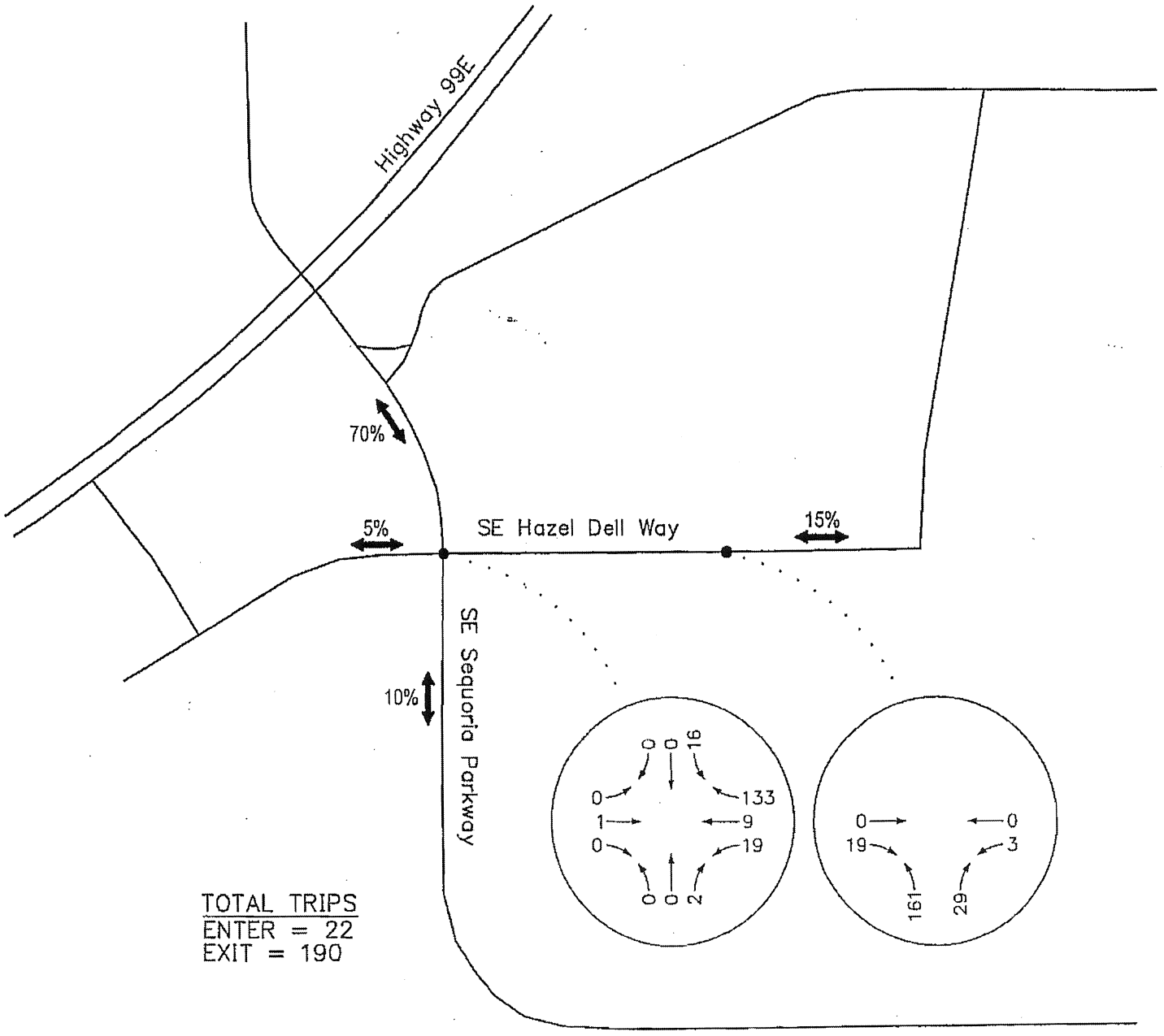



# SITE-GENERATED TRAFFIC (LEASE BUILDING)
## Proposed Development Plan
## PM Peak Hour

FIGURE 6

APPENDIX

NOT TO SCALE




GROUP MACKENZIE

Portland OR 503.224.9560 Vancouver WA 360.695.7879 Seattle WA 206.749.9993

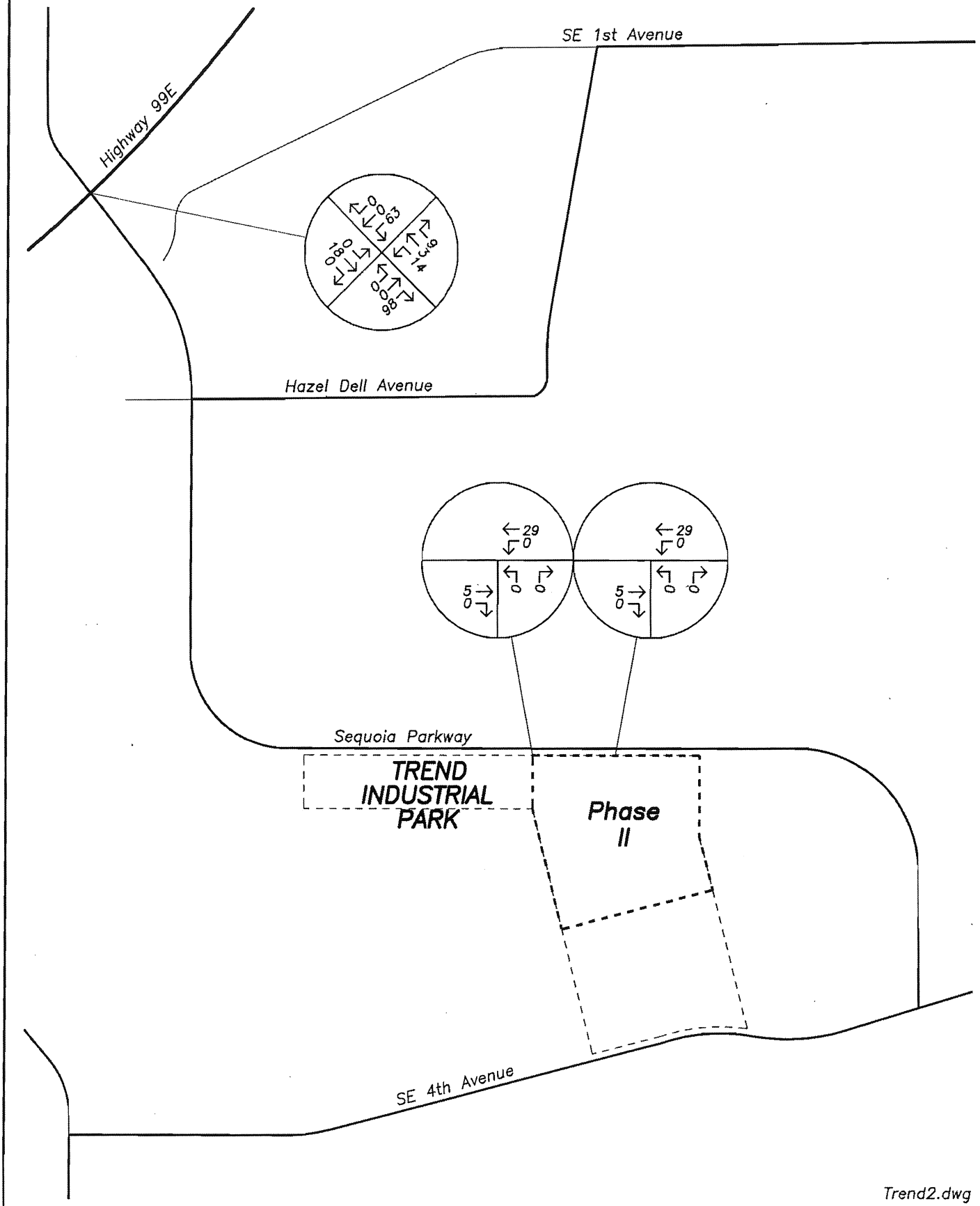
DATE: 9.13.07

DRAWN BY: WSB

CHECKED BY: SM

# SITE TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

FIGURE 2

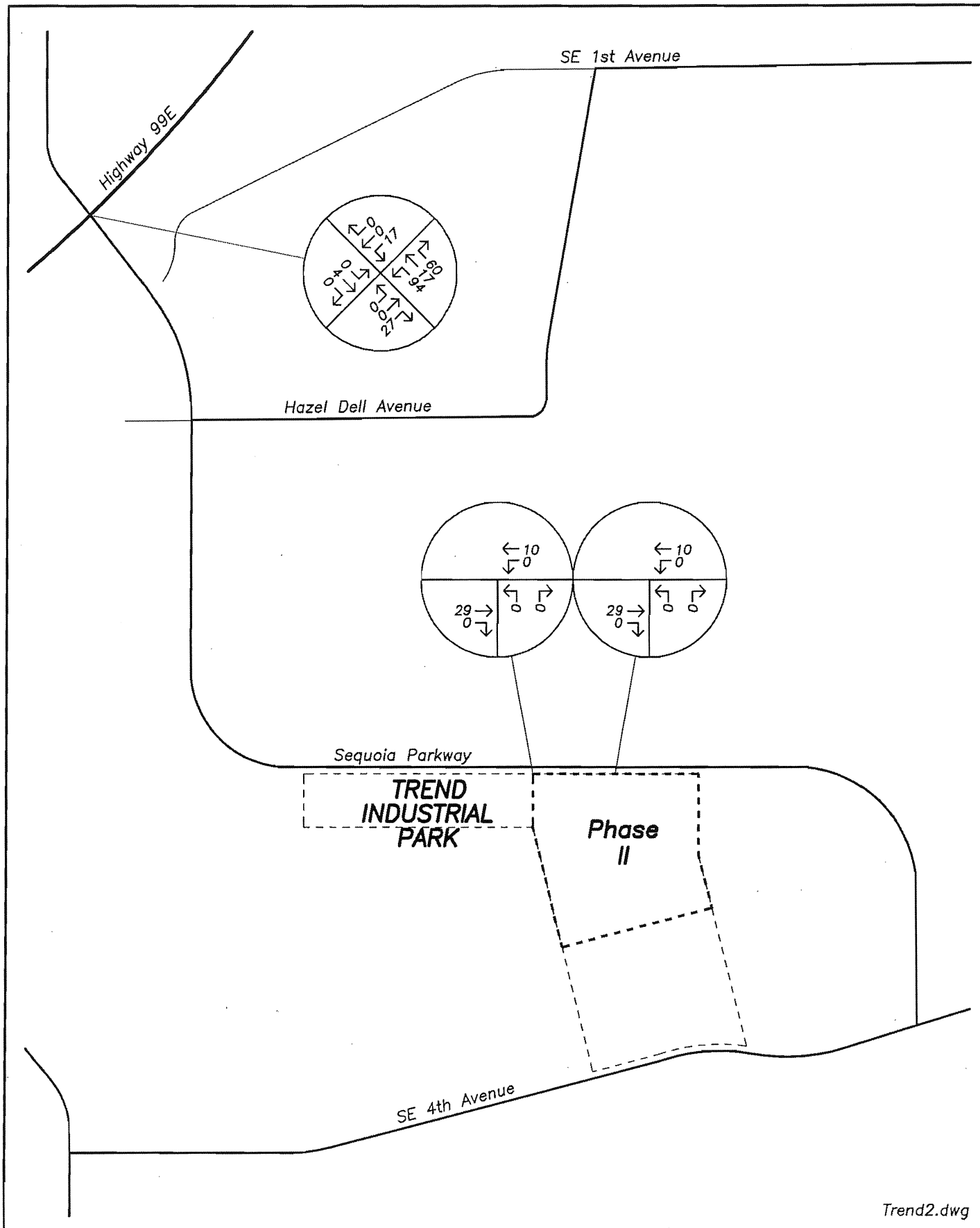



IN-PROCESS TRAFFIC VOLUMES
Site Trips from Other Developments
AM Peak Hour

FIGURE 16

APPENDIX

no scale




IN-PROCESS TRAFFIC VOLUMES
Site Trips from Other Developments
PM Peak Hour

no scale

FIGURE 17

APPENDIX

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | AM Peak | Analysis Year | Existing |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 27 | 759 | 52 | 54 | 585 | 4 | 159 | 14 | 23 | 12 | 45 | 50 |
| % Heavy Vehicles, %HV | 0 | 5 | 6 | 6 | 6 | 25 | 4 | 7 | 17 | 0 | 0 | 4 |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 60.0 | G = | G = 7.0 | G = 4.0 | G = 15.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 30 | 843 | 41 | 60 | 654 | | 177 | 16 | 26 | 13 | 106 | |
| Lane Group Capacity, c | 105 | 1723 | 761 | 177 | 1859 | | 407 | 333 | 259 | 105 | 214 | |
| v/c Ratio, X | 0.29 | 0.49 | 0.05 | 0.34 | 0.35 | | 0.43 | 0.05 | 0.10 | 0.12 | 0.50 | |
| Total Green Ratio, g/C | 0.06 | 0.50 | 0.50 | 0.10 | 0.55 | | 0.12 | 0.19 | 0.19 | 0.06 | 0.13 | |
| Uniform Delay, $d_1$ | 54.1 | 19.9 | 15.4 | 49.9 | 15.3 | | 48.9 | 40.0 | 40.4 | 53.6 | 49.0 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | |
| Incremental Delay, $d_2$ | 1.5 | 0.2 | 0.0 | 1.1 | 0.1 | | 0.7 | 0.1 | 0.2 | 0.5 | 1.8 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 55.6 | 20.1 | 15.4 | 51.1 | 15.4 | | 49.7 | 40.0 | 40.5 | 54.1 | 50.8 | |
| Lane Group LOS | E | C | B | D | B | | D | D | D | D | D | |
| Approach Delay | 21.0 | | | 18.4 | | | 47.9 | | | 51.1 | | |
| Approach LOS | C | | | B | | | D | | | D | | |
| Intersection Delay | 24.9 | | | $X_c$ = 0.46 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | PM Peak | Analysis Year | Existing |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 62 | 785 | 84 | 92 | 846 | 14 | 364 | 75 | 52 | 5 | 50 | 29 |
| % Heavy Vehicles, %HV | 3 | 3 | 4 | 3 | 3 | 0 | 3 | 0 | 8 | 0 | 0 | 10 |
| Peak-Hour Factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 59.0 | G = | G = 11.0 | G = 7.0 | G = 9.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 66 | 835 | 10 | 98 | 915 | | 387 | 80 | 55 | 5 | 84 | |
| Lane Group Capacity, c | 102 | 1727 | 763 | 182 | 1884 | | 610 | 309 | 243 | 165 | 130 | |
| v/c Ratio, X | 0.65 | 0.48 | 0.01 | 0.54 | 0.49 | | 0.63 | 0.26 | 0.23 | 0.03 | 0.65 | |
| Total Green Ratio, g/C | 0.06 | 0.49 | 0.49 | 0.10 | 0.54 | | 0.18 | 0.16 | 0.16 | 0.09 | 0.08 | |
| Uniform Delay, $d_1$ | 55.3 | 20.3 | 15.6 | 51.0 | 17.4 | | 45.6 | 43.9 | 43.7 | 49.6 | 54.0 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.22 | 0.11 | 0.11 | 0.14 | 0.11 | | 0.21 | 0.11 | 0.11 | 0.11 | 0.22 | |
| Incremental Delay, $d_2$ | 13.4 | 0.2 | 0.0 | 3.2 | 0.2 | | 2.2 | 0.4 | 0.5 | 0.1 | 10.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 68.7 | 20.6 | 15.6 | 54.2 | 17.6 | | 47.8 | 44.4 | 44.2 | 49.7 | 64.6 | |
| Lane Group LOS | E | C | B | D | B | | D | D | D | D | E | |
| Approach Delay | 24.0 | | | 21.1 | | | 46.9 | | | 63.7 | | |
| Approach LOS | C | | | C | | | D | | | E | | |
| Intersection Delay | 28.9 | | | $X_c$ = 0.54 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | AM Peak | Analysis Year | Background |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 28 | 782 | 152 | 119 | 603 | 4 | 178 | 17 | 33 | 12 | 64 | 52 |
| % Heavy Vehicles, %HV | 0 | 5 | 6 | 6 | 6 | 25 | 4 | 7 | 17 | 0 | 0 | 4 |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 60.0 | G = | G = 7.0 | G = 4.0 | G = 15.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | Cycle Length, C = 120.0 | | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 31 | 869 | 152 | 132 | 674 | | 198 | 19 | 37 | 13 | 129 | |
| Lane Group Capacity, c | 105 | 1723 | 761 | 177 | 1859 | | 407 | 333 | 259 | 105 | 218 | |
| v/c Ratio, X | 0.30 | 0.50 | 0.20 | 0.75 | 0.36 | | 0.49 | 0.06 | 0.14 | 0.12 | 0.59 | |
| Total Green Ratio, g/C | 0.06 | 0.50 | 0.50 | 0.10 | 0.55 | | 0.12 | 0.19 | 0.19 | 0.06 | 0.13 | |
| Uniform Delay, $d_1$ | 54.1 | 20.1 | 16.7 | 52.2 | 15.4 | | 49.3 | 40.0 | 40.7 | 53.6 | 49.6 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.11 | 0.11 | 0.11 | 0.30 | 0.11 | | 0.11 | 0.11 | 0.11 | 0.11 | 0.18 | |
| Incremental Delay, $d_2$ | 1.6 | 0.2 | 0.1 | 15.8 | 0.1 | | 0.9 | 0.1 | 0.3 | 0.5 | 4.2 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 55.7 | 20.3 | 16.8 | 68.0 | 15.6 | | 50.2 | 40.1 | 41.0 | 54.1 | 53.9 | |
| Lane Group LOS | E | C | B | E | B | | D | D | D | D | D | |
| Approach Delay | 20.8 | | | 24.1 | | | 48.1 | | | 53.9 | | |
| Approach LOS | C | | | C | | | D | | | D | | |
| Intersection Delay | 27.2 | | | $X_c$ = 0.54 | | | Intersection LOS | | | C | | |

## HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | PM Peak | Analysis Year | Background |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

### Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_1$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 64 | 809 | 114 | 112 | 871 | 14 | 469 | 94 | 114 | 5 | 56 | 30 |
| % Heavy Vehicles, %HV | 3 | 3 | 4 | 3 | 3 | 0 | 3 | 0 | 8 | 0 | 0 | 10 |
| Peak-Hour Factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 59.0 | G = | G = 11.0 | G = 7.0 | G = 9.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

### Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 68 | 861 | 41 | 119 | 942 | | 499 | 100 | 15 | 5 | 92 | |
| Lane Group Capacity, c | 102 | 1727 | 763 | 182 | 1884 | | 610 | 309 | 243 | 165 | 131 | |
| v/c Ratio, X | 0.67 | 0.50 | 0.05 | 0.65 | 0.50 | | 0.82 | 0.32 | 0.06 | 0.03 | 0.70 | |
| Total Green Ratio, g/C | 0.06 | 0.49 | 0.49 | 0.10 | 0.54 | | 0.18 | 0.16 | 0.16 | 0.09 | 0.08 | |
| Uniform Delay, $d_1$ | 55.4 | 20.5 | 15.9 | 51.7 | 17.6 | | 47.4 | 44.4 | 42.5 | 49.6 | 54.2 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.24 | 0.11 | 0.11 | 0.23 | 0.11 | | 0.36 | 0.11 | 0.11 | 0.11 | 0.27 | |
| Incremental Delay, $d_2$ | 15.4 | 0.2 | 0.0 | 8.2 | 0.2 | | 8.6 | 0.6 | 0.1 | 0.1 | 15.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 70.7 | 20.8 | 16.0 | 59.8 | 17.8 | | 56.0 | 45.0 | 42.6 | 49.7 | 69.7 | |
| Lane Group LOS | E | C | B | E | B | | E | D | D | D | E | |
| Approach Delay | 24.1 | | | 22.5 | | | 53.9 | | | 68.7 | | |
| Approach LOS | C | | | C | | | D | | | E | | |
| Intersection Delay | 31.7 | | | $X_c$ = 0.60 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | AM Peak | Analysis Year | Background + Site (Bldg C) |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 28 | 782 | 162 | 126 | 603 | 4 | 180 | 17 | 35 | 12 | 66 | 52 |
| % Heavy Vehicles, %HV | 0 | 5 | 6 | 6 | 6 | 25 | 4 | 7 | 17 | 0 | 0 | 4 |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 60.0 | G = | G = 7.0 | G = 4.0 | G = 15.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 31 | 869 | 163 | 140 | 674 | | 200 | 19 | 39 | 13 | 131 | |
| Lane Group Capacity, c | 105 | 1723 | 761 | 177 | 1859 | | 407 | 333 | 259 | 105 | 218 | |
| v/c Ratio, X | 0.30 | 0.50 | 0.21 | 0.79 | 0.36 | | 0.49 | 0.06 | 0.15 | 0.12 | 0.60 | |
| Total Green Ratio, g/C | 0.06 | 0.50 | 0.50 | 0.10 | 0.55 | | 0.12 | 0.19 | 0.19 | 0.06 | 0.13 | |
| Uniform Delay, $d_1$ | 54.1 | 20.1 | 16.8 | 52.5 | 15.4 | | 49.3 | 40.0 | 40.8 | 53.6 | 49.7 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.11 | 0.11 | 0.11 | 0.34 | 0.11 | | 0.11 | 0.11 | 0.11 | 0.11 | 0.19 | |
| Incremental Delay, $d_2$ | 1.6 | 0.2 | 0.1 | 21.2 | 0.1 | | 0.9 | 0.1 | 0.3 | 0.5 | 4.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 55.7 | 20.3 | 16.9 | 73.6 | 15.6 | | 50.2 | 40.1 | 41.0 | 54.1 | 54.2 | |
| Lane Group LOS | E | C | B | E | B | | D | D | D | D | D | |
| Approach Delay | 20.8 | | | 25.5 | | | 48.1 | | | 54.2 | | |
| Approach LOS | C | | | C | | | D | | | D | | |
| Intersection Delay | 27.7 | | | $X_c$ = 0.55 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | PM Peak | Analysis Year | Background + Site (Bldg C) |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 64 | 809 | 117 | 114 | 871 | 14 | 479 | 96 | 121 | 5 | 56 | 30 |
| % Heavy Vehicles, %HV | 3 | 3 | 4 | 3 | 3 | 0 | 3 | 0 | 8 | 0 | 0 | 10 |
| Peak-Hour Factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 59.0 | G = | G = 11.0 | G = 7.0 | G = 9.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 68 | 861 | 45 | 121 | 942 | | 510 | 102 | 22 | 5 | 92 | |
| Lane Group Capacity, c | 102 | 1727 | 763 | 182 | 1884 | | 610 | 309 | 243 | 165 | 131 | |
| v/c Ratio, X | 0.67 | 0.50 | 0.06 | 0.66 | 0.50 | | 0.84 | 0.33 | 0.09 | 0.03 | 0.70 | |
| Total Green Ratio, g/C | 0.06 | 0.49 | 0.49 | 0.10 | 0.54 | | 0.18 | 0.16 | 0.16 | 0.09 | 0.08 | |
| Uniform Delay, $d_1$ | 55.4 | 20.5 | 16.0 | 51.7 | 17.6 | | 47.5 | 44.5 | 42.7 | 49.6 | 54.2 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.24 | 0.11 | 0.11 | 0.24 | 0.11 | | 0.37 | 0.11 | 0.11 | 0.11 | 0.27 | |
| Incremental Delay, $d_2$ | 15.4 | 0.2 | 0.0 | 8.8 | 0.2 | | 9.9 | 0.6 | 0.2 | 0.1 | 15.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 70.7 | 20.8 | 16.0 | 60.6 | 17.8 | | 57.4 | 45.1 | 42.9 | 49.7 | 69.7 | |
| Lane Group LOS | E | C | B | E | B | | E | D | D | D | E | |
| Approach Delay | 24.0 | | | 22.6 | | | 54.9 | | | 68.7 | | |
| Approach LOS | C | | | C | | | D | | | E | | |
| Intersection Delay | 32.1 | | | $X_c$ = 0.61 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | AM Peak | Analysis Year | Background + Site (Bldg D) |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 28 | 782 | 161 | 125 | 603 | 4 | 180 | 17 | 34 | 12 | 66 | 52 |
| % Heavy Vehicles, %HV | 0 | 5 | 6 | 6 | 6 | 25 | 4 | 7 | 17 | 0 | 0 | 4 |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 60.0 | G = | G = 7.0 | G = 4.0 | G = 15.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 31 | 869 | 162 | 139 | 674 | | 200 | 19 | 38 | 13 | 131 | |
| Lane Group Capacity, c | 105 | 1723 | 761 | 177 | 1859 | | 407 | 333 | 259 | 105 | 218 | |
| v/c Ratio, X | 0.30 | 0.50 | 0.21 | 0.79 | 0.36 | | 0.49 | 0.06 | 0.15 | 0.12 | 0.60 | |
| Total Green Ratio, g/C | 0.06 | 0.50 | 0.50 | 0.10 | 0.55 | | 0.12 | 0.19 | 0.19 | 0.06 | 0.13 | |
| Uniform Delay, $d_1$ | 54.1 | 20.1 | 16.8 | 52.4 | 15.4 | | 49.3 | 40.0 | 40.7 | 53.6 | 49.7 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.11 | 0.11 | 0.11 | 0.33 | 0.11 | | 0.11 | 0.11 | 0.11 | 0.11 | 0.19 | |
| Incremental Delay, $d_2$ | 1.6 | 0.2 | 0.1 | 20.4 | 0.1 | | 0.9 | 0.1 | 0.3 | 0.5 | 4.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 55.7 | 20.3 | 16.9 | 72.9 | 15.6 | | 50.2 | 40.1 | 41.0 | 54.1 | 54.2 | |
| Lane Group LOS | E | C | B | E | B | | D | D | D | D | D | |
| Approach Delay | 20.8 | | | 25.3 | | | 48.1 | | | 54.2 | | |
| Approach LOS | C | | | C | | | D | | | D | | |
| Intersection Delay | 27.6 | | | $X_c$ = 0.55 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | PM Peak | Analysis Year | Background + Site (Bldg D) |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 64 | 809 | 116 | 114 | 871 | 14 | 478 | 96 | 120 | 5 | 56 | 30 |
| % Heavy Vehicles, %HV | 3 | 3 | 4 | 3 | 3 | 0 | 3 | 0 | 8 | 0 | 0 | 10 |
| Peak-Hour Factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 59.0 | G = | G = 11.0 | G = 7.0 | G = 9.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 68 | 861 | 44 | 121 | 942 | | 509 | 102 | 21 | 5 | 92 | |
| Lane Group Capacity, c | 102 | 1727 | 763 | 182 | 1884 | | 610 | 309 | 243 | 165 | 131 | |
| v/c Ratio, X | 0.67 | 0.50 | 0.06 | 0.66 | 0.50 | | 0.83 | 0.33 | 0.09 | 0.03 | 0.70 | |
| Total Green Ratio, g/C | 0.06 | 0.49 | 0.49 | 0.10 | 0.54 | | 0.18 | 0.16 | 0.16 | 0.09 | 0.08 | |
| Uniform Delay, $d_1$ | 55.4 | 20.5 | 16.0 | 51.7 | 17.6 | | 47.5 | 44.5 | 42.7 | 49.6 | 54.2 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.24 | 0.11 | 0.11 | 0.24 | 0.11 | | 0.37 | 0.11 | 0.11 | 0.11 | 0.27 | |
| Incremental Delay, $d_2$ | 15.4 | 0.2 | 0.0 | 8.8 | 0.2 | | 9.8 | 0.6 | 0.2 | 0.1 | 15.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 70.7 | 20.8 | 16.0 | 60.6 | 17.8 | | 57.3 | 45.1 | 42.8 | 49.7 | 69.7 | |
| Lane Group LOS | E | C | B | E | B | | E | D | D | D | E | |
| Approach Delay | 24.0 | | | 22.6 | | | 54.8 | | | 68.7 | | |
| Approach LOS | C | | | C | | | D | | | E | | |
| Intersection Delay | 32.1 | | | $X_c$ = 0.61 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | AM Peak | Analysis Year | Background + Site (Total) |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_1$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 28 | 782 | 171 | 132 | 603 | 4 | 182 | 17 | 36 | 12 | 68 | 52 |
| % Heavy Vehicles, %HV | 0 | 5 | 6 | 6 | 6 | 25 | 4 | 7 | 17 | 0 | 0 | 4 |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 60.0 | G = | G = 7.0 | G = 4.0 | G = 15.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 31 | 869 | 173 | 147 | 674 | | 202 | 19 | 40 | 13 | 134 | |
| Lane Group Capacity, c | 105 | 1723 | 761 | 177 | 1859 | | 407 | 333 | 259 | 105 | 218 | |
| v/c Ratio, X | 0.30 | 0.50 | 0.23 | 0.83 | 0.36 | | 0.50 | 0.06 | 0.15 | 0.12 | 0.61 | |
| Total Green Ratio, g/C | 0.06 | 0.50 | 0.50 | 0.10 | 0.55 | | 0.12 | 0.19 | 0.19 | 0.06 | 0.13 | |
| Uniform Delay, $d_1$ | 54.1 | 20.1 | 16.9 | 52.7 | 15.4 | | 49.3 | 40.0 | 40.8 | 53.6 | 49.8 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.11 | 0.11 | 0.11 | 0.37 | 0.11 | | 0.11 | 0.11 | 0.11 | 0.11 | 0.20 | |
| Incremental Delay, $d_2$ | 1.6 | 0.2 | 0.2 | 27.1 | 0.1 | | 1.0 | 0.1 | 0.3 | 0.5 | 5.1 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 55.7 | 20.3 | 17.1 | 79.8 | 15.6 | | 50.3 | 40.1 | 41.1 | 54.1 | 54.9 | |
| Lane Group LOS | E | C | B | E | B | | D | D | D | D | D | |
| Approach Delay | 20.8 | | | 27.0 | | | 48.1 | | | 54.8 | | |
| Approach LOS | C | | | C | | | D | | | D | | |
| Intersection Delay | 28.3 | | | $X_c$ = 0.56 | | | Intersection LOS | | | C | | |

# HCS+™ DETAILED REPORT

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | 99E/Sequoia |
| Agency or Co. | Lancaster | Area Type | All other areas |
| Date Performed | 1/2/2008 | Jurisdiction | ODOT |
| Time Period | PM Peak | Analysis Year | Background + Site (Total) |
| | | Project ID | Trend Industrial Phase 2 - 07263 |

## Volume and Timing Input

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Number of Lanes, $N_l$ | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 0 |
| Lane Group | L | T | R | L | TR | | L | T | R | L | TR | |
| Volume, V (vph) | 64 | 809 | 119 | 116 | 871 | 14 | 488 | 98 | 127 | 5 | 56 | 30 |
| % Heavy Vehicles, %HV | 3 | 3 | 4 | 3 | 3 | 0 | 3 | 0 | 8 | 0 | 0 | 10 |
| Peak-Hour Factor, PHF | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Pretimed (P) or Actuated (A) | A | A | A | A | A | A | A | A | A | A | A | A |
| Start-up Lost Time, $l_1$ | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Extension of Effective Green, e | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | |
| Arrival Type, AT | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | |
| Unit Extension, UE | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Initial Unmet Demand, $Q_b$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Ped / Bike / RTOR Volumes | 1 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 |
| Lane Width | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | |
| Parking / Grade / Parking | N | 0 | N | N | 0 | N | N | 0 | N | N | 0 | N |
| Parking Maneuvers, $N_m$ | | | | | | | | | | | | |
| Buses Stopping, $N_B$ | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Min. Time for Pedestrians, $G_p$ | 33.2 | | | 24.5 | | | 27.0 | | | 3.2 | | |

| Phasing | Excl. Left | WB Only | Thru & RT | 04 | Excl. Left | NB Only | Thru & RT | 08 |
|---|---|---|---|---|---|---|---|---|
| Timing | G = 7.0 | G = 2.0 | G = 59.0 | G = | G = 11.0 | G = 7.0 | G = 9.0 | G = |
| | Y = 3.5 | Y = 3.5 | Y = 6 | Y = | Y = 3.5 | Y = 3.5 | Y = 5 | Y = |
| Duration of Analysis, T = 0.25 | | | | | | Cycle Length, C = 120.0 | | |

## Lane Group Capacity, Control Delay, and LOS Determination

| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LT | TH | RT | LT | TH | RT | LT | TH | RT | LT | TH | RT |
| Adjusted Flow Rate, v | 68 | 861 | 47 | 123 | 942 | | 519 | 104 | 29 | 5 | 92 | |
| Lane Group Capacity, c | 102 | 1727 | 763 | 182 | 1884 | | 610 | 309 | 243 | 165 | 131 | |
| v/c Ratio, X | 0.67 | 0.50 | 0.06 | 0.68 | 0.50 | | 0.85 | 0.34 | 0.12 | 0.03 | 0.70 | |
| Total Green Ratio, g/C | 0.06 | 0.49 | 0.49 | 0.10 | 0.54 | | 0.18 | 0.16 | 0.16 | 0.09 | 0.08 | |
| Uniform Delay, $d_1$ | 55.4 | 20.5 | 16.0 | 51.8 | 17.6 | | 47.7 | 44.5 | 42.9 | 49.6 | 54.2 | |
| Progression Factor, PF | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| Delay Calibration, k | 0.24 | 0.11 | 0.11 | 0.25 | 0.11 | | 0.38 | 0.11 | 0.11 | 0.11 | 0.27 | |
| Incremental Delay, $d_2$ | 15.4 | 0.2 | 0.0 | 9.6 | 0.2 | | 11.1 | 0.6 | 0.2 | 0.1 | 15.6 | |
| Initial Queue Delay, $d_3$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay | 70.7 | 20.8 | 16.0 | 61.4 | 17.8 | | 58.8 | 45.2 | 43.1 | 49.7 | 69.7 | |
| Lane Group LOS | E | C | B | E | B | | E | D | D | D | E | |
| Approach Delay | 24.0 | | | 22.8 | | | 55.9 | | | 68.7 | | |
| Approach LOS | C | | | C | | | E | | | E | | |
| Intersection Delay | 32.6 | | | $X_c$ = 0.61 | | | Intersection LOS | | | C | | |

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | Sequoia/Site Access |
| Agency/Co. | Lancaster | Jurisdiction | Canby |
| Date Performed | 1/2/2008 | Analysis Year | Background + Site (Bldg C) |
| Analysis Time Period | AM Peak | | |

| | |
|---|---|
| Project Description | Trend Industrial Park Phase 2 - 07263 |
| East/West Street: Sequoia Parkway | North/South Street: Site Access |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 74 | 24 | 1 | 162 | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 82 | 26 | 1 | 180 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 25 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 6 | | 0 | | | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 6 | 0 | 0 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 25 | 0 | 25 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 1 | | 6 | | | | |
| C (m) (veh/h) | | 1351 | | 666 | | | | |
| v/c | | 0.00 | | 0.01 | | | | |
| 95% queue length | | 0.00 | | 0.03 | | | | |
| Control Delay (s/veh) | | 7.7 | | 10.5 | | | | |
| LOS | | A | | B | | | | |
| Approach Delay (s/veh) | -- | -- | 10.5 | | | | | |
| Approach LOS | -- | -- | B | | | | | |



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## TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *C Sumrain* | Intersection | *Sequoia/Site Access* |
| Agency/Co. | *Lancaster* | Jurisdiction | *Canby* |
| Date Performed | *1/2/2008* | Analysis Year | *Background + Site (Bldg C)* |
| Analysis Time Period | *PM Peak* | | |

Project Description *Trend Industrial Park Phase 2 - 07263*

| | |
|---|---|
| East/West Street: *Sequoia Parkway* | North/South Street: *Site Access* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

### Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | *168* | *6* | *0* | *81* | |
| Peak-Hour Factor, PHF | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *186* | *6* | *0* | *90* | *0* |
| Percent Heavy Vehicles | *0* | -- | -- | *5* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | | | *TR* | *LT* | | |
| Upstream Signal | | *0* | | | *0* | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *24* | | *1* | | | |
| Peak-Hour Factor, PHF | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* |
| Hourly Flow Rate, HFR (veh/h) | *26* | *0* | *1* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *5* | *0* | *5* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *N* | |
| Storage | | *0* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *0* | *0* | *0* |
| Configuration | | *LR* | | | | |

### Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | *LT* | | *LR* | | | | |
| v (veh/h) | | *0* | | *27* | | | | |
| C (m) (veh/h) | | *1364* | | *709* | | | | |
| v/c | | *0.00* | | *0.04* | | | | |
| 95% queue length | | *0.00* | | *0.12* | | | | |
| Control Delay (s/veh) | | *7.6* | | *10.3* | | | | |
| LOS | | *A* | | *B* | | | | |
| Approach Delay (s/veh) | -- | -- | | *10.3* | | | | |
| Approach LOS | -- | -- | | *B* | | | | |



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## TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *C Sumrain* | Intersection | *Sequoia/Site Access* |
| Agency/Co. | *Lancaster* | Jurisdiction | *Canby* |
| Date Performed | *1/2/2008* | Analysis Year | *Background + Site (Bldg D)* |
| Analysis Time Period | *AM Peak* | | |

| | |
|---|---|
| Project Description | *Trend Industrial Park Phase 2 - 07263* |
| East/West Street: *Sequoia Parkway* | North/South Street: *Site Access* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

### Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | *73* | *23* | *1* | *162* | |
| Peak-Hour Factor, PHF | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *81* | *25* | *1* | *180* | *0* |
| Percent Heavy Vehicles | *0* | -- | -- | *25* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | | | *TR* | *LT* | | |
| Upstream Signal | | *0* | | | *0* | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *5* | | *0* | | | |
| Peak-Hour Factor, PHF | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* | *0.90* |
| Hourly Flow Rate, HFR (veh/h) | *5* | *0* | *0* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *25* | *0* | *25* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *N* | |
| Storage | | *0* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *0* | *0* | *0* |
| Configuration | | *LR* | | | | |

### Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | *LT* | | *LR* | | | | |
| v (veh/h) | | *1* | | *5* | | | | |
| C (m) (veh/h) | | *1353* | | *667* | | | | |
| v/c | | *0.00* | | *0.01* | | | | |
| 95% queue length | | *0.00* | | *0.02* | | | | |
| Control Delay (s/veh) | | *7.7* | | *10.4* | | | | |
| LOS | | *A* | | *B* | | | | |
| Approach Delay (s/veh) | -- | -- | | *10.4* | | | | |
| Approach LOS | -- | -- | | *B* | | | | |

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | Sequoia/Site Access |
| Agency/Co. | Lancaster | Jurisdiction | Canby |
| Date Performed | 1/2/2008 | Analysis Year | Background + Site (Bldg D) |
| Analysis Time Period | PM Peak | | |

| | |
|---|---|
| Project Description | Trend Industrial Park Phase 2 - 07263 |
| East/West Street: | Sequoia Parkway |
| Intersection Orientation: | East-West |
| North/South Street: | Site Access |
| Study Period (hrs): | 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 167 | 6 | 0 | 80 | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 185 | 6 | 0 | 88 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 5 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 23 | | 2 | | | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 25 | 0 | 2 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 5 | 0 | 5 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 0 | | 27 | | | | |
| C (m) (veh/h) | | 1365 | | 716 | | | | |
| v/c | | 0.00 | | 0.04 | | | | |
| 95% queue length | | 0.00 | | 0.12 | | | | |
| Control Delay (s/veh) | | 7.6 | | 10.2 | | | | |
| LOS | | A | | B | | | | |
| Approach Delay (s/veh) | -- | -- | 10.2 | | | | | |
| Approach LOS | -- | -- | B | | | | | |



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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | Sequoia/Site Access |
| Agency/Co. | Lancaster | Jurisdiction | Canby |
| Date Performed | 1/2/2008 | Analysis Year | Background + Site (Total) |
| Analysis Time Period | AM Peak | | |

Project Description: Trend Industrial Park Phase 2 - 07263

East/West Street: Sequoia Parkway | North/South Street: Site Access

Intersection Orientation: East-West | Study Period (hrs): 0.25

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 79 | 36 | 2 | 163 | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 87 | 40 | 2 | 181 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 25 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 8 | | 0 | | | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 8 | 0 | 0 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 25 | 0 | 25 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 2 | | 8 | | | | |
| C (m) (veh/h) | | 1329 | | 652 | | | | |
| v/c | | 0.00 | | 0.01 | | | | |
| 95% queue length | | 0.00 | | 0.04 | | | | |
| Control Delay (s/veh) | | 7.7 | | 10.6 | | | | |
| LOS | | A | | B | | | | |
| Approach Delay (s/veh) | -- | -- | 10.6 | | | | | |
| Approach LOS | -- | -- | B | | | | | |



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Generated: 1/8/2008 1:30 PM

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | C Sumrain | Intersection | Sequoia/Site Access |
| Agency/Co. | Lancaster | Jurisdiction | Canby |
| Date Performed | 1/2/2008 | Analysis Year | Background + Site (Total) |
| Analysis Time Period | PM Peak | | |

Project Description: Trend Industrial Park Phase 2 - 07263

East/West Street: Sequoia Parkway | North/South Street: Site Access

Intersection Orientation: East-West | Study Period (hrs): 0.25

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 169 | 9 | 0 | 86 | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 187 | 10 | 0 | 95 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 5 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 36 | | 3 | | | |
| Peak-Hour Factor, PHF | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Hourly Flow Rate, HFR (veh/h) | 40 | 0 | 3 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 5 | 0 | 5 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 0 | | 43 | | | | |
| C (m) (veh/h) | | 1358 | | 705 | | | | |
| v/c | | 0.00 | | 0.06 | | | | |
| 95% queue length | | 0.00 | | 0.19 | | | | |
| Control Delay (s/veh) | | 7.7 | | 10.4 | | | | |
| LOS | | A | | B | | | | |
| Approach Delay (s/veh) | -- | -- | 10.4 | | | | | |
| Approach LOS | -- | -- | B | | | | | |



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# Pre-Application Meeting

**Trend Development, Building C**
**January 14, 2014**
**10:30 am**

**Attended by:**

Scott McCormack, Trend Business Center LLC, 503-624-4649
Patrick Haugon, VLMK Engineering, 503-222-4456
Hassan Ibrahim, Curran-McLeod Engineering, 503-684-3478
Darvin Tramel, City of Canby, 503-266-0636
Gary Stockwell, CU Electric Department, 503-263-4307
Havlin Kemp, VLMK Engineering, 503-222-4453
Angie Lehnert, Planning Department, 503-266-7001
Dave Michaud, Wave Broadband, 971-563-6314
Dan Mickelsen, Erosion Control, 503-266-0698

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**TREND BUSINESS CENTER, LLC, Scott McCormack**

- This is the fourth building of the Trend Business Center's master plan. We built building B in 2005 and normally we lease them out, but we sold this one to PumpTech. We still own building A, which was built in 2008 and leased it to Bella Flor, building D was built 2008 and Cascade Engineering Technologies just moved in this past summer. Building C is similar to building D, except a little bit larger, 34,000 square feet versus 29,000 square feet. Appearance wise they will be very similar and the utilities will be mostly the same. If you go to the site you will see it is mostly flat and roughly the sub-grade at the filling slab elevation.
- At this time we do not have a tenant, but hopefully we will by the time the building is complete.

**VLMK ENGINEERING, Havlin Kemp**

- We took the architectural features for building D, which are similar to building's A and B and tried to match existing. This building has a little different geometry, but the architectural features we did for Canby. We have not been though Canby's current design matrix, we did the same as we did for building D and shows up on the site plan. It is intended to look like a business park and the four buildings are fronting Sequoia Parkway and will look generally the same.
- On the utilities this piece of property was sub-divided by McCormack properties and we only had utilities stubbed to the site for one piece of property and for building D we did stub fire water, sanitary and provided for storm retention.
- Havlin said on the frontage there is a public utility easement and I do not know why the water line was placed there and Doug stated our 16 inch ductile iron water line is in the street and Havlin said we tapped here for building D and then brought it down here to this point. My questions is do we have a private water line in the public utility easement or is this public. Doug said he was not sure why it went in that way, but I was not here when it was built. Your current double check vault is tapped off the one leg and this water line comes off before that vault. Havlin said the double check is in the building. Doug concurred. This line

should have never been installed that way because if it is dedicated fire water only it has to be behind the double check. We will have to figure out what we are going to do with it, because the public 16 inch ductile iron main line is in the street. The double check if you are going to run it that way needs to go out to the street. You would have one double check controlling both buildings or you run them on individual buildings, but we are not going to be responsible for that water line once it crosses onto private property. Havlin asked could this line be used for fire water the way it is and with the double check in the building? Doug said we are not going to be responsible for the way it is tied in and the way the rules read now, we are responsible to the double check. Havlin said you want to forget about this line, was this not allowed? Doug said it would not be allowed today, everything goes to the property side of the public utility easement (PUE). Scott asked if there were new standards since 2008 or do you think it was wrong in the first place. Doug stated it was wrong in 2008. Havlin said the way we normally do projects is the way you are describing it, but we would have asked someone about this in regards to putting the double check in. Doug said he was not here in 2008 and I could not tell you what was said at that time. I just know the way the standards read today and double checks go out in the street for fire. We are not going to be in private property because it is a liability to the utility. Havlin said we have all the domestic out at the street, the meters and everything. Doug said normally you would have tapped one fire line straight in and put the double check there and brought all your fire water in here and do the same thing for this building. I do not know why this arrangement went in because since this is private it should be feeding private hydrants, which should be behind the double check. These hydrants are not the property of Canby Utility because they are on a private line. Havlin stated they are shown as public and in the PUE, they were required easements when this property subdivided. Doug said there is a difference in the way municipalities set it up and normally once it crosses onto private property, even in a PUE, it is part of the structures fire protection and that is why it was put in and why it becomes private hydrants. Havlin said Wilsonville and Beaverton hydrants are public and all the water lines serving them and Doug said Portland is all private. Havlin said I do not know if it is a change in Canby's way of doing things, today if you subdivide a piece of property you are required to provide the perimeter of PUE. Doug said it is still standard and Havlin asked for what. If we are not putting public water lines and hydrants in, we will get this figured out. Can we leave the existing building's pipe the way it is and go back and cut into Sequoia Parkway putting in a new tap and Doug said yes. I still have to figure out what to do with that line because that should not be a public line on private property, because of the liability should anything happen to it.

**WILLAMETTE BROADBAND, David Michaud**

- We would like to be able to run conduit into the site. We have a fiber node and a fiber RF out front of the site. We can go into your open trenches with our 2 inch conduit. Havlin said we were looking at as-builts surveys and there are a couple of vaults, do you have any vaults on the frontage? David said his equipment was all pedestals and the node is with the power supply and it is in an above ground enclosure. All of our pedestals are dark green in color and 2 to 3 feet tall.

**CURRAN-MCLEOD ENGINEERING, Hassan Ibrahim**

- The sidewalk will have to extend between the two developed properties. It will have to be located with a 5 foot planter along with a 6 foot wide sidewalk the length of the frontage.
- I do not see where the existing sewer is located. Scott said if you go out there now we have done some of the parking on building C side already and during the work we stubbed all the utilities out in preparation of this site. Hassan said obviously this will be private utilities and the answer was yes.
- Hassan said it looks like there is a monitoring manhole and Darvin interrupted stating he wanted to add a comment about the sewer portion and continued stating the difference of this building we see as far as it coming from an industrial pretreatment stand point is you are having three separate suites. We have to be able to sample each suite separately, not one connection and you cannot run them all in the same line because you have a metal finisher here and you could also have a plastic former. Obviously, I have not seen any of your sewer drawings and we really need three separate laterals with sampling vaults. Havlin asked if this was new since we did the last building, we have three suites for the last building and Darvin said yes, but your other building like the Peco building, you know a metal finisher came in afterwards and we do not know what is going in there and that is what we are trying to prevent is having to come back and say you are going to install a sampling vault and you are going to do this our way and you are going to do it. So, it is pretty important if you are going to have three separate commercial/industrial suites that they are able to be sampled. Now if you are going to guarantee none of them are allowed to discharge anything but domestic waste then you can have one sewer line, you cannot have any drains in any of the buildings and you would never be allowed to have anything in there that would limit your ability on the industrial pretreatment side. Havlin said this is new since the last building because it was a multi-tenant and Darvin said building D and the answer was yes. Scott said it ended up having the tenant take the entire building, but it was permitted as a multi-tenant. Darvin said we are going to want to see three separate laterals and how you connect them. You are just connecting all three to one lateral that is not going to work. The sampling manhole is no good to me because I cannot tell what industry I am sampling. I have not seen a drawing. Hassan said this is on private property and you cannot monitor from the manhole? Darvin said no, he needed it separated. Basically I need to sample from each different suite because you could possibly have three different industries in this building. Havlin said I do not think that manhole was put in for sampling, it is just a standard manhole. Darvin stated his comments were similar to the ones you had in 2007, but I do not think I was invited in 2008 planning section of it and I have reviewed this one and I have comments. I have copies for all of you and I did not want to rehash every comment for storm water and sewer, but I did notice the sewer was a concern for me. Hassan said how would they control this situation, initially if they build this impervious building for a certain company and two to three years later they split it up and another entity comes in, how do you keep track of it or control it. Darvin stated we control it through the business application process and the best time to install sampling vaults and laterals is during the main construction and I am saying we would like to see three separate laterals. It does not mean you cannot come out forward with three separate laterals and build another main to the actual city connection, it would be okay, but

you would have to provide access for a sampling vault and I need to sample each building. Havlin asked can it be sampled in the building. Darvin said if you get a tenant that is discharging, if you do not provide it now I am going to make them provide me everything, yes, they will have to cut concrete and Havlin stated they will have to cut concrete anyways and that is the process system in the building and they will be cutting it open and putting their interior process system, we can put it in at that time. It will be available for sampling before it ties into their office waste. Darvin said they would have to be separate and the answer was they would be and each suite would have a sampling station. Havlin stated the problem is having three sampling manholes and they may never be used, what I am asking is to have it included with the plumbing and not with the site. Darvin stated he had told other entities to do it also, we told Dragonberry to put in a sampling vault even though they are a dry business, we do not know what is coming in after them and it is kind of protecting our system. It saves everyone money in the long run to do it up front and Havlin said Scott can charge his tenant for it, if he has a tenant coming in who has some process system that uses sanitary. They can put it in with the build out in building, the slab gets cut anyhow and Darvin said the issue is we have tenants coming in and we do not find out until the day they sign their business license and then I come back and it is not very business friendly to tell them they have to install a quarter of a million dollar pretreatment or something like that afterwards. It has been an issue within the actual process we are getting businesses from developers like Trend, who builds a building and they do not know what is going into it and they show up as with Peco and they are doing metal finishing and we are making Peco jump through a bunch of hoops. It makes us look bad. Havlin said the option of having McCormack spend a lot of money for something that may never be used up front. Now you have educated Scott and he knows to tell his tenants before they sign a lease agreement they need to talk to Canby and find out all of what Canby is going to require. Dan asked Darvin is this sampling manhole where you need to use a large beaker or is it something you set an instrument in and it takes readings every 24 hours. Darvin said it can do both, it is like the one we stuck in at Dragonberry. This is common and I am sure you have done work in Beaverton or the Clean Water Services, it is right from the Clean Water Services sampling vault and it is similar to the one we had Dragonberry install. They are not overly expense, but they are not cheap. Scott said building D did not have any floor drains in their manufacturing area, are you concerned if they put a floor drain in their manufacturing area. Darvin said no, normally you have an industry, except they worry about floor drains and if they are discharging something they are going to have to put in the piping, I guess we can ask afterwards, but the thing is if you ask afterwards you only have the one connection coming down, then you are going to make them tear up the whole street to provide me a separate, they cannot be in the same line other words. Havlin said I am asking if they can have the sampling port in the building installed with the interior plumbing. Darvin stated you can and Havlin said I know there is such a thing and I am asking if Canby is going to come into their facility and sample and Darvin said yes, we do. Scott said if we provide a spot for it, will that work and Darvin said yes, we are willing to work with you. I am saying one pipe really does not work well for us because it is going to mix and we have to have it whether you left an area in some type of landscaping and remember if it is industry it has to be separate from domestic. Patrick said is it not going to be all industrial, would you be doing it separately and Darvin said what I am saying, in my opinion, the time to do it would be now, so each of

them are already separate and all they would have to do is tie into their own lateral. Havlin asked if it had to be separate up to the sampling because it is not separate all the way to the main in the street. Darvin stated normally all the other industries would have a separate connection the sewer main, we do not normally have them all going into a one pipe like Johnson Controls and stuff like that. That is the first thing that jumped out to me. Havlin said if you are willing to sample in the building, I do not think that would be a problem coming up with a system to have it sampled before it gets combined. Dan said you just tie in below it and everyone concurred. Havlin said the way this building will be set up, it will have a sanitary truck line into the building and tie into here and if you get three tenants and their restrooms and they have some type of process system, they will design their process system and have a sampling point before they tie into the trunk line. Darvin said I was thinking you would run it out here, but you are going to run it under the concrete pad. The answer was yes. Havlin said all they need to know is before they tie into this trunk line they put in a sampling system. Hassan asked how often do you sample and Darvin said we only have a few large ones that takes place. There is an issue with what you are talking about because legally I am supposed to, there are two different types of sampling, there is a sample we take at the industry from the process and normally they will have some sort of pretreatment apparatus, we take a sample there and we also have to take a sample from the point of connection. Those other units could be adding dissolution prior to there and in other words, I have to sample here and normally have to sample there. Havlin asked to the point of connection to what and Darvin said to the city. Havlin said it is right here and it is a public line to here and then it is all private from there and Darvin said we normally sample at the connection and this is for one section and you have three and it is a pain. Dan said Pioneer Pump has an 8 inch sewer main stubbed into their site with a connection from Vata, Pioneer Pump and Pioneer Pump phase II. If they decide to unload that 25,000 square foot warehouse, there are three connections into one and Darvin stated it is better to have it done up front than me to come back and tell them they have to have a separate attachment. Havlin said we will work something out that works for Scott and you. Darvin said we have to do special formulas. Havlin explained to Scott all three would be at the point of connection and there would be a manhole in the existing or cut it back here at the property line at the end of the public easement.

- Hassan asked if they were going to use the existing driveway right now and Havlin said they were going to widen it, it is not that wide right now. Havlin said can you see the dash lines the width of the driveway. Hassan asked what is the spacing between the two driveways, it looks more than 200 feet apart and it looks like the spacing meets the requirement. Havlin said they are existing and Hassan understood and said you are widening them and it looks like it meets the 200 foot space requirement from what I can see. Dan asked if the driveway to building C be the same as for building D and the answer was yes and they will be widening the driveways.
- I do not know the tree situation along Sequoia Parkway and I know we put some trees in when we built the parkway. I do not know how many of those trees survived, but they will need to have some trees placed here and Angie said you will need to work with the city arborist. The Council approved a street tree ordinance and in the ordinance they have a street tree fee of $200 dollars per tree. Hassan said it will be the responsibility of the property

owner to maintain and Angie said it is the city now and that is what the fee covers. Havlin said we pay in lieu of, we do not even install the trees we pay the $200 for all the required trees and the city puts them in. Dan said the city takes care of the trees for one year and then they get turned over the property owner, but talk to Sol Jacobsen for clarification.

- As far as storm drainage you understand it is on site storage. How are we going through this process, are we going through Clackamas County and Darvin said correct, but we will be reviewing all large commercial sites, this will be reviewed by Gordon Munro, Kennedy/Jenks. He will be reviewing for infiltration and capacity and we will be reviewing the storm water. It has to be maintained on site and also for storm water you are proposing three separate loading docks, is that correct. The answer was yes. Darvin stated he has a whole section on loading docks, which you are pretty familiar with and handed out literature about loading dock. This is similar to what you previously had at the other buildings and the only changing we did on it was, you have three separate tenants and on that it is okay because it is more of a safety issue and I am not sure if you were planning on connecting it to sewer, like you did on the previous building's loading docks. Havlin said we do not know. Scott asked if we have to get a DEQ permit and Darvin stated they will not let you take loading waste into a UIC, if you are proposing UIC's, which we do not have your storm water plan. They will not let you attach loading docks to UIC's anyway, so what you have done in the other buildings and Scott said the sanitary catch basin for spills. Darvin said we require you have a separator/interceptor and you have to have an emergency shut-off switch. Since you have three different docks, I thought to save money we would allow one interceptor, normally the small size and I think it is 500 gallons, we would allow one and you would have to do an automatic shut-off because the guy on the end will not be able to. Scott said we have the catch basin here and do you mean an oil/water separator and Darvin said yes, you have the overhang, all the same requirements. Due to the fact you have the third loading dock, we thought it would be better if you used an electrical system shut-off valve and placard it. Havlin told Scott it is the same as building D and Scott said except you want an automatic shut-off and Darvin said yes. If a truck driver was standing there and not knowing where to go, but we would be in agreement you could get away with one interceptor. Dan said there would be a catch basin at each one of these loading docks, correct. The answer was yes. Dan said why not have a valve wrench at the loading dock and have them shut it off before it got anywhere and Havlin and Scott both stated it was the system they have at building D. Dan said it works great with the valve wrench hanging and the manual in plain sight in case of an emergency, I remember inspecting it and works great. Darvin said the thought was what about the far one and Dan said what are you talking about and Havlin said this is a two bay and this one is a four bay. Darvin asked which way it is going. Havlin said it is just like building D and Darvin said my only concern was this guy not knowing, because the valve is going to be down here and Dan said put a pinch valve on each one. Scott said he would give Darvin a tour of building D to show him how it worked. Darvin said it does not work because the valve is supposed to be located on the discharge side of the interceptor because you want to catch the diesels and the stuff in the interceptor. If you put your valve up there chances are all the spill is already gone into the interceptor and heading out. It says it is always been on the discharge side, chances are by the time the guy gets out and it is spilling, he is running around and that is why I was thinking an electric valve, so all you would have to do is go up here and hit a button and it shuts the valve off on

the discharge side of the interceptor. Dan said in the meantime it fills up with goop and if you have a valve right there you could stop it and flood your loading dock and pump it out from there. Darvin said normally they are always on the discharge side of the interceptor, it would be a bad idea to have a valve there. You do not know if someone is loading the truck and he is inside and everything could go through and the idea of the interceptor is to capture it. It probably would not be over 500 gallons, it will be a 50 gallon barrel or 100 gallon diesel spill from someone punching a hole in a fuel cell or something like that. The idea is to get it before it leaves the interceptor.

**CITY OF CANBY, EROSION CONTROL, Dan Mickelsen**

- Dan asked where the construction entrance will be located. The answer was the entrance used by building D.
- When this driveway gets widened it will have to be a commercial approach and ADA compliant. Is the whole flower bed existing and the answer was yes. Sol may have already replanted these trees and they would have a plaque to identify the species and Havlin said we replanted a few trees when we built buildings A & B because our driveway took one out. Dan said as long as these trees are protected and if you have questions contact Sol.
- If you can leave this area on the frontage as a buffer it will help you in the long run. When do you plan on breaking ground? Scott said July. Dan wants the contractor to be mindful and keep all materials and debris on site.
- We would like to have all your contractors and subcontractors park on site and not on Sequoia Parkway.
- Are you going to be exporting soil and the answer was possibly some strippings, but the elevation is pretty close. Dan asked if you would put any around the site and Havlin stated any soil needing to be exported will be taken off site. Some might be left for landscaping and we would put landscaping fence around it.
- You will need an erosion control application submitted with your plan.
- Is building C's storm water going into the existing swale? I circled this area and asked what is this a catch basin. Havlin said the existing catch basin will be moved down into the docks and stubs extended down there. Dan asked where the catch basins outflow goes and Havlin stated into the existing storm system going into the drywells. Dan said if you have these catch basins in the loading docks you cannot have them going into drywell and Darvin said they cannot go into the sewers, we will not let you do that. Havlin said it will be the same system we have for building D. We have a storm catch basin outside of the overhang of the dock picking up the storm water and the concrete grades have the storm water going into this system. Dan said he understood and that would be fine going into the drywell. Havlin said it sheet flows to the catch basins. Darvin asked how much impervious area are you putting into the connection to the loading dock. Havlin said to the sanitary drains and Darvin said the loading dock drains, which go to the sanitary. Havlin stated about 50 x 4, a couple hundred square feet.
- Dan asked if Perlo would be the contractor and Scott stated his father retired a few years ago and Perlo Construction is now completely separate and yes we would hire them as the general contractor.

- Are you planning on putting in any pervious asphalt on the site and the answer was pervious asphalt does not work well in an industrial application.

**CANBY UTILITY, ELECTRIC DEPARTMENT, Gary Stockwell**

- I think you are depicting a transformer out front and Havlin said that it is not the final location, we just put one there so we did not forget it. Gary said nothing has really changed and we will allow the CT's and meters inside the building, but they must be in a limited access room. I do not see anything on your drawings indicating a power room on that end of the building. Havlin said they have not shown it. Gary said he would like to make a suggestion at this stage, if we can set the transformers somewhere towards the south end of the building it can be used quite possibly to serve the future building just south of this building. It would be money in your pocket and I would not need a second transformer to serve the next building or simply just upgrade the transformer, it would certainly be to your benefit. Havlin said it would work better for the building itself and you would bring the electrical down here to serve the transformer setting and Gary said he it would probably be acceptable as long as we are right on the power line and away from the building. What is the measurement between the building and property line and the answer was 10 feet. Gary said it would be acceptable to come this way and I have a power line on the Shimadzu property and I would probably extend to create a loop to the transformers for future reliable switching efforts. Discussion ensued on having the power room on the south side of the building. Gary said we need to have enough room for our vehicles to have access to the transformer and we could use the same transformer to serve the future building. Scott asked what if we sold the building in the future and Gary stated that is why we have easements.
- Further down the road we will size the transformer and obviously with some judgment factors on what we will be seeing in there and Havlin asked Gary to remind him if we sized the transformer for Peco before or after. Scott said the service in the electrical room is 2,000 amp. Havlin said they must have sized it after. Gary said we are very aggressive on our transformer sizing, you might ask for a 1,000 kVa transformer and I may put in a 75 and in a lot of cases we are right and sometimes we are wrong. If the transformer we put in is to small and when your tenant moves in and requires more energy, we will upsize the transformer at our cost. Scott said he remembers the same conversation with Building D and we are going to duplicate the same electrical gear as we did in D into C.
- As far as the temporary service goes, I will work with your contractors individually.

**CANBY UTILITY, WATER DEPARTMENT, Doug Quan**

- Do you have the water services set up for three separate tenants or are you going to use a single water service for domestic. Havlin stated a single water service. Doug said you have some issues on what you plan on doing. Just like the sanitary sewer if the wrong tenant moves in, we will require back flow protection. The back flow protection we are going to require if it goes Table 48 (OAR 333-061-0070) tenant is at the meter. That means the other tenants will be unprotected unless that tenant puts other devices inside to protect the rest of the tenants. If it is a single service you may end up with an RP device at the meter. If you put in a 1-1/2 inch service or larger it requires a double check installed, but the wrong tenant moves in it has to be changed to an RP device.

- We would be better off if we did another tap out at Sequoia Parkway and put the fire vault on the back edge of the easement and go into your building from there. I take it there will be one fire service for the entire structure and we need to figure out what is going to happen with those hydrants because we have dead legs and they are not getting flushed and are not on a looped system. Those should be technically private hydrants and behind the double check. Scott said is it okay to cut into the street because in 2008 it was a rule not to cut the street? Hassan said the roadway was built in 2003 and has been 10 years, we do not cut newly paved streets for 3 years. Doug said the water main is right under the fog line on the short side and you will not have to disturb the traffic. Havlin said the existing line runs down the access road and was going to extend down to SE 4th Avenue in the future. Doug asked if the future buildings will have frontage along SE 4th Avenue and the answer was yes. Doug said the services will come off of SE 4th Avenue. Havlin said we were asked to loop the fire line through the site between the streets. Doug asked if the line went all the way to SE 4th Avenue and the answer was no, it just goes to the property line. Doug said he will talk to the Canby Utility and get back with you.
- Just for your information Canby Utility Water Department will do the taps on the main line. We will do it on a quote basis and if there is more than a 10 percent discrepancy overage we will refund it to you. We will bring the water service to the property. Dan said and you will fill out the street cutting permit and the answer was correct.

**CITY OF CANBY, PLANNING DEPARTMENT, Angie Lehnert**

- Bryan has been reviewing your application and I am helping him. I made a memo for Chapter 16's zoning codes and the chapters that will be applicable, application form and printed email from Bryan on his comments. I did a fee schedule and highlighted what fees will be applicable. Do you have an idea if you are in the Advanced Financed District? I looked at the map and noticed you are inside the boundaries. Scott wanted to know what it was about and Angie said it is for public improvements. I do not know how these fees work, but we can check into it and Hassan said he would look also into it.
- This site is in the Industrial Overlay Zone and there is a design review matrix in Chapter 16.35 and this chapter supersedes the design review matrix in the application and the ones in the application are derived from Chapter 16.49. Hopefully 16.35 matrix will be simpler, it does encourage a point based design and has the building up to the street with parking to the side or the rear and if you have questions let us know.
- I do not know if we had the lighting ordinance when you did your last building, but we have one now and it encourages the dark sky friendly type lighting, Chapter 16.43.
- There is a maximum driveway width and Chapter 16.46 has access standards for driveways. Driveway to intersection and driveway to driveway and maximum widths. Havlin said he would check and see if they still comply, we worked out all of these driveway locations when we did A & B.
- Chapter 16.49 has landscaping standards and it would be nice if you had it labeled and show the square footage of the landscaping on your plans.
- I can email you all of the information I handed out and the answer was yes.

- Scott said he talked to Bryan about building D's traffic study, which encompassed both buildings and he was thinking we would not have to do another one, but he was going to get back to me to confirm it.
- I will get a hold of Sol about the street trees.
- The fee schedule will have a few sections that read, "see Clackamas County" because we do not do structural, plumbing or electrical.

**BEFORE THE PLANNING COMMISSION**
**OF THE CITY OF CANBY**

| | | |
|---|---|---|
| **A REQUEST FOR SITE AND DESIGN** | **)** | **FINDINGS, CONCLUSION & FINAL ORDER** |
| **REVIEW FOR** | **)** | **DR 14-01** |
| **A NEW INDUSTRIAL BUILDING** | **)** | **TREND BUSINESS CENTER LLC** |
| **AT 341 S SEQUOIA PARKWAY** | **)** | |

**NATURE OF THE APPLICATION**

The Applicant has sought an approval for a Site and Design Review #DR 14-01 for the construction of an industrial building on property described as Tax Lot 31E3401711, Clackamas County, Oregon. The property is zoned Heavy Industrial ("M-2") under the Canby Municipal Code ("CMC") and is in the Canby Industrial Overly (I-O) Zone.

**HEARINGS**

The Planning Commission considered application DR 14-01 after the duly noticed hearing on April 14, 2014 during which the Planning Commission approved by a ____ vote to approve DR 14-01. These findings are entered to document the approval.

**CRITERIA AND STANDARDS**

In judging whether or not a Site and Design Review application shall be approved, the Planning Commission determines whether criteria from the Code are met, or can be met by observance of conditions, in accordance with Chapter 16.49.040. Other applicable code criteria and standards were reviewed in the Staff Report dated April 14, 2014 and presented at the April 14, 2014 meeting of the Canby Planning Commission.

**FINDINGS AND REASONS**

The Planning Commission considered application DR 14-01 after the duly noticed hearing on April 14, 2014 during which the Planning Commission approved by a ____ vote to approve DR 14-01. These findings are entered to document the approval.

The Staff Report was presented, and written and oral testimony was received at the public hearing. Staff recommended approval of the Site and Design Review application with Conditions of Approval in order to ensure that the proposed development will meet all required City of Canby Land Development and Planning Ordinance approval criteria.

After hearing public testimony, and closing the public hearing, the Planning Commission made the following additional findings beyond those contained in the staff report to arrive at their decision and support their recommended conditions of approval and the exact wording thereof:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

**CONCLUSION**

In summary, the Planning Commission adopted the findings contained in the Staff Report, concluded that the Site and Design Review application meets all applicable approval criteria, and recommended that File #DR 14-01 be approved with the Conditions of Approval stated below. The Planning Commission decision is reflected in the written Order below.

**ORDER**

Approval of this application is based on submitted application materials and all written and oral public testimony. Approval is strictly limited to the submitted proposal and is not extended to any other development of the property. Any modification of development plans not in conformance with the approval of application file #DR 14-01, including all conditions of approval, shall first require an approved modification in conformance with the relevant sections of the Canby Municipal Code. The Planning Commission concludes that, with the following conditions, the application will meet the requirements for Site and Design Review approval. Therefore, **IT IS ORDERED BY THE PLANNING COMMISSION** of the City of Canby that **DR 14-01** is approved, subject to the following conditions:

**General**

1. Approval of this application is based on submitted application materials and public testimony. Approval is strictly limited to the submitted proposal and is not extended to any other development of the properties. Any modification of development plans not in conformance with the approval of application file #DR 14-01, including all conditions of approval, shall first require an approved modification in conformance with the relevant sections of this *Canby Land Development and Planning Ordinance*. Approval of this application is based on the following:
    a. Citizen and agency comments
    b. Application form received 2.13.14
    c. Application narrative revised 3.17.14
    d. Design review drawing set G1.0-G7.0 revised 3.17.14
    e. Landscaping Plan L1.0 revised 3.17.14
    f. Floor Plan A1.0 revised 3.17.14
    g. Elevations A2.0 revised 3.17.14
    h. Traffic Impact Study dated January 2008
    i. Other supporting materials submitted with the application

2. The development shall comply with the standards of all applicable outside utility and regulatory agencies including:
    a. City of Canby Planning
    b. City of Canby Engineer
    **c.** Canby Public Works
    d. Canby Fire District
    e. Canby Utility
    f. Northwest Natural Gas
    g. Canby Telcom
    h. Wave Broadband
    i. Oregon Department of Environmental Quality (DEQ)
3. The development shall comply with all applicable City of Canby Public Works Design Standards.
4. The owner/applicant shall comply with the recommendations of the consulting city engineer Hassan Ibrahim, dated 3.26.14.

**Stormwater**

5. The development shall comply with the standards of the Oregon Department of Environmental Quality (DEQ) pertaining to stormwater and other applicable regulations. The applicant shall submit documentation from DEQ that verifies the proposal is in compliance with all DEQ regulations.
6. The applicant shall submit a stormwater drainage plan for review by the city's consulting engineer. Stormwater designs must meet all Canby Public Works Design Standards.

**Lighting**

7. All site lighting shall meet the shielding and lumen standards Table 16.43.070.

**Landscaping**

8. The applicant shall pay the city fee for city establishment of street trees per the Tree Regulation standards in Chapter 12.32 of the Canby Municipal Code.
9. All landscaped areas shall be irrigated per 16.35.050(M) and 16.49.120(H); an irrigation outlet is required approximately every 150 feet of all plant materials to be maintained.
10. All landscaping shall be installed and maintained per the standards of 16.49.080(F-P), 16.49.100(A-C), and 16.49.090.
11. Parking lot trees shall follow the standards in 16.49.120(F).
12. Screening of parking and loading areas is required. Within three years of planting, screening shall be of such height and density as to shield vehicle headlights from head-on visibility; perimeter landscaping shall be maintained in a matter to achieve screening of vehicle headlights.

**Bicycle parking**

13. Final construction plans shall show a U style bike rack by each of the three entrances; the plans shall show that the spaces are at least 6'x2' with an overhead clearance of 7', that spaces/bike racks are at least 2' from a wall or other obstacle, that racks are securely anchored, and that the racks are within 50' of entrances.

**Other**

**14.** Construction plans for public sidewalk and planter strip improvements shall be submitted for review. These plans shall show that the site's sidewalk and planter strips match the widths of adjacent sidewalk and planter strips.

**15.** Final construction plans shall depict the four compact parking spaces by the north entrance marked on the parking surface or with a sign in front of the parking stalls.

**Procedural**

Prior to issuance of Building Permits the following must be completed:

**16.** The applicant shall apply for a City of Canby Site Plan Permit and pay all applicable development fees prior to construction.

**17.** The applicant shall apply for a City of Canby Site Erosion Control Permit prior to construction.

**18.** Submit final construction plans: Final construction plans shall indicate the design, location, and planned installation of any right of way improvements and utilities including, but not limited to, water, electric, sanitary sewer, natural gas, telephone, storm water, cable, and emergency service provisions. Construction plans shall be designed and stamped by a professional engineer registered in the State of Oregon.

**19.** Prior to the issuance of City Site Plan permit approval, final construction plans must be approved by the city and all other utility/service providers. The City of Canby may require a pre-construction conference to obtain final approval from utility providers and applicable city departments. This includes, but is not limited to, approval by:

a. City of Canby Planning
b. City of Canby Engineer
**c.** Canby Public Works
d. Canby Fire District
e. Canby Utility
f. Northwest Natural Gas
g. Canby Telcom
h. Wave Broadband

**20.** Clackamas County Building Codes Division will provide structural, electrical, plumbing, and mechanical plan review and inspection for this project. Applicable building permits are required from Clackamas County prior to construction.

**I CERTIFY THAT THIS ORDER** approving **DR 14-01** was presented to and **APPROVED** by the Planning Commission of the City of Canby.

**DATED** this 14th day of April, 2014

_____
Tyler Smith
Planning Commission Chair

_____
Bryan Brown
Planning Director

_____
Laney Fouse
Attest

**ORAL DECISION:** Click here to enter text.

| *Name* | *Aye* | *No* | *Abstain* | *Absent* |
|---|---|---|---|---|
| ***Tyler Smith*** | | | | |
| ***John Savory*** | | | | |
| ***Shawn Hensley*** | | | | |
| ***John Serlet*** | | | | |
| ***Larry Boatwright*** | | | | |
| ***Vacant*** | | | | |
| ***Vacant*** | | | | |

**WRITTEN DECISION:** Click here to enter text.

| *Name* | *Aye* | *No* | *Abstain* | *Absent* |
|---|---|---|---|---|
| ***Tyler Smith*** | | | | |
| ***John Savory*** | | | | |
| ***Shawn Hensley*** | | | | |
| ***John Serlet*** | | | | |
| ***Larry Boatright*** | | | | |
| ***Vacant*** | | | | |
| ***Vacant*** | | | | |