



## **WILSONVILLE CITY HALL DEVELOPMENT REVIEW BOARD PANEL B**

**MONDAY, AUGUST 22, 2016 - 6:30 P.M.**

**I. Call To Order:**

**II. Chairman's Remarks:**

**III. Roll Call:**

Aaron Woods Richard Martens Shawn O'Neil Samuel Scull Samy Nada Council Liaison Julie Fitzgerald

**IV. Citizen's Input:**

**V. City Council Liaison's Report:**

**VI. Consent Agenda:**

**A. Approval of minutes of the July 25, 2016 meeting**

Documents:

[July 25 2016 minutes.pdf](#)

**VII. Public Hearing:**

**A. Resolution No. 331.**

**Black Bear Diner: Michael Rose, Real Income Corp - Owner/Applicant.** The applicant is requesting approval of a Site Design Review request and Class 3 Sign Permit for conversion of an existing restaurant to a Black Bear Diner Restaurant. The subject property is located at 30175 SW Parkway Avenue on Tax Lot 102 of Section 23AA, T3S, R1W, Clackamas County, Oregon. Staff: Daniel Pauly.

Case Files: DB16-0037 Site Design Review  
DB16-0038 Class 3 Sign Permit

Documents:

[Black Bear Diner SR.Exhibits.pdf](#)  
[Exhibit B1 Applicants Drawings.pdf](#)

**VIII. Board Member Communications:**

**IX. Staff Communications:**

**X. Adjournment**

Assistive Listening Devices (ALD) are available for persons with impaired hearing and can be scheduled for this meeting. The City will also endeavor to provide the following services, without cost, if requested at least 48 hours prior to the meeting.

- Qualified sign language interpreters for persons with speech or hearing impairments.
- Qualified bilingual interpreters.
- To obtain such services, please call the Planning Assistant at 503 682-4960

**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 22, 2016  
6:30 PM**

---

**VI. Consent Agenda:**

- A. Approval of minutes from the July 25, 2016 DRB Panel B meeting**

**Wilsonville City Hall  
29799 SW Town Center Loop East  
Wilsonville, Oregon**

**Development Review Board – Panel B  
Minutes–July 25, 2016 6:30 PM**

---

**I. Call to Order**

Acting Chair Richard Martens called the meeting to order at 6:30 p.m.

**II. Chair's Remarks**

The Conduct of Hearing and Statement of Public Notice were read into the record.

**III. Roll Call**

Present for roll call were: Richard Martens, Aaron Woods, Samy Nada, Samuel Scull, and Council Liaison Julie Fitzgerald. Shawn O'Neil was absent.

Staff present: Daniel Pauly, Barbara Jacobson, and Steve Adams

**IV. Citizens' Input** This is an opportunity for visitors to address the Development Review Board on items not on the agenda. There were no comments.

**V. City Council Liaison Report**

**Councilor Fitzgerald** reported that on July 18, 2016 City Council held a lengthy work session and discussed the following items:

- The Transit Master Plan Committee presented its continuing to work in the community interviewing people on how the public transit system was serving the community and changes that could be made without a budget increase, such as changes to routes and how the system connected with TriMet. The committee would continue doing surveys throughout the community.
- Although Wilsonville Road Corridor Traffic Management was discussed, it was too early to know what changes would be made. Staff did present numerous options for addressing the congestion that resulted primarily from I-5 running through the city.
- Following discussion, the Council decided to apply for an Equitable Housing Grant to fund a study to assess what housing needs Wilsonville had. She understood interviews would be conducted to find out where there were gaps and then Council would consider how to increase options for people that were tailored to the community.
- Council also discussed the legislative matters the League of Oregon Cities (LOC) was considering and each Councilor identified the areas they believed were most important. The LOC asked that all cities identify legislative priorities and Wilsonville supported and voiced interest in needed housing assistance programs, restoring recreational immunity, and looking at rights-of-way for municipalities and how those should be handled. There was also a lot of interest in the LOC addressing transportation funding policies, which related to Wilsonville's interest in freeing up traffic.

**Aaron Woods** asked if Council would take more citizen input when improvements that address traffic congestion were being considered.

**Councilor Fitzgerald** confirmed that citizens could always provide input to the City via emails sent to the city manager, adding that all citizen complaints and input were tabulated. She explained the City was currently looking for relatively simple adjustments that could be made and tried out, such as signage.

Initial cost estimates were also being considered, and while the City had a certain amount of money to spend, if a significant investment were involved, there likely would be public hearings; however, they were not yet at that point. Much of the issue related to ODOT and the availability of different options. Council would love input and she encouraged citizen input via meeting attendance, email, phone calls, and letters, adding that hopefully, another article would appear in the *Boones Ferry Messenger* soon to keep the dialogue going.

## **VI. Consent Agenda:**

- A. Approval of minutes of April 25, 2016 meeting

**Aaron Woods moved to approve the April 25, 2016 DRB Panel B meeting minutes as presented. Samy Nada seconded the motion, which unanimously.**

## **VII. Public Hearing:**

- A. **Resolution No. 330. Mont Blanc No. 2 – Villebois Phase 10 Central: Polygon WLH, LLC – Applicant.** The applicant is requesting approval of a Zone Map Amendment from Public Facility (PF) Zone to Village (V) Zone, a Specific Area Plan – Central Refinements, Preliminary Development Plan, Tentative Subdivision Plat, Tentative Condominium Plat, Type ‘C’ Tree Plan and Final Development Plan for the development of condominiums and row houses in Phase 10 of SAP-Central. The subject property is located on Tax Lot 2900 of Section 15AC, T3S, R1W, Clackamas County, Oregon. Staff: Daniel Pauly.

Case Files:	DB16-0020	Zone Map Amendment
	DB16-0021	SAP Central Refinements
	DB16-0022	SAP Central PDP 10, Preliminary Development Plan
	DB16-0023	Tentative Subdivision Plat
	DB16-0024	Tentative Condominium Plat
	DB16-0025	Type C Tree Plan
	DB16-0026	Final Development Plan

*The DRB action on the Zone Map Amendment is a recommendation to the City Council.*

**Chair Martens** called the public hearing to order at 6:40 p.m. and read the conduct of hearing format into the record. All Board members declared for the record that they had visited the site. No board member, however, declared a conflict of interest, bias, or conclusion from a site visit. No board member participation was challenged by any member of the audience.

**Samuel Scull** declared that he was currently a Villebois resident and served on several of the homeowners association (HOA) committees and boards; however, he had no conflict with the subject proposal.

**Daniel Pauly, Associate Planner**, announced that the criteria applicable to the application were stated on page 2 of the Staff report, which was entered into the record. Copies of the report were made available to the side of the room.

**Mr. Pauly** presented the Staff report via PowerPoint, briefly reviewing the site’s history and the project’s location and surrounding features, and describing the Applicant’s requests with these comments:

- Zone Map Amendment. As with other Villebois developments where the land was formally the Dammasch State Hospital campus, the site was proposed for rezoning consistent with the Comprehensive Plan to allow for development consistent with the Villebois Village Master Plan.
- SAP Central Refinements & SAP Central Preliminary Development Plan (PDP). The Applicant proposed a total of 92 units on the 3.2-acre site, which included 82 for sale, stacked, flat-type condo

units. There were two, 24-unit, three-story buildings, and one, four-story 34-unit building. The PDP also proposed 10 row houses, which would be in five-plexes along Villebois Dr. In addition, there were proposed pathways, parking areas, open spaces, and garage structures that would serve the development.

- Circulation. The block sizes and shapes were all consistent with what was previously planned for the Specific Area Plan (SAP) for this portion of Villebois. A pedestrian ally was an important part of the designed connection from The Piazza to Montague Park and would provide a nice pedestrian connection. Campanile Ln would also be a more pedestrian-friendly corridor for connections between the key parks as part of the main bike/pedestrian thoroughfare through the Village Center. A mid-block crossing was also provided from Villebois Dr to Campanile Ln, just south of the condo building and row houses.
- Parking. A number of parking spaces were required for the many proposed units. He reviewed the number of off and on street parking spaces required by the City, and the number of parking spaces proposed by the Applicant. (Slide 10)
  - The row houses had garages designed to be used for parking, but even if the garages were used for storage, the minimum would still meet with the exterior driveway space and off street parking.
  - For the condo buildings, 132 spaces would be provided, a number of which were in garages. However, if garages were not used for parking, the minimum parking requirement would not be met, so a condition was proposed to provide additional surety that the garages were kept clear for parking, and that those parking areas in the garages were kept clear enough of items to meet the minimum dimensional standards for a legal parking spot per City Code.
  - Exhibit B5, which was emailed to the Board after the packet was distributed, showed that the Applicant had increased the size of the garage space to ensure there was room for items, such as trash bins and bicycle parking, while still allowing room for vehicle parking.(Slide 11)
  - The condition also required the homeowners association (HOA) control whether garages were used for storage and people signage would be provided in the garages where it would be actively controlled to educate people. The signage would be tasteful, while specifying the dimensions that would need to be kept clear for parking to ensure the garages were available to meet the minimum parking standard as designed.
  - These requirements were reflected in Condition PDC 6 of the Staff report; however, the City's legal counsel proposed the following amended language, which he read into the record as follows:

"The covenant restriction shall be recorded with the Final Condominium Plat and included in the Covenants, Conditions, and Restrictions (CC&Rs) for the development in a form to be approved, in writing, by the City that requires garages be used for parking a vehicle and not for any other storage, except as provided herein. The Plat and CC&Rs shall provide all garage spaces for the Condominiums must meet minimum dimensional requirements for parking spaces, as defined by the Wilsonville Code and must be kept "usable and accessible for parking at all times." Garages shall be subject to inspection by the homeowners association and the City. Each garage must have a sign interior to the garage that is clearly visible reading "9 foot by 18 foot minimum area must be kept clear at all times for vehicle parking and no storage is allowed within this area" or where the space is among the 40% allowed to be compact "Compact Vehicles Only: 7.5 foot by 15 foot minimum area to be kept clear at all times for vehicle parking and no storage is allowed within this area", or substantially similar language to be approved, in writing, by the City. The homeowners association may approve temporary use of garage space, not to exceed ten (10) days, for storage while actively moving without further approval from the City. No other storage shall be

allowed without written homeowner association and City approval. See also Finding C5".

- Because this was a dense area of development, and to assure that parking was met and did not spill out and affect nearby projects, an additional 36 on street spaces could, per Code, be considered available parking to be used to meet parking requirements for the project. However, the Applicant provided the required parking onsite and conditions assured that it would be perpetually provided onsite.

**Aaron Woods** stated it seemed that the HOA and the City would have the responsibility of ensuring that the residents did not use their garages for storage. He asked what a homeowner would be liable for, noting it seemed somewhat restrictive since the vast majority of people use their garages for storage. He believed it would be almost impossible to enforce such a restriction on a homeowner purchasing this particular property.

**Mr. Pauly** responded that as part of the condition, including the signage and the clarity of the restriction in the CC&Rs, the City hoped it would be clear to the purchaser that this was a special requirement due to the dense urban nature of this residential area. Because other nearby projects were dense as well, there would be vehicles on the street due to the urban design of the area.

**Chair Martens** offered he lived in a condo development with an almost identical restriction, and they made it work. His HOA had reviewed the restriction within the last year and found widespread support for it. Their language, however, was slightly different in that it stated the garage could not be used for storage if it displaced one's vehicle to the driveway or guest parking, which would accommodate those with only one or no automobile.

**Mr. Pauly** agreed that was a good condition, adding if the Board wanted Staff could work on drafting addition language to address that. As far as the City's and HOA's authority, typically such restrictions were an HOA responsibility and the City would not be actively enforcing it. If for some reason, the HOA was nonfunctional or there was a major issue, the City might get involved. The City did not have a large Code enforcement staff because most of those issues were enforced through HOAs. Issues that did not go through HOAs or issues in areas without an HOA would come to the City. Primarily, the HOA would be dealing with the parking enforcement.

**Barbara Jacobson, City Attorney** confirmed that was correct, noting it was a violation of CC&Rs, which typically included remedies. She agreed modifying the language to clarify that storage could not displace a vehicle was a good idea to accommodate homeowners without vehicles and that the Board could make that proposal later if they would like.

**Samy Nada** asked how the City Code described or defined a required parking spot, including the dimension.

**Mr. Pauly** replied parking spaces had two parts, its dimension, and that it be usable and accessible for parking.

**Mr. Nada** asked how the garage could be counted as a second space if it was blocked by another car in the driveway.

**Mr. Pauly** replied tandem parking counted because typically, the same unit was assigned both spaces, so one spouse would have to move their vehicle so the other could move theirs. He would not expect that two strangers would be assigned tandem parking without some sort of agreement. Tandem parking was

not a standard of perfect accessibility, but even though someone had to move one car for the other to be accessed, it was still considered accessible and usable for parking.

**Mr. Nada** asked if the space that blocked a driveway was counted as a parking space.

**Mr. Pauly** responded no. The only spots that would be counted were tandem exterior spots behind garages where cars were both pulled in the same way. He confirmed that with a one-car garage, there would be one space in the garage and one space in the driveway for a total of two parking spaces. No parallel parking behind those spaces that would block the driveway would be counted.

**Mr. Nada** stated it did not seem practical to count the tandem spaces as two spots. Perhaps one or two people would do that, but it would be a big hassle. These spaces were being counted just to get to the minimum, and even with off street parking, the Applicant would be 12 spots short.

**Mr. Pauly** clarified that of the 48 spaces, half were one-car garages. Removing all the driveway spaces behind the one-car garages would only remove 24 spaces. The proposal was already 14 parking spaces above the minimum, and 36 extra spaces on the street could also be counted. Even with the driveway spaces taken away, the proposal would still meet the minimum parking requirements.

**Mr. Nada** responded removing those spaces would take away 48 spaces, not 24 because it was a one-car garage and one driveway space. If the one driveway space was taken away, there would be 48 less parking spaces than the 96 spaces.

**Mr. Pauly** said he understood. The City considered those spaces usable and accessible, so even if 48 spaces were removed the proposal would still be 14 spaces above the minimum with the 36 on street spaces plus the 132 spaces already counted.

**Mr. Nada** stated it was two spaces according to his calculations. He asked what size car the required parking spaces were designed for.

**Mr. Pauly** replied that per Code, a standard-sized parking space was 9-ft by 18-ft was being used, so obviously, if someone chose to have a king cab dually in this urban location, they would most likely be parking on the street. The City could not plan for everyone owning such a large vehicle. The Code also allowed up to 40 percent compact spaces, which are 7.5-ft by 15-ft. Most small-to-medium sized sedans or small SUVs fit into those spaces.

**Mr. Martens** asked if any of the 36 designated off street parking spaces might have been counted for neighboring developments as well.

**Mr. Pauly** replied no, because off street parking spaces are all on the frontage of each property. Previous projects reviewed by the Board were only able to count the spaces adjacent to their properties; spaces across the street could not be counted.

**Samuel Scull** inquired if Staff had been taken into consideration that parking was already a problem in Villebois because people failed to use their garage or had more than two cars, which resulted in those cars being parked long term on the street. Add visitors to the mix and parking then overflowed to other parts of the neighborhood, and this neighborhood was two to three times denser than other area neighborhoods.

**Mr. Pauly** replied all that was certainly considered. He noted this area was the Village Center, which was designed to be the densest part of the development, although it was slightly less dense than originally planned. In fact, the overall density of the Village Center would be at or below what was originally

planned. Even back then, it was acknowledged that such density came with vehicles, and the worst-case scenario could not be planned for, only what was reasonable, which the Code standard provided. When the Villebois Code was established, it was thoughtfully put together and it was a denser neighborhood, so there would be some overflow parking, and Staff understood that was an issue. In the Village Center, most of the street parking would probably be used on most evenings or weekends when most people were home. In this case, the Applicant exceeded the parking requirements and Staff was making reasonable and prudent conditions to ensure, as much as possible, that garages were not being taken up for other uses but preserved for parking. A predominant concern throughout many HOAs in the city and multifamily projects was that garages were not being used for parking, so Staff was trying to make sure garages were being used for parking.

**Mr. Woods** asked what the short- and long-term bicycle parking spaces were on Page 5 of 20 of the Preliminary Development Plan.

**Mr. Pauly** replied when the City adopted the new Transportation System Plan (TSP) recently that new Code standard was added. The Code stated that once a project met a certain threshold of required bicycle parking, which he believed was six, a certain percentage of that bicycle parking needed to be long-term. Short-term bicycle spaces involved a bicycle rack intended for quick visits or shopping, for perhaps an hour or two; whereas long-term was for all-day employees, for example, or where bikes would be stored overnight in residential multifamily project. There were specific standards in the Code differentiating those scenarios.

**Mr. Woods** asked how short-term and long-term bicycle parking was managed in the Code since he could park his bicycle all day in short-term parking.

**Mr. Pauly** clarified that as managed in the Code, avid bikers probably had a valuable enough bike that they would have a natural tendency to put it in the more secure place and not have to worry about it. However, if someone wanted to put a bike out on the street all day with minimal security, there was nothing to stop them, as that was not a management issue addressed in the Code or on any projects to his knowledge.

**Mr. Nada** stated he might have miscalculated when counting the garages. There were two extra garages than the number of condos, so would every condo have a garage or would someone receive an extra garage?

**Mr. Pauly** deferred to the Applicant, noting they had done similar projects, so it had all been thought out. He continued his presentation of the Staff report as follows:

- SAP Central Refinements & SAP Central Preliminary Development Plan (PDP). He displayed an image from Exhibit B5 that showed how garages could be switched around to accommodate parking and trash storage. Some garages were 21-ft deep with a 3-ft area for trash bins and bicycle storage. Other garages were wider with an 11-ft parking bay, as well as the 3-ft area for trash cans.
  - There had been a lot of discussion about whether to have a central trash enclosure as seen at apartment complexes. The Applicant explained that in their experience it worked better if people in a condo complex were responsible for their own trash, so they could control the amount of trash they generated, similar to a single-family homeowner, rather than having a central dumpster.
  - Staff had worked with the Applicant and Republic Services to see how the collection routes would lay out. Ultimately, the drive aisles ended up being two-way, the same width as a typical Villebois alley. Putting out the trash at collection was very typical of Villebois, as could be seen in the alley between the row houses and the other condo building. Republic

also used smaller trucks in Villebois. Staff had been sure to coordinate closely with Republic Services on trash collection for the proposed SAP.

- He noted Republic Services submitted a letter dated July 19, 2016 that signed off on the Applicant's proposed plan, which he entered into the record as Exhibit B6.
- Traffic. A previous traffic study had been done for the entirety of the central area of Villebois. When comparing the last Traffic Impact Analysis from 2013 to the current plan there was actually one less trip, so there would be a slight reduction of traffic, so no traffic issues were identified with the proposal.
- Density and Housing Mix Refinement. One component of the plan was a refinement to the SAP, which allowed for a change of up to 10 percent in density. All the housing units in Villebois were grouped into two aggregate land-use categories, one being medium-sized single-family and larger and the other being small lot, single-family and smaller. All the units in the SAP Central were in that smaller category; therefore, changing from one product to another did not affect that because they were all in the same bucket, so Staff looked at unit count. The Applicant proposed a reduction of six units, .5 percent, which was well within the percentage change allowed through a refinement process. He noted that at this point, they were very close to the original unit count expected for the Village Center.
  - Staff also considered the housing mix within that category, especially in terms of urban design and variety of housing. Originally, the area was planned for specialty condos, which would have preserved some of the Dammasch State Hospital buildings and adaptively reused them for housing. At one point, that was determined to not be feasible so the buildings were demolished, and therefore the specialty condos could not feasibly be built.
  - The Village Apartments, more traditional condos, and some mixed-use condos currently existed due to the orientation of a potential L-shaped building along Villebois Dr. Eventually that building's property was subdivided into different lots, and so the subject lot included a portion of that building; however, mixed-use was planned for the remainder of that lot.
  - The proposal had a very similar density and urban design with three- to four-story buildings close to the street to create a dense urban feel as contemplated at the Village Center. In Villebois, a transect concept was contemplated where the densest, highest buildings were in the Village Center and the least dense, larger homes were on the edges, such as along Grahams Ferry. The proposed project, Mont Blanc No. 2, would be right at the center of Villebois and was expected to have a dense urban feel.
- Given how the buildings were oriented toward Paris Ave and to the south, the garages on the northwest side, which had a 15-ft buildable front, would face Campanile Ln. These perspectives would be shown later in the presentation.

**Samy Nada** asked if the one trip decrease in the traffic analysis was in comparison to what was planned or existing conditions.

**Mr. Pauly** replied it was against what was planned. The expected road capacities in Villebois were planned and built based on the planned density, the number and type of units initially assigned in the Master Plan and SAPs for each area. The most recent traffic study update for the area was in 2013, and compared to the current, there was one trip less. In short, the traffic impacts from this project had been planned as the infrastructure had been built and planned for the Villebois development.

**Mr. Nada** stated he did not see an actual traffic study, as seen in previous projects that identified the different intersections and the ratings of each intersection.

**Mr. Pauly** explained that because a previous traffic study had been done, only a memorandum was provided. He noted when a scope of a traffic study was requested, one of two things would happen. There could be a full Traffic Impact Analysis (TIA), which contained the intersection studies, tables, diagrams

and details. But if it was a small project with minimal impact or a previous study existed, only a memo that explained the impacts was provided. In this instance, since the impacts were so minimal from the previous in-depth study, the City's traffic engineers did not believe it made sense to have the Applicant go through the expense of doing a full study, so only a memo was necessary to explain the change from the previous study. He confirmed the original Traffic Impact Analysis was done in 2013.

**Mr. Scull** asked if increased or added public transit had been considered in the traffic study, relative to the density in the center of the development.

**Mr. Pauly** replied there was a public transit component in the Master Plan. Bus stops were planned for specific areas; however, none of those bus stops impacted this project. He believed bus stops were planned in the circular park currently under construction north of the school, adding that essentially, each neighborhood would have a bus stop. SMART was currently reviewing its routes to determine how they could best serve the city, and whether SMART would serve Villebois with more frequency. The Master Plan did contain an appendix that addressed public transit and bus stops had been contemplated and planned throughout the Villebois community.

**Mr. Pauly** continued his presentation of the Staff report via PowerPoint with these comments:

- The Final Development Plan (FDP). Landscaping. The Applicant's proposed street trees and open space landscaping matched the Community Elements Book, which described the different planting and landscaping materials and street tree options for Villebois. Basalt benches would provide a unique look, while being consistent with the overall design, and planters would add greenery in an urban nature. (Slide 16)
  - He noted the pedestrian paver ally would be along the southeast side of Campanile Ln. The ally was the connection going up from the Piazza through an approved, but not yet built, development and into Montague Park. Campanile Ln was what was called The Courtyard address, which had been designed as a mixed pedestrian/bicycle/car area and a main outdoor room in the Village Center.
  - Architecture. He reviewed the architectural elements of the Applicant's proposed buildings, which Staff had gone through in detail to ensure they met all the various Village Center Architecture Standards for articulation. The buildings had also been reviewed by Consultant Architect Steve Coyle, the same architect who had reviewed all of the Villebois homes' architecture.
    - He noted the Village Center was unique in that no specific architectural standard or style, such as American Modern or English Revival, for example, was required. The architecture only needed to meet a checklist of certain design elements, which included articulation on the face, a clearly defined bottom, middle, and top of the building, window treatments, balconies, clear entries, and the use of brick.
    - The five-plex row houses would have a London design, which would provide consistency with neighboring projects. The front courtyards along Villebois Dr would provide a ground floor area that could potentially be used for small business, which was an idea in the Villebois Master Plan.
    - The four-story, 34-unit building, was similar to the three-story, 24-unit condo building, but also included the additional architectural difference at the top to break up the mass of the building.
    - The garages along Campanile Ln and Collina Ln were also enhanced with windows, brick treatment, and indentation to break up the long façade, as well as some additional architectural detail on the roof to provide architectural interest along the roads they faced.
  - The Tentative Subdivision Plat would dedicate the right-of-way, establish the public utility easements, and create the ten lots for the row houses that would have individually owned, similar to

most row houses in the Village Center and elsewhere in Villebois. The plat would also create the tracts for the open space, alley, and future condo development.

- Tentative Condominium Plat would create the condo plat, including the garages and separating out the ownership on each floor.
- Type C Tree Plan. All of the trees on the site were proposed for removal and a couple adjacent trees would be protected. Though some trees were rated Medium to Good, they were not a desirable species and some trees had Verticillium wilt or other issues, so no trees on the site were desirable to preserve to the point of changing a building design, even though Villebois had a history of designing around Good and Important trees.
  - He noted an Important tree in the middle of Paris Ave was preserved as part of a previous proposal and that some trees to the south in an area not yet approved for development would be protected during development of the subject project.
- He clarified that he had read the revised Condition PDC 6 into the record, adding the language could be revised further to reflect those homeowners who did not own vehicles if the Board wanted. He entered the following exhibits into the record:
  - Exhibit B5: Revised drawing submitted by the Applicant for garages and parking spaces.
  - Exhibit B6: Letter and two signed exhibits from Frank Lonergan, Operations Manager, Republic Services dated July 19, 2016.

**Chair Martens** noted the Staff report conditioned that language in the CC&Rs would be agreeable to Staff, so he did not believe the Board needed to approve specific language.

**Ms. Jacobson** agreed, adding the condition's language did say, "or substantially similar language to be approved, in writing, by the City." However, if the Board wanted Staff to address homeowners who did not own a vehicle that would make sense.

**Mr. Pauly** believed that flexibility was there.

**Chair Martens** stated he was comfortable leaving the recommendation as presented in the Staff report. He called for the Applicant's presentation.

**Jim Lange, Pacific Community Design, 12564 SW Main St, Tigard, OR 97223** introduced himself.

**Pamela Verdadero, Polygon NW, 109 East 13<sup>th</sup> St, Vancouver, WA 98660**, thanked the Staff for the wonderful job on the detailed Staff report. The Applicant was very excited about introducing another home style into the mix at Villebois and felt that it met the needs of the neighborhood, specifically single-level living which was in need at Villebois. The proposed plan transitioned nicely from the less dense part of the neighborhood into the core at the Piazza. And with the retail shops, it would be a great walkable area of the neighborhood.

- In addition to the row homes, single-level one-, two-, and three-bedroom homes with detached garages were proposed that would be served by elevators and enclosed corridors. These buildings would have more of an urban edge since they were at the core of the neighborhood. The Applicant believed they would attract people who wanted to downsize, as well as first-time homebuyers.
- Since this would be primarily an owner-occupied neighborhood the Applicant would do a lot of counseling upfront regarding parking and the intended use of garages, including what to do with oversized vehicles, boats, or RVs. Expectations were set regarding the type of neighborhood and whether it was the right fit for a particular individual.

**Mr. Nada** asked if any condo owner could buy more than one garage.

**Ms. Verdadero** confirmed it was one garage per condominium.

**Chair Martens** confirmed the three-story buildings would also be served by elevators and interior corridors.

**Ms. Verdadero** added that being an owner-occupied neighborhood, there was an active HOA and while homeowners would not be involved in the policing of the garage space, they were very passionate about parking. If it became an issue, it would be definitely be brought up and evaluated at meetings.

**Mr. Scull** asked if the proposed development would have an independent HOA separate from the other HOAs in the neighborhood.

**Ms. Verdadero** replied that she believed so.

**Mr. Pauly** added the HOA was also required to contribute to the Village Center maintenance of some of the shared facilities.

**Mr. Nada** stated he was not very familiar with how different HOAs interacted with each other in Villebois. If there were parking issues in the plan, it would not be a problem inside because there was no place to park, although it might affect other HOAs. He asked who people would complain to so the HOA could enforce the parking requirements.

**Ms. Verdadero** replied an HOA liaison sat on each of the active HOAs and went back and forth between the homeowners and the different neighborhoods.

**Mr. Nada** asked if there was currently a parking problem in Villebois.

**Ms. Verdadero** answered not that she was aware of or heard about specifically. With the owner-occupied component, especially with downsizing homeowners who were already getting rid of extras, letting prospective homeowners know upfront, and setting the expectation that the garage needed to be used for parking, there had not been any issues. Polygon NW had been very successful in the past at setting that expectation at the time of sale.

**Chair Martens** called for public testimony in favor of, opposed and neutral to the application. He noted for the record that no one was in the audience and closed the public hearing at 7:41 pm.

**Samuel Scull moved to approve Resolution No. 330 with the addition of Exhibits B5 and B6. Aaron Woods seconded the motion.**

**Mr. Nada** asked if the Board could see a more recent traffic study than the one done three years ago that included the different intersections and current traffic patterns because fewer houses were actually being built than had been planned three years ago. People were complaining about traffic and he wanted to see what traffic would be like today.

**Mr. Woods** confirmed Mr. Nada wanted the City to do another true traffic study that included the density and new housing being proposed versus the updated traffic study from 2013.

**Mr. Martens** understood that study would be based upon the number and type of units being built.

**Mr. Pauly** offered to further explain how traffic studies were done and how they worked internally.

**Mr. Nada** understood from a previous project that traffic studies were done by counting how many cars crossed a given intersection at a given time of day and were not based solely on the number of units.

**Mr. Pauly** explained that when traffic studies were done, the City considered how much capacity was used up by what was currently built, and by Stage 2 approvals, projects that were approved, but not yet built. These figures were calculated and put in a spreadsheet for each of these projects. He asked Mr. Adams to explain how decisions were made regarding whether to use a memo or a traffic study on projects like that proposed.

**Steve Adams, Development Engineering Manager**, stated it was decided at the inception of the Villebois project that there would be a main traffic study for the entire subdivision, and a traffic study for each of the SAPs. SAPs East, North, Central, and South each had a traffic study that anticipated so many types of homes being built in that area, so each traffic study was unique for what was planned in that SAP. In the interim, as long as the development came in for a specific PDP, that SAP's traffic study would be reviewed. Each traffic study considered the overall flow and the main intersections both onsite and offsite. What was agreed upon was if, for example, SAP Central 10 was planned to have X units which anticipated X trips and the developer deviated from that a bit based on the current market conditions, Staff would go back to the traffic study and anticipate how that deviation would reflect on the traffic patterns.

- Traffic counts at Villebois Drive were completed approximately one month ago to ascertain the impacts that occurred once the bridge going across to Kinsman Rd opened on Barber St. The last full-blown study in Villebois was associated with Grande Pointe in 2013. When Grande Pointe came in it was a yet-to-be-determined area of Villebois, so the City talked with the developer about updating the traffic study to know how much Grande Pointe would impact everything else. The City did counts at Grahams Ferry Rd and Tooze Rd, and at some of the major intersections, such as Brown Rd and Wilsonville Rd, to determine traffic flow and whether they were within the projections anticipated when the first traffic study was done in 2003. At that point, no red flags were raised as far as the capacity of the streets to handle the traffic, therefore, the City back to providing memos on each small sub phase to determine how well traffic was performing and the anticipated demands.

**Mr. Nada** asked how often a big study like the one conducted in 2013 should be done.

**Mr. Adams** replied the City anticipated that the last big study had already been done for Villebois because each SAP had a study and now, it was just a matter of tracking the trips and looking at truck traffic, volume, capacity, etc. Speeds were also reviewed to determine if a specific area had a speeding problem. Currently, 80 to 90 percent of the traffic memos were done and completed, so even though Villebois was only about 60 percent built out, the City was ahead as far as what had been approved by DRB, what was under construction, and what had actually been built. He asked if there was a specific traffic issue in Villebois that raised concerns.

**Mr. Nada** replied not in Villebois specifically, but other nearby major intersections, such as Wilsonville Rd and Brown Rd. Even though those intersections were not in close proximity to the project, the project would still have an impact, so he wanted the Board to see the numbers and the Level of Service (LOS) rating seen in other studies that indicated wait times and etc. He wanted to know what those wait times were currently and what impact the proposed project would have on surrounding intersections and even those intersections to I-5.

**Mr. Adams** replied Staff felt pretty comfortable, adding DRB-Panel B had missed the traffic study training work session that explained all these details. He noted that in the last couple years, the City had done a project called Transportation Performance Modeling. The City hired DKS to study key intersections to see how they were performing and see what the model said they would perform at over the last ten years to determine whether the City was staying ahead of traffic.

- Projects were very large or major, so as traffic builds and builds, incremental increases in delays were seen at intersections. Then various City projects would be completed, for example, the Barber St connection through Villebois to Kinsman Rd, or the I-5/Wilsonville Rd Interchange Project, and traffic numbers would drop back down again. Over the last ten years, studies have shown that overall, most intersections were well below the LOS D that the City required. For example, Barber St just opened last September. Counts done in May showed 5,000 to 6,000 vehicles crossed that bridge per day and those cars used to go down to Wilsonville Rd or up to Boeckman Rd, the bridge removed those 6,000 vehicles off Wilsonville Rd between Brown Rd and the interstate, or at least to Boones Ferry Rd. Concurrently, the City did a count on Boeckman Rd, which was carrying 6,000 vehicles per day between the Villebois Dr roundabout and Kinsman Rd. Although the Boeckman Rd project caused major traffic problems for the 15 months it was closed, once completed, those two roads combined pulled 12,000 vehicles daily east/west that would have either gone north or south. The City had just broken ground on the Kinsman Rd connection between Barber St and Boeckman Rd, and that project, which was anticipated to be completed in the fall of 2017, was expected to take traffic pressure off other roads. Extending Kinsman Rd to Boeckman Rd should eliminate vehicles cutting through the Villebois subdivision from Sherwood since there would now be a direct route. So, again the City anticipated the Kinsman Road Extension would pull more traffic from busier areas.
- He offered to give Mr. Nada a copy of the Transportation Performance Modeling Report. The City would repeat the study every two to three years and then refer back to it to ensure the City was staying ahead of traffic issues. One reason the report was triggered was because Day Rd hit capacity way before the City anticipated it would. When Day Rd was built in 2001, the City had not anticipated the amount of cut through traffic from Tualatin. The study gave the City an idea of why the traffic was there, and why it was increasing. The City wanted to stay ahead of that traffic situation because Washington County was currently building 124<sup>th</sup> Ave which would bring more traffic down to Grahams Ferry Rd. The City wanted to keep an eye on that area to ensure the major street upgrades were done in time to handle the expected traffic counts.
- He confirmed that the Board would not see full traffic studies for any further projects in Villebois, only memos. However, if something else came in that was a major change, a complete traffic study would be required.

**Mr. Pauly** added something on the level of a Master Plan amendment would trigger a complete traffic study, but for something within the confines of the approved Master Plan or an approved SAP, there would be a memo.

**Mr. Adams** agreed if it was a change that fell outside the 10 percent change, such as putting in 400 apartments rather than 100 homes, a new traffic study would be required because such a major change would result in a lot more traffic.

**Chair Martens** confirmed there was no further comment. He repeated the motion on the floor and called for a vote.

**The motion passed unanimously.**

**Chair Martens** closed the public hearing at 7:57 pm and read the rules of appeal into the record.

### **VIII. Board Member Communications**

- A. Results of the May 9, 2016 DRB Panel A meeting
- B. Results of the June 13, 2016 DRB Panel A meeting
- C. Results of the July 11, 2016 DRB Panel A meeting

### **IX. Staff Communications**

**Daniel Pauly, Associate Planner**, noted the only large application Panel A reviewed was the Republic Services Digester.

**X. Adjournment**

The meeting adjourned at 7:58 p.m.

Respectfully submitted,

Paula Pinyerd, ABC Transcription Services, Inc. for  
Shelley White, Planning Administrative Assistant

**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 22, 2016  
6:30 PM**

---

**VII. Public Hearing:**

**A. Resolution No. 331. Black Bear Diner: Michael Rose, Real Income Corp – Owner/Applicant.**

The applicant is requesting approval of a Site Design Review request and Class 3 Sign Permit for conversion of an existing restaurant to a Black Bear Diner Restaurant. The subject property is located at 30175 SW Parkway Avenue on Tax Lot 102 of Section 23AA, T3S, R1W, Clackamas County, Oregon. Staff: Daniel Pauly.

Case Files:	DB16-0037	Site Design Review
	DB16-0038	Class 3 Sign Permit

**DEVELOPMENT REVIEW BOARD  
RESOLUTION NO. 331**

**A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING A SITE DESIGN REVIEW REQUEST AND CLASS 3 SIGN PERMIT FOR CONVERSION OF AN EXISTING RESTAURANT TO A BLACK BEAR DINER RESTAURANT. THE SITE IS LOCATED AT 30175 SW PARKWAY AVENUE ON TAX LOT 102 OF SECTION 23AA, T3S-R1W, CLACKAMAS COUNTY; WILSONVILLE, OREGON. MICHAEL ROSE, REAL INCOME CORP – OWNER/APPLICANT.**

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated August 15, 2016, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel B at a scheduled meeting conducted on August 22, 2016, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated August 15, 2016, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB16-0037 and DB16-0038, Site Design Review and Class 3 Sign Permit for conversion of an existing restaurant building to a Black Bear Diner restaurant.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 22<sup>nd</sup> day of August, 2016 and filed with the Planning Administrative Assistant on \_\_\_\_\_. This resolution is final on the 15th calendar day after the postmarked date of the written notice of decision per WC Sec 4.022(.09) unless appealed per WC Sec 4.022(.02) or called up for review by the council in accordance with WC Sec 4.022(.03).

---

\_\_\_\_\_  
Richard Martens, Vice-Chair - Panel B  
Wilsonville Development Review Board

Attest:

---

**Shelley White, Planning Administrative Assistant**

Exhibit A1  
Staff Report  
Wilsonville Planning Division  
Black Bear Diner

Development Review Board Panel 'B'  
Quasi-Judicial Public Hearing

---

<b>Hearing Date:</b>	August 22, 2016
<b>Date of Report:</b>	August 15, 2016
<b>Application Nos.:</b>	DB16-0037 Site Design Review DB16-0038 Class 3 Sign Permit

---

**Request:** The requests before the Development Review Board are Site Design Review and a Class 3 Sign Permit related to the conversion of an existing restaurant space to Black Bear Diner.

**Location:** West side of Parkway Avenue at Main Street. The property is specifically known as Tax Lot 102, Section 23AA, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon

**Owner/Applicant:** Michael Rose  
Real Income Corp

**Applicant's Representative:** Kurt Jorgensen, AIA  
Nichols, Melburg, & Rosetto

**Comprehensive Plan Designation:** Commercial

**Zone Map Classification:** PDC (Planned Development Commercial)

**Staff Reviewers:** Daniel Pauly AICP, Senior Planner  
Steve Adams PE, Development Engineering Manager

**Staff Recommendation:** Approve with conditions the requested Site Design Review request, and Class 3 Sign Permit.

## **Applicable Review Criteria:**

<b><u>Development Code:</u></b>	
Section 4.008	Application Procedures-In General
Section 4.009	Who May Initiate Application
Section 4.010	How to Apply
Section 4.011	How Applications are Processed
Section 4.014	Burden of Proof
Section 4.031	Authority of the Development Review Board
Subsection 4.035 (.04)	Site Development Permit Application
Subsection 4.035 (.05)	Complete Submittal Requirement
Section 4.110	Zones
Section 4.116	Standards Applying to Commercial Development in Any Zone
Section 4.118	Standards Applying to Planned Development Zones
Section 4.131	PDC-Planned Development Commercial Zone
Sections 4.133.00 through 4.133.06	Wilsonville Road IAMP Overlay Zone
Section 4.140	Planned Development Regulations
Section 4.154	On-site Pedestrian Access and Circulation
Section 4.155	Parking, Loading, and Bicycle Parking
Section 4.167	Access, Ingress, and Egress
Section 4.171	Protection of Natural Features and Other Resources
Section 4.175	Public Safety and Crime Prevention
Section 4.176	Landscaping, Screening, and Buffering
Section 4.177	Street Improvement Standards
Section 4.179	Mixed Solid Waste and Recyclables Storage in New Multi-Unit Residential and Non-Residential Buildings
Section 4.191	Non-conforming Site Conditions
Sections 4.199.20 through 4.199.60	Outdoor Lighting
Sections 4.300 through 4.320	Underground Utilities
Sections 4.400 through 4.440 as applicable	Site Design Review
Sections 4.600-4.640.20	Tree Preservation and Protection
<b><u>Other Planning Documents:</u></b>	
Wilsonville Comprehensive Plan	
Previous Planning Approvals	

## Vicinity Map



## Background:

The subject building was originally built as a restaurant in the 1960's. City records show the restaurant being Kopper Kitchen from the early 1970's to the mid 1990's. The owner believes it was a different restaurant prior to being Kopper Kitchen. The current owners purchased the restaurant in the mid 1990's and converted it to a Denny's . The owners closed the Denny's restaurant in July 2015 and are now seeking to convert the restaurant building to a Black Bear Diner.

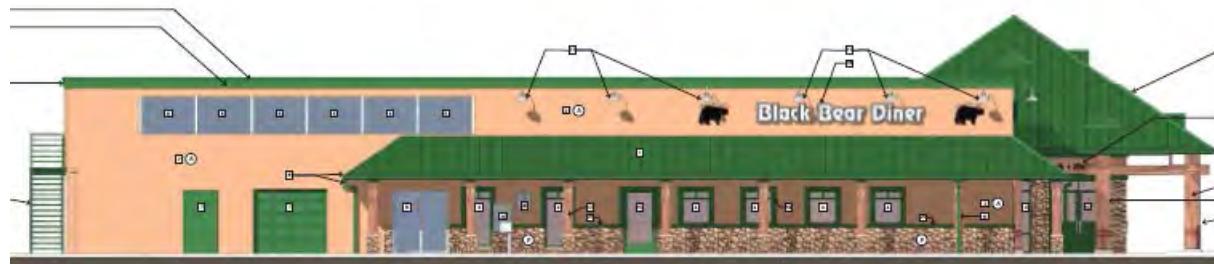


Photo of Area 1970

## **Summary:**

Site Design Review (DB16-0037)

The professionally designed architecture adapts the typical design elements for Black Bear Diner to the existing building. The new landscaping has also been professionally designed.



East Elevation (Facing SW Parkway Avenue)



North Elevation (Main Entry)

Class 3 Sign Permit (DB16-0038)

The applicant has elected to meet the current sign code rather than conform with previous sign approvals for the property. As such the building elevations eligible for signs are the east and the north. The north is allowed 48 square feet, and the east is allowed 60 square feet. Directional signs on bear statues are also proposed.

## **Traffic Study:**

While the reuse of a building for the same type of use would not typically require a traffic study, the City has no record of a traffic study being done for the subject development. As such the City has worked with the applicant to do a traffic study. This information is not being used as criteria to approve or deny the current requests, but does provide the City information about traffic expected to be generated from the site. This information will be helpful to anticipate future transportation needs in the area as well provide helpful information for future development related transportation studies in the area.

Pursuant to the DKS Traffic Study, Exhibit B2, the City anticipates the following PM peak hour traffic impacts:

Estimated New PM Peak Hour Trips	78
Estimated Weekday PM Peak Hour Trips Through Wilsonville Road Interchange Area	71

As found in Table 9 on Page 12 of the DKS Study, the City Standard of Level of Service (LOS) D or above will continue to be met.

### **Discussion Points:**

#### **Amount of Parking**

If built today, a similarly sized restaurant would require a minimum of 121 parking spaces. The site has much less parking, but is able to continue as a restaurant with non-conforming site conditions. The parking lot originally had 70 parking stalls, including 18 on the west side of the building adjacent to Interstate 5. With the most recent improvement to the Wilsonville Road/Interstate 5 interchange the northbound off-ramp was widened and realigned. This project required a portion of the property eliminating 9 parking spaces and not providing enough access room for the remaining parking spaces on the west side of the property, leaving 52 parking spaces.

With the more recent repaving parking stalls were painted on the west side of the building, but they are dimensionally deficient to be considered parking stalls. As submitted, the applicant's site plan shows 51 spaces. The City is working with the applicant to restripe Parkway Avenue to eliminate an unnecessary center turn lane and provide additional on-street parking immediately adjacent to the property, bringing the amount of parking above the amount left after the loss of parking to the I-5 project.

### **Conclusion and Conditions of Approval:**

Staff has reviewed the Applicant's analysis of compliance with the applicable criteria. The Staff report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings and information included in this Staff Report, and information received from a duly advertised public hearing, Staff recommends that the Development Review Board approve the proposed application (DB16-037 through DB16-0038) with the following conditions:

#### **Planning Division Conditions:**

##### **Request A: DB16-0037 Site Design Review**

<b>PDA 1.</b>	Construction, site development, and landscaping shall be carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. Minor revisions may be approved by the Planning Director through administrative review pursuant to Section 4.030. See Finding A15.
<b>PDA 2.</b>	All proposed landscaping approved by the Board shall be installed prior to occupancy of the remodeled restaurant, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning

	<p>Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City will be returned to the applicant. See Finding A35.</p>
<b>PDA 3.</b>	The approved landscape plan is binding upon the applicant/owner. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, pursuant to the applicable sections of Wilsonville's Development Code. See Finding A36.
<b>PDA 4.</b>	All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered as allowed by Wilsonville's Development Code. See Findings A37 and A38.
<b>PDA 5.</b>	<p>The following requirements for planting of shrubs and ground cover shall be met:</p> <ul style="list-style-type: none"> <li>• Non-horticultural plastic sheeting or other impermeable surface shall not be placed under landscaping mulch.</li> <li>• Native topsoil shall be preserved and reused to the extent feasible.</li> <li>• Surface mulch or bark dust shall be fully raked into soil of appropriate depth, sufficient to control erosion, and shall be confined to areas around plantings.</li> <li>• All shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon containers and 10" to 12" spread.</li> <li>• Shrubs shall reach their designed size for screening within three (3) years of planting.</li> <li>• Ground cover shall be equal to or better than the following depending on the type of plant materials used: gallon containers spaced at 4 feet on center minimum, 4" pot spaced 2 feet on center minimum, 2-1/4" pots spaced at 18 inch on center minimum.</li> <li>• No bare root planting shall be permitted.</li> <li>• Ground cover shall be sufficient to cover at least 80% of the bare soil in required landscape areas within three (3) years of planting.</li> <li>• Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations.</li> <li>• Compost-amended topsoil shall be integrated in all areas to be landscaped, including lawns. See Finding A40.</li> </ul>
<b>PDA 6.</b>	All trees shall be balled and burlapped and conform in size and grade to

<p>"American Standards for Nursery Stock" current edition. See Finding A41.</p>	
<b>PDA 7.</b>	Plant materials shall be installed to current industry standards and be properly staked to ensure survival. Plants that die shall be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. See Finding A43.
<b>PDA 8.</b>	Prior to installation of new outdoor lighting the applicant shall submit for Class I Administrative Review of the lighting's conformance with the City's Outdoor Lighting Ordinance. See Finding A51.
<b>PDA 9.</b>	The applicant shall restripe Parkway Avenue to provide for parallel parking along the west side of the street. Along the property's approximately 230-foot frontage along Parkway Avenue the applicant shall hydro-blast the existing travel lane striping and install striping for an 8-foot wide parallel parking lane on the west side (4" white line), 6-foot bike lane (8" white line), a bike lane symbol and 14-foot travel lane (double yellow 4" yellow lines).  At the same time the City would like to restripe Parkway Avenue to Holly Lane and finds it useful and economical to have the applicant perform the work and the City to reimburse the applicant for the costs to hydro-blast the existing striping on Parkway Avenue from the south property lane to Holly Lane, install the east side bike lane striping, bike symbol and all striping south of the property line to Holly Lane.  Striping work shall be done in coordination with the City of Wilsonville Engineering. City will be responsible for providing a simple plan set for the restriping for applicant's use (see Exhibit C2).
<p>See Finding A22.</p>	
<b>PDA 10.</b>	The applicant shall close their access at the south driveway by constructing a concrete traffic separator (detail RD-1070).
<p><b>Request B: DB16-0038 Class 3 Sign Permit</b></p>	
<b>PDB 1.</b>	Prior to sign installation the applicant shall submit for a Class I Sign Permit for approval by the Planning Division to ensure proposed signs match the area allowed and placement and other aspects of the sign design approved by the Development Review Board.
<b>PDB 2.</b>	Directional signs, including those held by bear statues, shall not exceed 6 square feet or 4 feet in height. There shall not be more than 1 sign per intersection corner with no more than 2 signs per intersection.
<p><i>The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City's Community Development Department or Tualatin Valley Fire and Rescue, all of which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision</i></p>	

*clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.*

### **Engineering Division Conditions:**

#### All Requests

<b>PF 1.</b>	Public Works Plans and Public Improvements shall conform to the "Public Works Plan Submittal Requirements and Other Engineering Requirements" in Exhibit C1.
<b>PF 2.</b>	The north driveway entrance (shared with the adjacent fueling station) lacks the typical concrete driveway separating public right-of-way from private drive aisles. To aid in the demarcation between public and private asphalt and reinforce the law requiring drivers to stop before entering public right-of-way the applicant shall install, at a minimum, a 30" x 30" Stop Sign (conforming to MUTCD requirements) and a 12" wide, 12-ft long white stop bar.

### **Building Division Conditions:**

#### **BD 1. Accessible Parking:**

While the accessible parking and access as shown on the submitted drawings may prove to be acceptable, it is impossible to confirm code compliance with the limited information available at this time. Accessible parking and accessible access will be reviewed as part of the building permit plan review. The additional information available at plan review may require changes to the number and location of accessible parking spaces shown on these preliminary plans.

## **Master Exhibit List:**

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list that includes exhibits for Planning Case File DB16-037 through DB16-0038.

### Planning Staff Materials

- A1.** Staff report and findings (this document)
- A2.** Staff's Presentation Slides for Public Hearing (to be presented at Public Hearing)

### Materials from Applicant

- B1.** Applicant's Plan Set
  - A001 Title Sheet
  - A101 Site Plan
  - A201 Floor Plan
  - A241 Roof Plan
  - A301 Exterior Elevations
  - A302 Exterior Elevations
  - A401 Exterior Perspectives
  - A402 Exterior Perspectives
  - E101 Electrical Site Plan
  - E102 Electrical Site Illumination Plan
  - L10 Landscape Planting Plan
- B2.** DKS Transportation Impact Analysis

### Development Review Team Correspondence and Engineering Staff Materials

#### Engineering Division

- C1.** Public Works Plan Submittal Requirements and Other Engineering Requirements
- C2.** Parkway Avenue striping plan

### Public Comments

- D1.** Comments in support of application from Gayle Johnston

## **Background Information and Procedural Statements:**

1. The statutory 120-day time limit applies to this application. The application was received on July 28, 2016. On August 2, 2016 staff conducted a completeness review within the statutorily allowed 30-day review period and found the application to be complete. The City must render a final decision for the request, including any appeals, by November 30, 2016.
2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	PDC	Convenience Store and Fuel Station
East:	PDC	Parkway Avenue/Commercial Office
South:	PDC	Motel
West:	--	Interstate 5

3. Previous Planning Approvals:  
73RZ1 Zone Change and Addition to Kopper Kitchen  
76V01 Variance for New Kopper Kitchen Sign  
86DR06 Kopper Kitchen Remodel and Expansion  
86SR05 Kopper Kitchen Sign  
95AR07 Sign Copy and Exterior Color Change (Conversion to Denny's)  
SR16-0021 Replace Freestanding Denny's Sign with Black Bear Diner Sign
4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

## **Findings:**

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

### **General Procedural Findings**

#### **Application Procedures-In General**

Section 4.008

The application is being processed in accordance with the applicable general procedures of this Section.

#### **Authority to Initiate Application**

Section 4.009

As required by this section, the property owner, Michael Rose, signed the application.

#### **Pre-Application Conference Required**

Subsection 4.010 (.02)

A pre-application conference was held (PA15-0021) in accordance with this subsection.

#### **Lien Payment before Approval**

Subsection 4.011 (.02) B.

No applicable liens exist for the subject property that would prevent approval. The application can thus move forward.

#### **General Submission Requirements**

Subsection 4.035 (.04) A.

The applicant has provided all of the applicable general submission requirements contained in this subsection.

#### **Zoning-Generally**

Section 4.110

This proposed development is in conformity with the applicable zoning district and general development regulations listed in Sections 4.150 through 4.199 have been applied in accordance with this Section.

## **Request A: DB16-0037 Site Design Review**

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

### **Objectives of Site Design Review**

#### **Proper Functioning of the Site**

Subsection 4.400 (.02) A. and Subsection 4.421 (.03)

- A1.** The site has been professionally designed with significant thought on to make the site functional and safe with existing constraints. Through drive ability and pedestrian circulation and additional pavement markings have increased site function and safety.

#### **High Quality Visual Environment**

Subsection 4.400 (.02) A. and Subsection 4.421 (.03)

- A2.** Professional landscaping and a professional, site specific building and site design using long lasting materials supports a high quality visual environment, adding value and interest to a site presently in disrepair.

#### **Encourage Originality, Flexibility, and Innovation**

Subsection 4.400 (.02) B. and Subsection 4.421 (.03)

- A3.** The proposed improvements enhance the existing building and site with details and features reflecting the new tenant.

#### **Discourage Inharmonious Development**

Subsection 4.400 (.02) C. and Subsection 4.421 (.03)

- A4.** As indicated in Finding A2 above the professional unique design of the landscaping, building, and site support a high quality visual environment and thus prevent monotonous, drab, unsightly, dreary development. Use of long last materials and architecture with detailing as well as new landscaping will make the site more harmonious with adjacent and nearby development.

#### **Proper Site Relationships**

Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- A5.** A professional site specific design, including signs, has been developed that carefully considers the relationship of structures and other improvements to the site.

#### **Proper Relationships with Surroundings**

Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- A6.** Use of long last materials and architecture with detailing as well as new landscaping will make the site more harmonious with adjacent and nearby development.

**Regard to Natural Aesthetics**

Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- A7.** The additional landscaping will enhance the natural aesthetic of the existing site.

**Attention to Exterior Appearances**

Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- A8.** A professional site and tenant specific design has been developed demonstrating proper attention has been given to the appearance of structures and other improvements, including signs.

**Protect and Enhance City's Appeal**

Subsection 4.400 (.02) E. and Subsection 4.421 (.03)

- A9.** Upgrading the architecture of the existing building and site landscaping and filling a vacant building at a visible location along Interstate 5 will enhance the City's appeal.

**Stabilize Property Values/Prevent Blight**

Subsection 4.400 (.02) F. and Subsection 4.421 (.03)

- A10.** Upgrading the architecture of the existing building and site landscaping and filling a vacant building at a visible location along Interstate 5 will help stabilize an older area and prevent it from being blighted.

**Adequate Public Facilities**

Subsection 4.400 (.02) G. and Subsection 4.421 (.03)

- A11.** Adequate facilities exist for the previous and proposed restaurant use.

**Pleasing Environments and Behavior**

Subsection 4.400 (.02) H. and Subsection 4.421 (.03)

- A12.** Upgrading the architecture of the existing building and site landscaping and filling a vacant building at a visible location along Interstate 5 will create a more pleasing environment than currently exists.

**Civic Pride and Community Spirit**

Subsection 4.400 (.02) I. and Subsection 4.421 (.03)

- A13.** Upgrading the architecture of the existing building and site landscaping and filling a vacant restaurant building at a visible location along Interstate 5 will create an additional gathering place that contributes to civic pride and community spirit.

**Favorable Environment for Residents**

Subsection 4.400 (.02) J. and Subsection 4.421 (.03)

- A14.** Upgrading the architecture of the existing building and site landscaping and filling a vacant restaurant building at a visible location along Interstate 5 will create a more favorable environment for residents.

## **Jurisdiction and Power of the DRB for Site Design Review**

Development Must Follow DRB Approved Plans  
Section 4.420

- A15.** These criteria will be satisfied by Condition of Approval PDA 1 ensuring construction, site development, and landscaping are carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No building permits will be granted prior to development review board approval. No variances are requested from site development requirements.

## **Design Standards**

Preservation of Landscaping, Limiting Grading  
Subsection 4.421 (.01) A.

- A16.** The only impacted landscaping are existing developed landscape areas. No natural landscape areas exist on the site. No grading is proposed.

Harmony of Proposed Buildings to Environment  
Subsection 4.421 (.01) B.

- A17.** The proposal is for the enhancement and redevelopment of an existing site substantially maintaining the same relationship with the environment.

Special Attention to Drives, Parking, and Circulation- Access Points  
Subsection 4.421 (.01) C.

- A18.** The only change of access is a recommendation and option to close the southern property access to increase the amount of parking on site and on the adjacent street.

Special Attention to Drives, Parking, and Circulation- Interior Circulation  
Subsection 4.421 (.01) C.

- A19.** Circulation has been restrained by a taking of land on the west side of the property for the most recent improvements to the adjacent I-5 off ramp. Following recommendations of the traffic engineer the pavement area is being striped to enable better circulation.

Special Attention to Drives, Parking, and Circulation- Pedestrian and Vehicle Separation  
Subsection 4.421 (.01) C.

- A20.** Pedestrian and vehicle circulation has been separated to the extent feasible.

**Special Attention to Drives, Parking, and Circulation- Safe and Convenient Parking Areas**

Subsection 4.421 (.01) C.

- A21.** The parking area is designed to be safe, even so that parking count was reduced to increase safety over the current parking lot configuration. While the existing parking area can continue as a non-conforming site condition, Condition of Approval PDA 9 requires the applicant to restripe Parkway Avenue to provide additional convenient maximizing the use of available nearby pavement. Similarly, Condition of Approval PDA 10 requires the closure of the south driveway access and striping of additional parking spaces. All of the additional parking is reuse of existing pavement on the site and adjacent street.

**Special Attention to Drives, Parking, and Circulation- Parking Detracting from Design**

Subsection 4.421 (.01) C.

- A22.** Remaining in the same areas as previously approved, the parking does not distract from the design of the remodeled building.

**Special Attention to Surface Water Drainage**

Subsection 4.421 (.01) D.

- A23.** The drainage will be consistent with previous approvals.

**Harmonious Above Ground Utility Installations**

Subsection 4.421 (.01) E.

- A24.** No above ground utility installations are proposed.

**Indication of Sewage Disposal**

Subsection 4.421 (.01) E.

- A25.** Sewage disposal will be consistent with previous approvals.

**Advertising Features Do Not Detract**

Subsection 4.421 (.01) F.

- A26.** The applicant has provided sufficient information on signs, and a sign permit is being reviewed concurrently with this request. See Request B.

**Screening and Buffering of Special Features**

Subsection 4.421 (.01) G.

- A27.** No additional screening is required for any of the listed special features.

**Design Standards Apply to All Buildings, Structures, Signs, and Features**

Subsection 4.421 (.02)

- A28.** Design standards have been applied to all buildings, structures, and other site features.

Conditions of Approval to Ensure Proper and Efficient Function  
Subsection 4.421 (.05)

**A29.** No additional conditions of approval are recommended to ensure the proper and efficient functioning of the development.

Color or Materials Requirements  
Subsection 4.421 (.06)

**A30.** No specific paints or colors are being required.

### **Standards for Mixed Solid Waste and Recycling Areas**

Mixed Solid Waste and Recycling Areas  
Subsections 4.430 (.02)-(.04)

**A31.** The mixed solid waste and recycling area are kept the same as established for the existing use.

### **Site Design Review Submission Requirements**

Submission Requirements  
Section 4.440

**A32.** The applicant has provided a site plan drawn to scale, architectural drawings and sketches, color and material information, and a detailed landscape plan.

### **Time Limit on Site Design Review Approvals**

Void after 2 Years  
Section 4.442

**A33.** The Applicant has indicated that they will pursue development within two (2) years and it is understood that the approval will expire after 2 years if a building permit hasn't been issued unless an extension has been granted by the board.

### **Installation of Landscaping**

Landscape Installation or Bonding  
Subsection 4.450 (.01)

**A34.** Condition of Approval PDA 2 will assure installation or appropriate security.

Approved Landscape Plan Binding  
Subsection 4.450 (.02)

**A35.** Condition of Approval PDA 3 provides ongoing assurance approved landscaping is installed and maintained.

**Landscape Maintenance and Watering**  
Subsection 4.450 (.03)

**A36.** Condition of Approval PDA 4 will ensure landscaping is continually maintained in a substantially similar manner as originally approved by the Board.

**Limitation to Modifications of Landscaping**  
Subsection 4.450 (.04)

**A37.** Condition of Approval PDA 4 provides ongoing assurance that this criterion is met by preventing modification or removal without the appropriate City review.

**Landscaping**

**Intent and Required Materials**  
Subsections 4.176 (.02) C. through I.

**A38.** The applicant proposes an enhanced landscape meeting the applicant intent.

**Shrubs and Groundcover Materials Requirements**  
Subsection 4.176 (.06) A.

**A39.** Condition of Approval PDA 5 requires that the detailed requirements of this subsection are met.

**Plant Materials Requirements-Trees**  
Subsection 4.176 (.06) B.

**A40.** The plants material requirements for trees will be met as follows:

- Condition of Approval PDA 6 requires all trees to be B&B (Balled and Burlapped)
- Condition of Approval PDA 6 requires all plant materials to conform in size and grade to "American Standard for Nursery Stock" current edition."
- The applicant's planting plan lists tree sizes meeting requirements.

**Plant Species Requirements**  
Subsection 4.176 (.06) E.

**A41.** The applicant has provided sufficient information in their landscape plan (sheet L1.0) showing the proposed landscape design meets the standards of this subsection related to use of native vegetation and prohibited plant materials.

**Landscape Installation and Maintenance Standards**  
Subsection 4.176 (.07)

**A42.** The installation and maintenance standards are met or will be met by Condition of Approval PDA 7 as follows:

- Plant materials are required to be installed to current industry standards and be properly staked to ensure survival
- Plants that die are required to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City.

- Notes on the applicant's sheet L1.0 provides for an irrigation system.

**Landscape Plan Requirements**  
Subsection 4.176 (.09)

**A43.** Applicant's sheet L1.0 in Exhibit B1 shows all existing and proposed landscape areas. The plans are drawn to scale and show the type, installation size, number and placement of materials. Plans include a plant material list. Plants are identified by both their scientific and common names.

**Completion of Landscaping**  
Subsection 4.176 (.10)

**A44.** The applicant has not requested to defer installation of plant materials and landscaping is required to be installed prior to occupancy.

**Non-Conforming Site Conditions**

**Continuity of Use Allowed**  
Subsection 4.191 (.01)

**A45.** Though it has some non-conforming site conditions, the site will continue to be used as a sit-down restaurant as it has been for many years predating the incorporation of the City of Wilsonville.

**Abandonment of a Non-Conforming Site Requires Conformity or Variance.**  
Subsection 4.191 (.02)

**A46.** The property has not been abandoned for more than 18 months. The previous restaurant closed July 2015. The applicant is actively working on remodeling the building for reopening. The site is thus able to continue to be used with the existing non-conforming conditions.

**Normal Maintenance Permitted for Non-Conforming Site Conditions**  
Subsection 4.191 (.03)

**A47.** Much of the changes to the site are normal maintenance. Restriping the paved areas to ensure all parking spaces meet City dimensional standards, ensure circulation areas are adequate, and maximize parking are considered normal maintenance.

**Trigger for Conforming to Site Improvement Standards**  
Subsection 4.191 (.04)

**A48.** The project continues as a sit down restaurant, no change of occupancy is required. The subject discretionary review does not have a nexus to requiring additional parking as the use continues to be the same, just under a different brand/concept. No triggers for bringing the site into conformity exist.

Expansion of Structure with Non-Conforming Site Conditions  
Subsection 4.191 (.04)

**A49.** No expansion is proposed which would be expansion or enlargement in relation to parking demand or other non-conforming site conditions. However, the applicant is working with the City to ensure the circulation is safe and parking is maximized using available area on the site and the adjacent street.

### **Outdoor Lighting-Generally**

Applicability of Outdoor Lighting Standards  
Sections 4.199.20 and 4.199.60

**A50.** Proposed is a new exterior lighting system for a commercial project. The outdoor lighting standards thus apply.

Outdoor Lighting Zones  
Section 4.199.30

**A51.** The subject property is within LZ2.

Optional Lighting Compliance Methods  
Subsection 4.199.40 (.01) A.

**A52.** As the criteria are clear and objective, staff is able to review the final design at the time of building permit through the Class I Administrative Review process as required by Condition of Approval PDA 8.

## **Request B: DB16-0038 Class 3 Sign Permit**

### **Sign Review and Submission**

Review Process  
Subsection 4.031 (.01) M. and Subsection 4.156.02 (.03)

**B1.** The application qualifies as a Class III Sign Permit and is being reviewed by the Development Review Board.

Qualifications to be processed as a Class III Sign Permit  
Subsection 4.156.02 (.06)

**B2.** The proposal is associated with new architecture review requiring DRB review and does not require a Master Sign Plan as it involves a single tenant. The request thus qualifies as a Class III Sign Permit.

**Class III Sign Permit Submission Requirements**  
 Subsection 4.156.02 (.06) A.

**B3.** As indicated in the table below the Applicant has satisfied the submission requirements:

Requirement	Submitted	Waiver Granted	Condition of Approval	Not Applicable	Additional findings/not es
		Info Available to	Info Necessary for		
<b>Completed Application Form</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Sign Drawings or Descriptions</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Documentation of Building/Tenant Space Lengths</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Drawings of Sign Placement of Building Facades</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Project Narrative</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Information on Any Requested Waivers or Variances</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Class III Sign Permit Review Criteria**

**Class II Sign Permit Review Criteria: Generally and Site Design Review**  
 Subsection 4.156.02 (.05) E.

**B4.** As indicated in Findings B12 through B35 the proposed signs satisfy the sign regulations for the applicable zoning district and the Site Design Review Criteria in Sections 4.400 through 4.421.

**Class II Sign Permit Review Criteria: Compatibility with Zone & Surrounding Development**  
 Subsection 4.156.02 (.05) E. 1.

**B5.** The proposed signage is typical of and compatible with development within the PDC zone. This includes a design and colors reflecting corporate identity, illuminated channel

letters and logo, the placement of the sign in a recognizable sign band, and proportionality to the building facades. No evidence exists nor has testimony been received that the subject signs would detract from the visual appearance of the surrounding development.

**Class II Sign Permit Review Criteria: Nuisance and Impact on Surrounding Properties**

Subsection 4.156.02 (.05) E. 2.

- B6.** There is no evidence and no testimony has been received that the subject signs would create a nuisance or negatively impact the value of surrounding properties.

**Class II Sign Permit Review Criteria: Items for Special Attention**

Subsection 4.156.02 (.05) E. 3.

- B7.** Special attention has been paid to the interface between signs and other site elements including building architecture and landscaping, including trees. The building signs are within architectural features identifiable as a sign band with a buffer within the sign band around the sign, which demonstrates consideration of the interface between the signs and building architecture. No sign-tree conflicts have been noted.

**Sign Measurement**

**Measurement of Cabinet Signs and Similar**

Subsection 4.156.03 (.01) A.

- B8.** Final sign design will be measured by calculating area for signs enclosed by cabinet or frame.

**Measurement of Individual Element Signs**

Subsection 4.156.03 (.01) B.

- B9.** Final building sign design will be calculated by measuring individual letters and bear figures using up to three squares, rectangles , circles, or triangles drawn around all sign elements.

**Measurement of Sign Height Above Ground**

Subsection 4.156.03 (.02) A.

- B10.** Final sign height of the directional signs will be calculated by measuring the distance between the average grade directly below the sign to the highest point of the sign.

**Measurement of Sign Height and Length**

Subsection 4.156.03 (.03) A.-B.

- B11.** Sign height will be calculated by measuring the vertical distance between the lowest and highest points of the sign and length will be calculated by measuring the horizontal distance between the furthest left and right points of the sign.”

## **Freestanding and Ground Mounted Signs in the PDC, PDI, and PF Zones**

### **General Allowance**

Subsection 4.156.08 (.01) A.

- B12.** No additional freestanding signs are proposed. The applicant is using an existing freestanding sign along I-5, a permit for which the City previously issued through an administrative approval.

## **Building Signs in the PDC, PDI, and PF Zones**

### **Establishing whether Building Facades are Eligible for Signs**

Subsection 4.156.08 (.02) A.

- B13.** The North and East facades are sign eligible while the south and west are not as follows:

Façade	Sign Eligible	Criteria making sign eligible
North	Yes	Entrance open to general public, adjacent to primary parking area.
East	Yes	Adjacent to primary parking area
South	No	
West	No	

### **Building Sign Area Allowed**

Subsection 4.156.08 (.02) B.

- B14.** The proposed sign area is within the allowance for each sign eligible façade as follows

Façade	Linear Length	Sign Area Allowed
North	Approx. 84 feet	48 sf
East	Approx. 105 feet	60 sf

### **Calculating Linear Length to Determine Sign Area Allowed.**

Subsection 4.156.08 (.02) B. 6.

- B15.** As a roughly rectangular existing building with a single tenant the north and east building lines have been measured to determine the allowed sign area.

### **Building Sign Length Not to Exceed 75% of Façade Length**

Subsection 4.156.08 (.02) C.

- B16.** None of the facades have signs exceeding seventy-five (75) percent of the length of the façade.

### **Building Sign Height Allowed**

Subsection 4.156.08 (.02) D.

- B17.** All of the proposed building signs are within a definable architectural feature and have a definable space between the sign and the top and bottom of the architectural feature.

### **Building Sign Types Allowed**

Subsection 4.156.08 (.02) E.

- B18.** All the proposed buildings signs are wall flat, which is an allowable type.

### **Additional Signs: Directional Signs**

Subsection 4.156.08 (.03) A.

- B19.** Directional signs, including those being held by bear statues are proposed. Condition of Approval PDB 2 ensures the signs do not exceed 6 square feet or 4 feet in height and that no more than 1 sign is placed per intersection corner with no more than 2 signs per intersection.

## **Site Design Review**

### **Excessive Uniformity, Inappropriateness of Design, Etc.**

Subsections 4.400 (.01) and 4.421 (.03)

- B20.** *Excessive Uniformity:* A variety of signs are proposed which do not create excessive uniformity.

*Inappropriate or Poor Design of Signs:* Signs are typical of the type of development proposed found to be appropriate throughout the City.

*Lack of Proper Attention to Site Development:* The appropriate professional services have been used to design the site in relation to signs

*Lack of Proper Attention to Landscaping:* No landscaping is impacted.

## **Objectives of Site Design Review**

### **Proper Functioning of the Site**

Subsection 4.400 (.02) A. and Subsection 4.421 (.03)

- B21.** The signs are placed to be visible from public areas including the primary parking areas and the street thus assuring proper function to identify the tenant.

### **High Quality Visual Environment**

Subsection 4.400 (.02) A. and Subsection 4.421 (.03)

- B22.** The sign standards ensure signs are designed to be the appropriate scale and placement and of a high quality construction to maintain a high quality visual environment.

**Encourage Originality, Flexibility, and Innovation**  
Subsection 4.400 (.02) B. and Subsection 4.421 (.03)

- B23.** The proposed sign package allows flexibility for a new tenant of the existing building consistent with this objective.

**Discourage Inharmonious Development**  
Subsection 4.400 (.02) C. and Subsection 4.421 (.03)

- B24.** By being compatible with surrounding development and the proposed architecture of the building the sign will be appropriate and harmonious with surrounding development.

**Proper Site Relationships**  
Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- B25.** By meeting standards of the City's sign code placement and design of signs will be properly related to the revised site and building design.

**Proper Relationships with Surroundings**  
Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- B26.** By meeting standards of the City's sign code placement and design of signs will be properly related to surrounding sites and development.

**Regard to Natural Aesthetics**  
Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- B27.** The proposed sign package does not impact natural terrain or landscaping.

**Attention to Exterior Appearances**  
Subsection 4.400 (.02) D. and Subsection 4.421 (.03)

- B28.** A professional design of the building architecture and signs as well as review by staff has assured proper attention for the exterior appearance of the proposed sign package.

**Protect and Enhance City's Appeal**  
Subsection 4.400 (.02) E. and Subsection 4.421 (.03)

- B29.** The proposed sign package meeting the City's sign standards is an appropriate overall design of the building enhancing its appeal.

**Stabilize Property Values/Prevent Blight**  
Subsection 4.400 (.02) F. and Subsection 4.421 (.03)

- B30.** Upgrading the architecture of the existing building, including the proposed sign package, will help stabilize an older area and prevent it from being blighted.

**Pleasing Environments and Behavior**

Subsection 4.400 (.02) H. and Subsection 4.421 (.03)

- B31.** Upgrading the architecture of the existing building, including the building signs, will create a more pleasing environment than currently exists.

**Civic Pride and Community Spirit**

Subsection 4.400 (.02) I. and Subsection 4.421 (.03)

- B32.** Upgrading the architecture of the existing building, including the building signs, will support the creation an additional gathering place that contributes to civic pride and community spirit.

**Favorable Environment for Residents**

Subsection 4.400 (.02) J. and Subsection 4.421 (.03)

- B33.** Upgrading the architecture of the existing building, including building signs, will create a more favorable environment for residents.

**Applicability of Design Standards to Signs**

Subsection 4.421 (.02)

- B34.** Design standards have been applied to exterior signs, as applicable, see Finding B34 above.

**Conditions of Approval to Ensure Proper Site Function**

Subsection 4.421 (.05)

- B35.** No additional conditions of approval are recommended to ensure the proper and efficient functioning of the development in relation to signs.

**Color or Materials Requirements**

Subsection 4.421 (.06)

- B36.** Staff does not recommend any additional requirements for materials or colors for the proposed signs.

**Site Design Review-Procedures**

Section 4.440

- B37.** The applicant has submitted a sign plan as required by this section.

# Black Bear Diner

## Transportation Impact Study

Prepared for



 City of Wilsonville  
EXHIBIT B2 DB16-0037 et seq

Prepared by  
**DKS**  
July 2016

## TABLE OF CONTENTS

---

<b>LIST OF FIGURES.....</b>	<b>ii</b>
<b>LIST OF TABLES .....</b>	<b>ii</b>
<b>CHAPTER 1: INTRODUCTION AND SUMMARY .....</b>	<b>1</b>
Existing Intersection Operations .....	2
Proposed Project Site .....	2
Trip Generation .....	2
Project Traffic Impact .....	3
Project Impact Summary .....	3
<b>CHAPTER 2: EXISTING CONDITIONS .....</b>	<b>5</b>
Study Area Roadway Network .....	5
Pedestrian and Bicycle Facilities .....	5
Future Planned Projects .....	5
Existing Traffic Volumes and Operations.....	6
Collision Analysis .....	8
Public Transit Service.....	8
<b>CHAPTER 3: PROJECT IMPACTS .....</b>	<b>9</b>
Project Site .....	9
Trip Generation .....	9
Trip Distribution .....	9
Future Traffic Volumes and Operating Conditions .....	10
Intersection Operations.....	12
Site Plan Evaluation .....	13
Project Impact Summary .....	16

## APPENDIX

## LIST OF FIGURES

---

Figure 1: Study Area .....	1
Figure 2: Existing PM Peak Hour Traffic Volumes.....	6
Figure 3: Trip Distribution and PM Peak Hour Project Volumes .....	10
Figure 4: Existing plus Project PM Peak Hour Traffic Volumes .....	11
Figure 5: Existing plus Stage II (plus Project) PM Peak Hour Traffic Volumes.....	12

## LIST OF TABLES

---

Table 1: Key Study Area and Proposed Development Characteristics .....	1
Table 2: Existing Study Intersection Operations.....	2
Table 3: Trip Generation Summary for Proposed Black Bear Diner .....	3
Table 4: Future Project and Stage II Intersection Operations Comparison .....	3
Table 5: Study Area Roadway Characteristics .....	5
Table 6: Existing Study Intersection Operations.....	7
Table 7: Collision History at Study Intersections .....	8
Table 8: Trip Generation Summary for Proposed Black Bear Diner .....	9
Table 9: Future Project and Stage II Intersection Operations Comparison .....	12
Table 10: Vehicular Parking Requirements .....	15
Table 11: Bicycle Parking Requirements .....	16

## CHAPTER 1: INTRODUCTION AND SUMMARY

This study evaluates the transportation impacts associated with the proposed Black Bear Diner that would occupy the existing vacant building (previously a Denny's sit down restaurant) located at 30175 SW Parkway Avenue on the southwest corner of the Main Street/Parkway Avenue intersection in Wilsonville, Oregon. The purpose of this transportation impact analysis is to identify potential mitigation measures needed to offset transportation impacts that the proposed restaurant would have on the nearby transportation network. While the building has been used as a restaurant for approximately the past 40 years, no known previous traffic study was ever done for this site. The impact analysis is focused on two study intersections, Wilsonville Road/Town Center Loop West and Main Street/Town Center Loop West, which were selected for evaluation in coordination with City staff and the project sponsor are shown in Figure 1.



**Figure 1: Study Area**

This chapter provides an introduction to the proposed development and the steps taken to analyze the associated impacts on the transportation network. It highlights important elements of the remaining chapters, including a description of the project and the findings of the transportation analysis. Table 1 lists important characteristics of the study area and proposed project.

**Table 1: Key Study Area and Proposed Development Characteristics**

Characteristics	Information
<b>Study Area</b>	
Number of Study Intersections	2
Analysis Period	Weekday p.m. peak hour (Peak hour between 4-6 p.m.)
<b>Project Site</b>	
Existing Land Use	Vacant Building (previously Denny's)
Proposed Development	Black Bear Diner (approx. 7,900 square feet of usable restaurant space)
Project Access	Existing intersection of Main Street/Parkway Avenue and existing driveway off Parkway Avenue

## Existing Intersection Operations

Existing traffic operations at the study intersection were determined for the p.m. peak hour based on the 2000 Highway Capacity Manual methodology for signalized intersections<sup>1</sup> and 2010 Highway Capacity Manual<sup>2</sup> for unsignalized intersections. The results were then compared with the City of Wilsonville's minimum acceptable level of service (LOS) operating standard. Table 2 lists the estimated delay, LOS , and v/c ratio of each study intersection. The existing study intersections currently meet operating standards.

**Table 2: Existing Study Intersection Operations**

<b>Intersection (<i>Traffic Control</i>)</b>	<b>Operating Standard</b>	<b>Existing</b>		
		<i>Delay</i>	<i>LOS</i>	<i>v/c</i>
Wilsonville Road/Town Center Loop West ( <i>Signalized</i> )	LOS D	38.3	D	0.69
Main Street/Town Center Loop West ( <i>All-Way Stop</i> )	LOS D	13.3	A/B	0.43
<u>Signalized Intersections:</u>		<u>Unsignalized Intersections:</u>		
Delay = Average Intersection Delay (sec.)		Delay = Critical Movement approach Delay (sec.)		
LOS = Level of Service of Intersection		LOS = Level of Service of Major/Minor Street		
v/c = Volume-to-Capacity Ratio of Intersection		v/c = Volume-to-Capacity Ratio of Intersection		

## Proposed Project Site

The proposed Black Bear Diner will occupy the existing vacant building located on the southwest corner of the Main Street/Parkway Avenue intersection. The first floor of the existing building is approximately 7,900 square feet and the second floor is approximately 2,900 square feet. However, the project sponsor has agreed not to use the second floor; therefore it was not included in the trip generation estimates.<sup>3</sup>

## Trip Generation

Trip generation is the method used to estimate the number of vehicles a development adds to site driveways and the adjacent roadway network during a specified period (i.e., such as the a.m. and p.m. peak hour). Trip generation estimates are performed using trip rates surveyed at similar land uses, as provided by the Institute of Transportation Engineers (ITE).<sup>4</sup>

The project site is estimated to generate 1,004 average daily trips including 78 (47 in, 31 out) in the p.m. peak hour. These trips were distributed and added to the roadway network for the future operations analysis to determine whether the site would impact the study intersections. Table 3 on the following page lists the p.m. peak hour vehicle trip generation estimates for the proposed Black Bear Diner.

<sup>1</sup> 2000 Highway Capacity Manual, Transportation Research Board, Washington DC, 2000.

<sup>2</sup> 2010 Highway Capacity Manual, Transportation Research Board, Washington DC, 2010.

<sup>3</sup> Email conversation with Steve Adams, City of Wilsonville, June 29, 2016.

<sup>4</sup> Trip Generation, 9<sup>th</sup> Edition, Institute of Transportation Engineers, 2012.

**Table 3: Trip Generation Summary for Proposed Black Bear Diner**

Land Use (ITE Code)	KSF <sup>a</sup>	Trip Generation Rate <sup>b</sup>	P.M. Peak Hour Trips			Daily Trips
			In	Out	Total	
High-Turnover (Sit-Down) Restaurant (932)	7.9	9.85 per KSF	47	31	78	1,004

<sup>a</sup> KSF = 1,000 Square Feet<sup>b</sup> The project trip generation estimates were based on ITE average trip rate.

## Project Traffic Impact

The impact analysis included trip generation, trip distribution, p.m. peak hour project trips through the I-5/Wilsonville Road interchange area, and future traffic operating conditions at the study intersections. The analysis also included scenarios that account for Stage II approved developments in the area, including those under construction or built but not yet occupied. The scenarios include:

- Existing + Project
- Existing + Stage II (includes traffic from other developments that have Stage II approval or are under construction)
- Existing + Project + Stage II

The study intersection operating conditions for the three future scenarios are listed in Table 4. Both study intersections meet the City's operating standards. Therefore, the development does not require off-site mitigations to the study area transportation network.

**Table 4: Future Project and Stage II Intersection Operations Comparison**

Intersection ( <i>Traffic Control</i> )	Operating Standard	Existing + Project			Existing + Stage II			Existing + Stage II + Project		
		Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c
Wilsonville Road/Town Center Loop West ( <i>Signalized</i> )	LOS D	40.0	D	0.73	39.9	D	0.72	41.8	0.76	D
Main Street/Town Center Loop West ( <i>All-Way Stop</i> )	LOS D	14.8	A/B	0.50	13.7	A/B	0.44	15.2	B/C	0.50
<u>Signalized Intersections:</u>		<u>Unsignalized Intersections:</u>								
Delay = Average Intersection Delay (sec.)		Delay = Critical Movement approach Delay (sec.)								
LOS = Level of Service of Intersection		LOS = Level of Service of Major/Minor Street								
v/c = Volume-to-Capacity Ratio of Intersection		v/c = Volume-to-Capacity Ratio of Intersection								

## Project Impact Summary

The proposed Black Bear Diner to occupy the existing vacant building (previously a Denny's Restaurant) located on the southwest corner of the Main Street/Parkway Avenue intersection is anticipated to result in the following impacts:

### Trip Generation

- The project site is estimated to generate 1,004 average daily trips including 78 (47 in, 31 out) in the p.m. peak hour.

- Of the 78 total project trips, 71 new p.m. peak hour trips are estimated to pass through the I-5/Wilsonville Road interchange area.

### **Study Intersection Operations**

- The Wilsonville Road/Town Center Loop West and Main Street/Town Center Loop West intersections are anticipated to meet the City's mobility standard with an LOS of D or better for all scenarios.

### **Site Circulation and Safety**

- The unmarked shared area at the Main Street/Parkway Avenue intersection between the project site and 76 Station may cause confusion between entering, parking, and exiting vehicles. It is recommended that a stop sign on the west leg of the intersection (exit of driveway) is implemented to clarify the traffic control.
- Sufficient aisle width between the parking stalls for two-way motor vehicle movement is provided on the north and east side of the building; however, parking along the west side of the building should be coordinated with Tualatin Valley Fire and Rescue to assure it meets fire code requirements.
- Parking conflicts with loading zones on the south end of the project site should be reconfigured.
- Prior to occupancy, sight distance at existing access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

### **Vehicle and Bicycle Parking**

- The existing site does not meet the City of Wilsonville parking requirement for vehicles or for bicycles. The minimum required parking stalls for vehicles is 121 spaces with three ADA spaces. Presently the site has 60 marked parking stalls, 4 of which are ADA spaces. The minimum required bicycle parking spaces is two. A parking management plan will need to be provided by the project sponsor prior to approval that shows how the restaurant will provide adequate parking for the intended use.
- Several parking spaces near the south end of the site conflict with each other and with potential loading and unloading activities of the project site. It is recommended that all conflicting parking is removed prior to occupancy.
- The existing ADA parking spaces on the east side of the building share an access aisle while the existing ADA parking spaces to the north of the site do not have an access aisle and are not adjacent to any building entrance. It is recommended that the project sponsor work with the City to update the ADA parking spaces to meet current ADA parking requirements.

### **Frontage Improvements**

- The existing project site does not have bicycle or pedestrian facilities that connect with the adjacent sidewalks or bicycle network. Additionally, there are no existing sidewalks along the west side of Parkway Avenue. The project sponsor should coordinate with the City to determine necessary pedestrian improvements to Parkway Avenue if any.

## CHAPTER 2: EXISTING CONDITIONS

This chapter provides documentation of existing study area conditions, including the study area roadway network, pedestrian and bicycle facilities, and existing traffic volumes and operations. Supporting details are provided in the appendix.

### Study Area Roadway Network

A Black Bear Diner is proposed to occupy the vacant building (previously a Denny's Restaurant) located at 30175 SW Parkway Avenue on the southwest corner of the Main Street/Parkway Avenue intersection in Wilsonville, Oregon. Key roadways in the study area are summarized in Table 5 along with their existing roadway characteristics. The functional classifications for City of Wilsonville streets are provided in the *City of Wilsonville Transportation System Plan (TSP)*.<sup>5</sup>

**Table 5: Study Area Roadway Characteristics**

Roadway	Classification	Number of Lanes	Posted Speed	Sidewalks	Bike Lanes	On-Street Parking
Wilsonville Road	Major Arterial	4	25	Yes	Yes	No
Town Center Loop West <sup>a</sup>	Major Arterial/Local	2	35	Yes	Yes	No <sup>b</sup>
Main Street	Local Street	2	25	Yes	Yes	No
Parkway Avenue	Local Street	2	30	Partial <sup>c</sup>	No	No

<sup>a</sup> Town Center Loop West is classified as a Major Arterial north of Wilsonville Road and as a Local Street south of Wilsonville Road

<sup>b</sup> On-Street parking is allowed south of Main Street/Town Center Loop West

<sup>c</sup> Sidewalks on east side of Parkway Avenue near Main Street

### Pedestrian and Bicycle Facilities

Bicycle and pedestrian facilities along Main Street, Town Center Loop West, and Wilsonville Road include six foot sidewalks and six foot bicycle lanes on both sides. There are no sidewalks on the west side of Parkway Avenue in the vicinity of the project site and there are no bicycle lanes along Parkway Avenue.

### Future Planned Projects

The City of Wilsonville TSP includes future planned roadway and intersection projects. The Wilsonville Road/Town Center Loop West intersection is identified to exceed applicable mobility standards for future 2035 traffic volumes and both study intersections are identified as having freight rate deficiencies from small turning radii. The following project is identified in the TSP to alleviate these concerns:

#### **SI-04 Wilsonville Road/Town Center Loop West Intersection Improvements:**

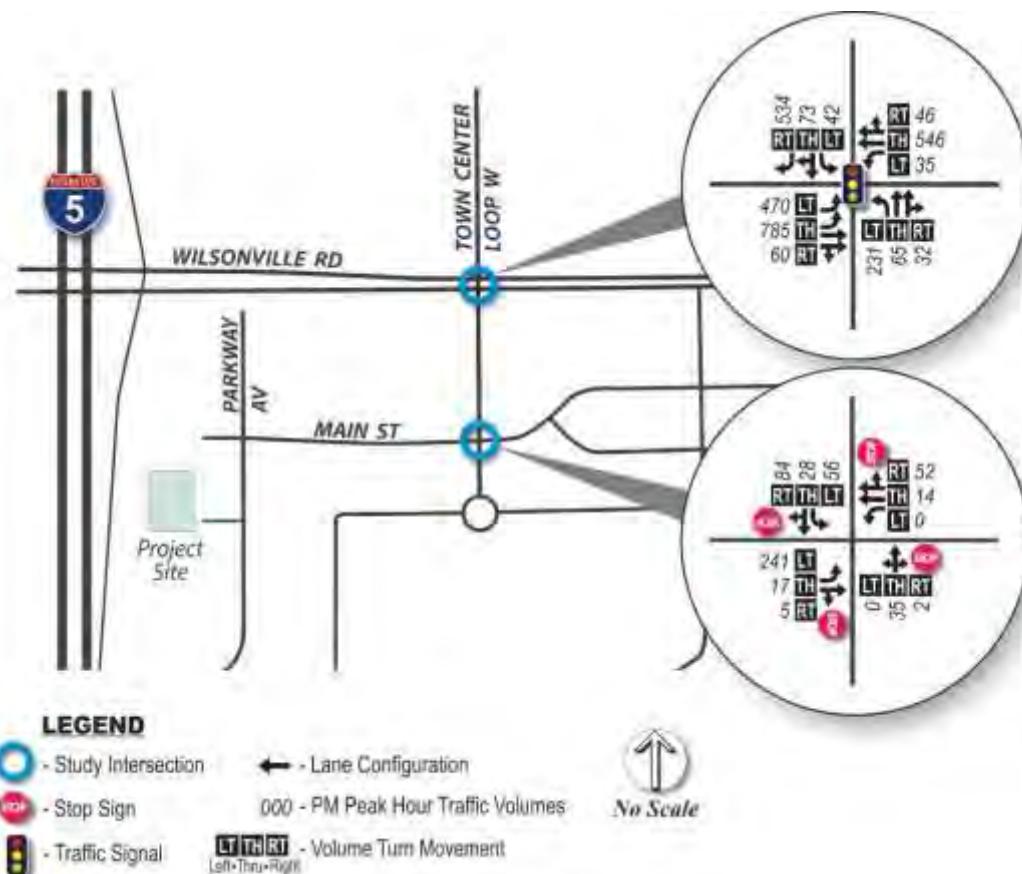
This project will widen the north leg of the intersection and install a second southbound right-turn lane (dual lanes) at the intersection.

<sup>5</sup> City of Wilsonville Transportation Systems Plan, 2013.

## Existing Traffic Volumes and Operations

Existing traffic volume data, shown in Figure 2, was collected at the study intersection.<sup>6</sup> Existing p.m. peak hour traffic operations were analyzed at the following study intersection based on coordination with city staff:

- Wilsonville Road/Town Center Loop West
- Main Street/Town Center Loop West



**Figure 2: Existing PM Peak Hour Traffic Volumes**

The following sections describe intersection performance measures, required operating standards, existing operating conditions, and field observations.

<sup>6</sup> Traffic Data was collected by All Traffic Data on Wednesday, December 9, 2015 and by Key Data Network on Tuesday, June 7, 2016

## Intersection Performance Measures

Level of service (LOS) ratings and volume-to-capacity (V/C) ratios are two commonly used performance measures that provide a good picture of intersection operations.

- **Level of service (LOS):** A “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection.<sup>7</sup> LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity.
- **Volume-to-capacity (V/C) ratio:** A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

## Required Operating Standards

The City of Wilsonville requires the study intersections of public streets to meet its minimum acceptable level of service (LOS) standard, which is LOS D for peak periods.<sup>8</sup> While private driveway approaches are not required by City code to meet the City’s LOS standard, safety and operations are still considered.

## Existing Operating Conditions

Existing traffic operations at the study intersection were determined for the p.m. peak hour based on the 2000 Highway Capacity Manual methodology for signalized intersections and 2010 Highway Capacity Manual for unsignalized intersections. The results were then compared with the City of Wilsonville’s minimum acceptable level of service (LOS) operating standard. Table 6 lists the estimated delay, LOS , and v/c ratio of each study intersection.

**Table 6: Existing Study Intersection Operations**

Intersection ( <i>Traffic Control</i> )	Operating Standard	Existing		
		Delay	LOS	v/c
Wilsonville Road/Town Center Loop West ( <i>Signalized</i> )	LOS D	38.3	D	0.69
Main Street/Town Center Loop West ( <i>All-Way Stop</i> )	LOS D	13.3	A/B	0.43
<u>Signalized Intersections:</u>		<u>Unsignalized Intersections:</u>		
Delay = Average Intersection Delay (sec.)		Delay = Critical Movement approach Delay (sec.)		
LOS = Level of Service of Intersection		LOS = Level of Service of Major/Minor Street		
v/c = Volume-to-Capacity Ratio of Intersection		v/c = Volume-to-Capacity Ratio of Intersection		

<sup>7</sup> A description of Level of Service (LOS) is provided in the appendix and includes a list of the delay values (in seconds) that correspond to each LOS designation.

<sup>8</sup> *City of Wilsonville Code*, City of Wilsonville Section 4.140, p.163.

## Collision Analysis

Five years of collision records (2011-2015) for the study area were obtained from ODOT's online database. The data identified 25 collisions at the signalized study intersection during the five-year period. A breakdown of the collisions by severity is provided in Table 7. As shown, there were zero fatal crashes and ten injury crashes (one serious injury) at the study intersection between 2011 and 2015. The majority of the collisions were rear end (ten), or turning (nine) collisions that occurred during daylight hours. Four crashes occurred at night time, three of which were reported as having no lighting. There were no reported bicycle or pedestrian collisions.

Table 7 shows total reported collisions at each study intersection as well as the calculated observed and critical crash rates. The crash rate for the Wilsonville Road/Town Center Loop West intersection is below the ODOT critical crash rate for similar intersections (0.86 for urban four-leg signalized intersections) and does not warrant further investigation of safety performance. There were no collisions at the Main Street/Town Center Loop West intersection.

**Table 7: Collision History at Study Intersections**

Intersection	Collisions (by Severity)				Collision Rate <sup>b</sup>
	Fatal	Injury	PDO <sup>a</sup>	Total	
Wilsonville Road/Town Center Loop West	0	10	15	25	0.47

<sup>a</sup> PDO = Property damage only.

<sup>b</sup> Collision rate for intersections= average annual collisions per million entering vehicles (MEV); MEV estimates based on p.m. peak-hour traffic count and applicable factors.

## Public Transit Service

South Metro Area Regional Transit (SMART) operates several fixed routes that serve Wilsonville and the surrounding area.<sup>9</sup> Route 4 and 2x travel on Wilsonville Road with one stop located on the southeast corner of Main Street/Town Center Loop West (Route 4) and one stop on the southeast corner of Wilsonville Road/Town Center Loop West (Route 2x).

---

<sup>9</sup> South Metro Area Regional Transit (SMART) operates several fixed routes that serve Wilsonville and make connections to TriMet in Portland, Cherriots in Salem, and Canby Area Transit. The City's transit center, "SMART Central at Wilsonville Station," provides connections to all SMART routes and to TriMet's Westside Express Service (WES) commuter rail station.

## CHAPTER 3: PROJECT IMPACTS

This chapter reviews the impacts that the proposed Black Bear Diner may have on the study area transportation system. This analysis includes the existing site circulation, trip generation, trip distribution, and future year traffic volumes and operating conditions. The focus of the impact analysis is on the following study intersection identified by City of Wilsonville staff:

- Wilsonville Road/Town Center Loop West
- Main Street/Town Center Loop West

### Project Site

The proposed Black Bear Diner will occupy the existing vacant building located at 30175 SW Parkway Avenue on the southwest corner of the Main Street/Parkway Avenue intersection. The first floor of the existing building is approximately 7,900 square feet and the second floor is approximately 2,900 square feet. However, the project sponsor has agreed to not use the second floor; therefore it will not be included in the trip generation estimates.<sup>10</sup>

### Trip Generation

Trip generation is the method used to estimate the number of vehicles a development adds to site driveways and the adjacent roadway network during a specified period (i.e., such as the a.m. and p.m. peak hour). Trip generation estimates are performed using trip rates surveyed at similar land uses, as provided by the Institute of Transportation Engineers (ITE).<sup>11</sup> The project site is estimated to generate 1,004 average daily trips including 78 (47 in, 31 out) in the p.m. peak hour. These trips were distributed and added to the roadway network for the future operations analysis to determine whether the site would impact the study intersections. Table 8 lists the p.m. peak hour vehicle trip generation estimates for the proposed Black Bear Diner.

**Table 8: Trip Generation Summary for Proposed Black Bear Diner**

Land Use (ITE Code)	KSF <sup>a</sup>	Trip Generation Rate <sup>b</sup>	PM Peak Hour Trips			Daily Trips
			In	Out	Total	
High-Turnover (Sit-Down) Restaurant (932)	7.9	9.85 per KSF	47	31	78	1,004

<sup>a</sup> KSF = 1,000 Square Feet

<sup>b</sup> The project trip generation estimates were based on ITE average trip rate.

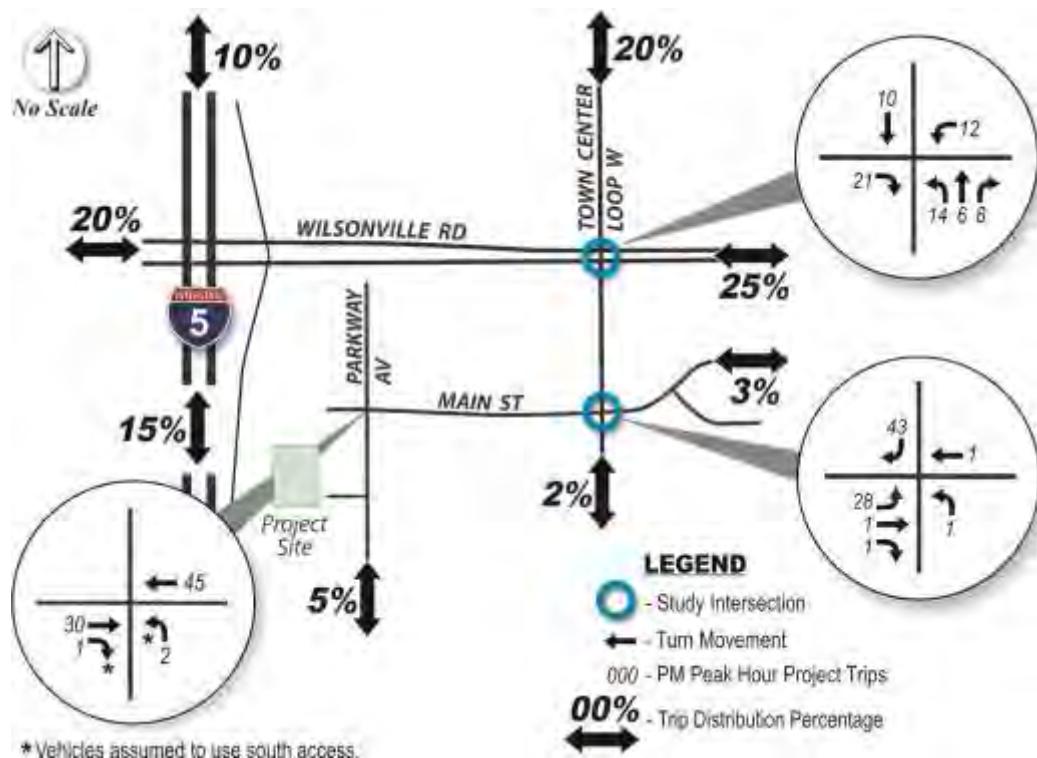
### Trip Distribution

Trip distribution provides an estimation of where project-related trips would be coming from and going to. It is given as percentages at key gateways to the study area and is used to route project trips through the study intersection. Figure 3 on the following page shows the expected trip distribution and project trip routing for the additional traffic generated by the Black Bear Diner.

<sup>10</sup> Email conversation with Steve Adams, City of Wilsonville, June 29, 2016.

<sup>11</sup> *Trip Generation, 9<sup>th</sup> Edition*, Institute of Transportation Engineers, 2012.

The trip distribution was estimated using the existing traffic volumes of the study intersections. It is assumed that vehicles entering and exiting from the south of the project site would use the driveway access along Parkway Avenue and vehicle entering and exiting from the north would use the Main Street/Parkway Avenue intersection.



**Figure 3: Trip Distribution and PM Peak Hour Project Volumes**

### **Project Trips Through the I-5/Wilsonville Road Interchange Area**

The project trips through the I-5/Wilsonville Road interchange area were estimated based on the trip generation and distribution assumptions as shown in Figure 3. The proposed Black Bear Diner is expected to generate 71 p.m. peak hour trips through the I-5/Wilsonville Road interchange area (which includes all movements of the Wilsonville Road/Town Center Loop West intersection).

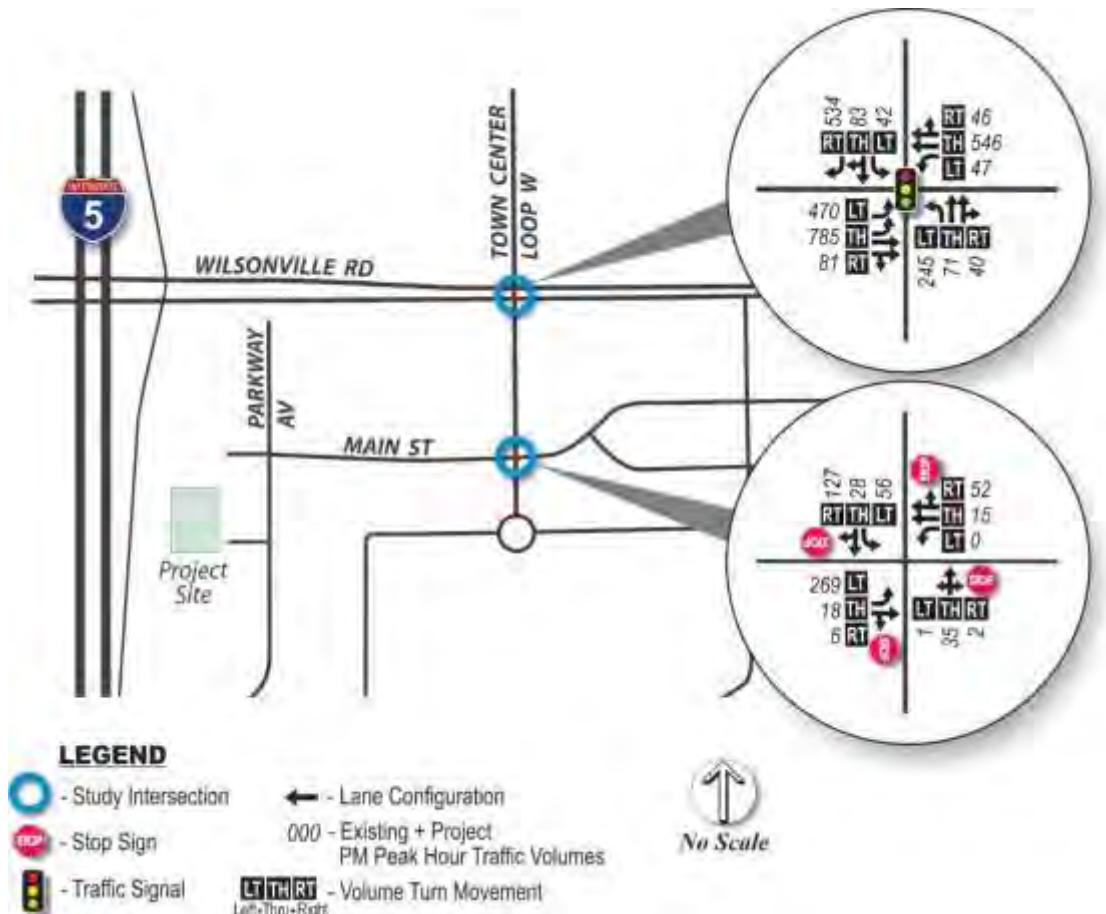
### **Future Traffic Volumes and Operating Conditions**

Future operating conditions were analyzed at the study intersections for the following future traffic scenarios:

- Existing + Project
- Existing + Stage II (traffic from other developments that have State II approval or are under construction)
- Existing + Stage II + Project

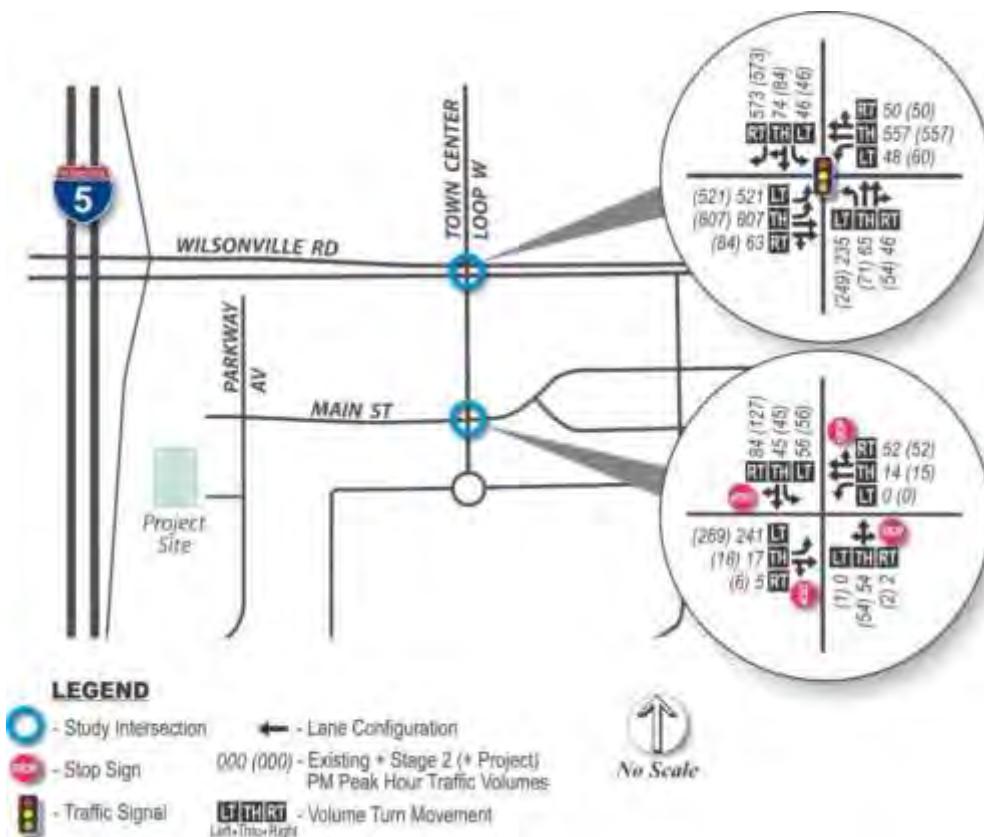
Future traffic volumes were estimated at the study intersection for each scenario. The comparison of these scenarios enables the assessment of project impacts. The future operating scenarios include various combinations of three types of traffic: existing, project, and Stage II which is estimated based on the list of currently approved Stage II developments, provided by City staff.<sup>12</sup>

The Stage II list and the corresponding p.m. peak hour trip generation estimates for these developments are included in the appendix. Figure 4 shows the p.m. peak hour traffic volumes used to analyze the “Existing plus Project” scenario, while Figure 5 on the following page shows the volumes used to analyze the “Existing plus Stage II plus Project” scenario.



**Figure 4: Existing plus Project PM Peak Hour Traffic Volumes**

<sup>12</sup> Email from Daniel Pauly, City of Wilsonville, July 7, 2016 (see appendix for Stage II list).



**Figure 5: Existing plus Stage II (plus Project) PM Peak Hour Traffic Volumes**

## Intersection Operations

The study intersection operating conditions for the three future scenarios are listed in Table 9. Both study intersections meet the City's operating standards for all scenarios. Therefore, the development does not require off-site mitigations to the study area transportation network.

**Table 9: Future Project and Stage II Intersection Operations Comparison**

Intersection ( <i>Traffic Control</i> )	Operating Standard	Existing + Project			Existing + Stage II			Existing + Stage II + Project		
		Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c
Wilsonville Road/Town Center Loop West ( <i>Signalized</i> )	LOS D	40.0	D	0.73	39.9	D	0.72	41.8	0.76	D
Main Street/Town Center Loop West ( <i>All-Way Stop</i> )	LOS D	14.8	A/B	0.50	13.7	A/B	0.44	15.2	B/C	0.50
<u>Signalized Intersections:</u>					<u>Unsignalized Intersections:</u>					
Delay = Average Intersection Delay (sec.)					Delay = Critical Movement approach Delay (sec.)					
LOS = Level of Service of Intersection					LOS = Level of Service of Major/Minor Street					
v/c = Volume-to-Capacity Ratio of Intersection					v/c = Volume-to-Capacity Ratio of Intersection					

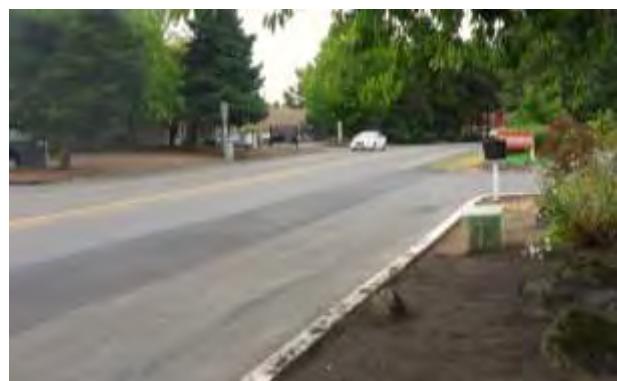
## Site Plan Evaluation

The project sponsor does not anticipate changing the existing site, therefore a site plan was not provided and the existing site was evaluated to identify potential concerns related to access, circulation and safety, bicycle and pedestrian facilities, and parking.

### Site Access

The proposed development is expected to use the existing site access points including the Main Street/Parkway Avenue intersection and the driveway access on Parkway Avenue. It is anticipated that the majority of the project trips will use the Main Street/Parkway Avenue intersection and that project trips traveling to or from south of the project site would use the driveway access on Parkway Avenue. The Main Street/Parkway Avenue intersection is two-way stop controlled with Main Street being the minor stopped approach. Note that no stop sign is located on the west leg which is a driveway to this site and the adjacent 76 fueling station.

Existing site driveways (see photo to the right) will need to meet American Association of State Highway and Transportation Officials (AASHTO) sight distance requirements.<sup>13</sup> This includes providing adequate sight triangles at driveway that are clear of objects (large signs, landscaping, parked cars, etc.) that could potentially limit vehicle sight distance. Prior to occupancy, sight distance at any existing access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.



**South Access Sight Distance**

### Circulation and Safety

The existing development infrastructure provides internal circulation between public streets and project buildings. Sufficient aisle width between the parking stalls for two-way motor vehicle movement is provided in the parking lots on the north and east of the building (see photo to the right). However, parking along the west side of the building should be reevaluated to make sure it meets the fire code due to the lack of space for a vehicle to turn around.



**East Parking Lot**

<sup>13</sup> *Geometric Design of Highways and Streets*, AASHTO, 2011.

The unmarked shared area at the Main Street/Parkway Avenue intersection between the project site and the 76 Station (see photo to the right) may cause confusion between entering, parking, and exiting vehicles. Some vehicles were observed to incorrectly use the vacant space for parking. Additionally, there is no traffic control for westbound traffic at the Main Street/Parkway Avenue intersection and it is recommended that a stop sign on the west leg of the intersection (exit of driveway) is implemented to clarify the traffic control.



**Unmarked Shared Area**

### **Bicycle and Pedestrian Facilities**

There are currently no bicycle or pedestrian facilities that connect with the adjacent sidewalks or bicycle network. Additionally, there are no existing sidewalks along the west side of Parkway Avenue.

### **Parking**

The proposed Black Bear Diner is required to comply with the City of Wilsonville Development Code for the number of vehicular parking stalls and bicycle parking spaces that are provided on the site.<sup>14</sup> The requirements are based on the land use type and size. Several parking spaces near the south end of the site (see photo to the right) conflict with each other and with potential loading and unloading activities of the project site. It is recommended that all conflicting parking is removed prior to occupancy.



**South Parking Lot**

The angled parking spaces along the west side of the building (see photo to the right) do not allow for enough space for two-way motor vehicle movement (see prior discussion regarding fire code requirements). Additionally there is not adequate space for vehicles to turn around. It is recommended that parking along the west side of the building is removed or reconfigured to allow for easier circulation.



**West Parking Lot**

<sup>14</sup> City of Wilsonville Development Code, Chapter 4.155; Table 5, Adopted July 2013.

The existing ADA parking spaces are located on the east side of the building and at the north end of the site. ADA regulations require ADA parking spaces to be a minimum of eight feet wide for cars, eleven feet wide for van-accessible parking spaces, unless the access aisle is eight feet wide then the van-accessible parking space may be eight feet wide, and a minimum of five feet for all access aisles.<sup>15</sup> The existing ADA parking spaces on the east side of the building share an access aisle while the existing ADA parking spaces to the north of the site do not have an access aisle (see photo to the right) and are not adjacent to any building entrance. It is recommended that the project sponsor work with the City to update the ADA parking spaces to meet current ADA parking requirements.



**ADA Parking North of Building**

Table 10 provides vehicle parking requirements based on City code requirements. As shown, the existing site does not meet the City of Wilsonville parking requirement for vehicles or for bicycles. The minimum required parking stalls for vehicles is 121 spaces with three ADA spaces. The minimum required bicycle parking spaces is two. Based on internal circulation issues discussed previously, the nine parking spaces along the west side of the building and approximately two parking spaces at the south end of the site would reduce the number of parking spaces to 49. It is recommended that a parking management plan be provided by the project sponsor prior to approval that shows how the restaurant will provide adequate parking for the intended use.

**Table 10: Vehicular Parking Requirements**

<b>Land Use (Size)</b>	<b>Code Required Vehicular Parking Stalls</b>			<b>Proposed Number of Stalls</b>	
	<i>Total Stalls per KSF<sup>a</sup></i>	<i>Range of Regular Stalls Required</i>	<i>ADA Accessible Stalls Required</i>	<i>Regular</i>	<i>ADA Accessible</i>
Eating or drinking establishment (7.9 KSF)	15.3 to 23.0	121 to 182	3	60	4

<sup>a</sup> KSF = 1,000 Square Feet

There are no existing bicycle parking facilities at the project site. Table 11 on the following page provides the bicycle parking requirements for the proposed development per the City of Wilsonville Development Code that are based on land use type and size. For a restaurant, the City requires one bicycle parking space per 4000 square feet. This results in two required bicycle spaces. The existing site does not have any bicycle parking, therefore the project sponsor will need to coordinate with the City regarding bicycle parking needs.

<sup>15</sup> U.S. Department of Justice Civil Rights Division, Accessible Parking Fact Sheet, 2010.

**Table 11: Bicycle Parking Requirements**

<b>Land Use (Size)</b>	<b>Code Required Bicycle Parking Spaces (Min/Max)</b>	
	<i>Bicycle Parking per 4000 sq. ft.</i>	<i>Total Spaces</i>
Eating or drinking establishment (7.9 KSF)	1	2

## Project Impact Summary

The proposed Black Bear Diner to occupy the existing vacant building located at 30175 SW Parkway Avenue on the southwest corner of the Main Street/Parkway Avenue intersection is anticipated to result in the following impacts:

### Trip Generation

- The project site is estimated to generate 1,004 average daily trips including 78 (47 in, 31 out) in the p.m. peak hour.
- Of the 78 total project trips, 71 new p.m. peak hour trips are estimated to pass through the I-5/Wilsonville Road interchange area.

### Study Intersection Operations

- The Wilsonville Road/Town Center Loop West and Main Street/Town Center Loop West intersections are anticipated to meet the City's mobility standard with an LOS of D for all scenarios.

### Site Circulation and Safety

- The unmarked shared area at the Main Street/Parkway Avenue intersection between the project site and 76 Station may cause confusion between entering, parking, and exiting vehicles. It is recommended that a stop sign on the west leg of the intersection (exit of driveway) is implemented to clarify the traffic control.
- Sufficient aisle width between the parking stalls for two-way motor vehicle movement is provided on the north and east side of the building; however, parking along the west side of the building should be coordinated with Tualatin Valley Fire and Rescue to assure it meets fire code requirements.
- Parking conflicts with loading zones on the south end of the project site should be reconfigured.
- Prior to occupancy, sight distance at existing access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

### Vehicle and Bicycle Parking

- The existing site does not meet the City of Wilsonville parking requirement for vehicles or for bicycles. The minimum required parking stalls for vehicles is 121 spaces with three ADA spaces. Presently the site has 60 marked parking stalls, 4 of which are ADA spaces. The minimum required bicycle parking spaces is two. A parking management plan will need to be provided by the project sponsor prior to approval that shows how the restaurant will provide adequate parking for the intended use.

- Several parking spaces near the south end of the site conflict with each other and with potential loading and unloading activities of the project site. It is recommended that all conflicting parking is removed prior to occupancy.
- The existing ADA parking spaces on the east side of the building share an access aisle while the existing ADA parking spaces to the north of the site do not have an access aisle and are not adjacent to any building entrance. It is recommended that the project sponsor work with the City to update the ADA parking spaces to meet current ADA parking requirements.

#### **Frontage Improvements**

- The existing project site does not have bicycle or pedestrian facilities that connect with the adjacent sidewalks or bicycle network. Additionally, there are no existing sidewalks along the west side of Parkway Avenue. The project sponsor should coordinate with the City to determine necessary pedestrian improvements to Parkway Avenue if any.

# Appendix

---

**Existing Peak Hour Traffic Counts**

**Collision Data**

**Level of Service Descriptions**

**HCM Analysis – Existing**

**HCM Analysis – Existing + Project**

**HCM Analysis – Existing + Stage II**

**HCM Analysis – Existing + Project + Stage II**

## **Existing Peak Hour Traffic Counts**





## Peak Hour Summary

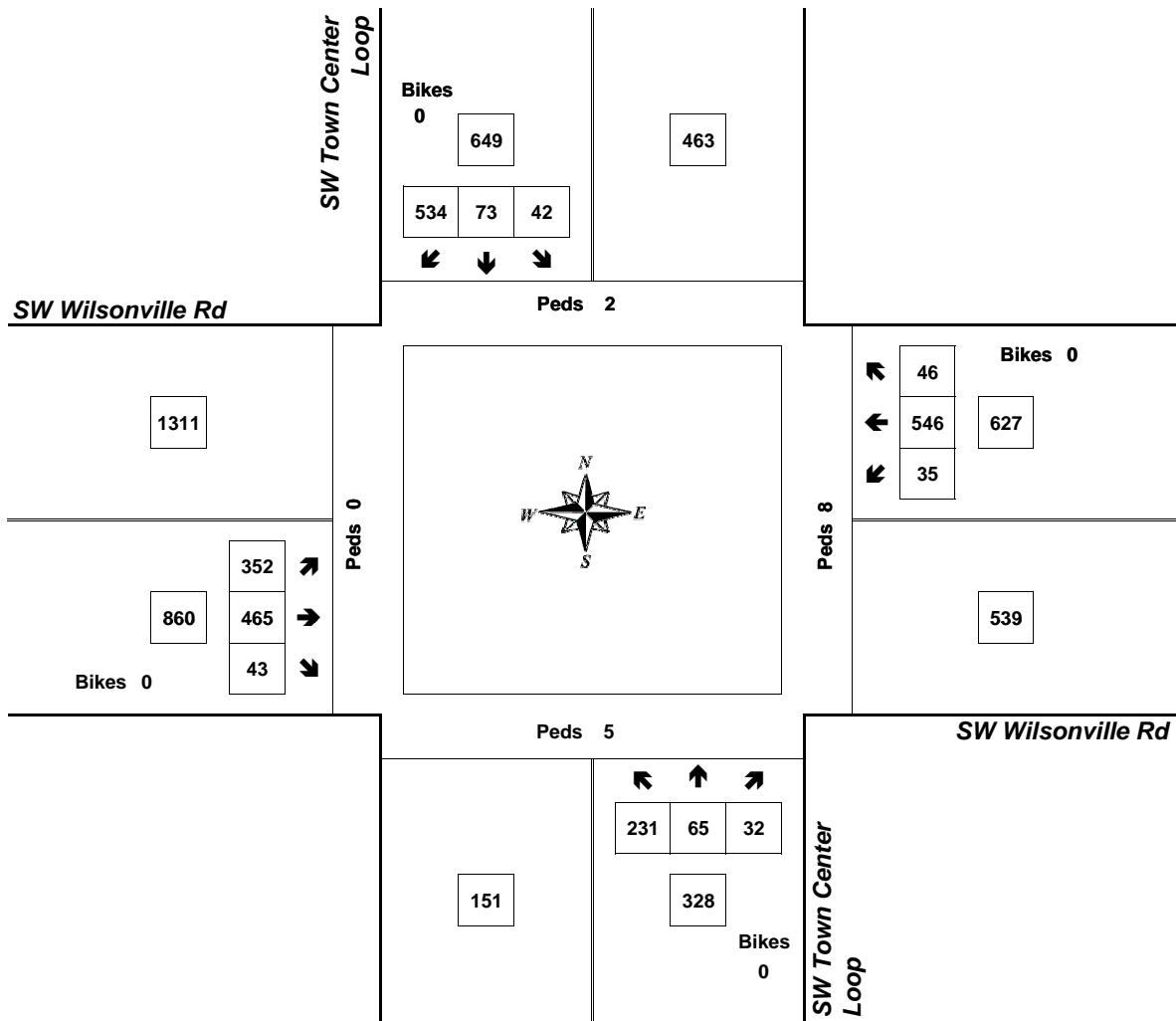


Clay Carney  
(503) 833-2740

### SW Town Center Loop & SW Wilsonville Rd

4:50 PM to 5:50 PM

Wednesday, December 09, 2015



Approach	PHF	HV%	Volume
EB	0.82	1.3%	860
WB	0.91	0.6%	627
NB	0.82	2.4%	328
SB	0.83	0.6%	649
<b>Intersection</b>	<b>0.94</b>	<b>1.1%</b>	<b>2,464</b>

Count Period: 4:00 PM to 6:00 PM





Key Data Network  
5477 SW Joshua St

Tualatin, Oregon, United States 97062  
503.804.3294 conley@k-d-n.com  
Key People serving Key Clients

Location: 45.3019908818485, -  
122.765795588493

Count Name: Town Center Loop  
W & SW Main St TMC  
Site Code:  
Start Date: 06/07/2016  
Page No: 3

### Turning Movement Peak Hour Data (4:05 PM)

Start Time	Northbound Approach						Southbound Approach						Eastbound Approach						Westbound Approach						Int. Total
	Northbound						Southbound						Eastbound					Westbound							
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	Left	Thru	Right	U-Turn	Peds	App. Total		
4:05 PM	0	3	0	0	1	3	2	2	7	0	0	11	24	3	0	0	0	27	0	2	1	0	1	3	44
4:10 PM	0	2	0	0	0	2	2	5	6	0	0	13	19	0	0	0	0	19	0	4	5	0	1	9	43
4:15 PM	0	1	0	0	0	1	4	3	10	0	1	17	21	3	1	0	0	25	0	1	4	0	0	5	48
4:20 PM	0	2	0	0	0	2	4	3	3	0	1	10	26	0	1	0	0	27	0	1	5	0	0	6	45
4:25 PM	0	0	1	0	0	1	5	0	11	0	0	16	25	1	0	0	0	26	0	1	1	0	0	2	45
4:30 PM	0	5	1	0	0	6	4	1	8	0	0	13	16	0	0	0	1	16	0	1	7	0	0	8	43
4:35 PM	0	4	0	0	0	4	4	0	2	0	0	6	17	2	0	0	0	19	0	1	4	0	0	5	34
4:40 PM	0	5	0	0	0	5	9	2	6	0	3	17	20	2	0	0	0	22	0	0	3	0	2	3	47
4:45 PM	0	2	0	0	0	2	3	2	5	0	0	10	13	2	2	0	1	17	0	0	3	0	2	3	32
4:50 PM	0	0	0	0	1	0	6	1	5	0	0	12	19	2	0	0	0	21	0	0	5	0	0	5	38
4:55 PM	0	3	0	0	0	3	5	1	6	0	2	12	15	0	1	0	0	16	0	2	6	0	1	8	39
5:00 PM	0	5	0	0	1	5	3	6	8	0	0	17	16	2	0	0	0	18	0	1	5	0	1	6	46
Total	0	32	2	0	3	34	51	26	77	0	7	154	231	17	5	0	2	253	0	14	49	0	8	63	504
Approach %	0.0	94.1	5.9	0.0	-	-	33.1	16.9	50.0	0.0	-	-	91.3	6.7	2.0	0.0	-	-	0.0	22.2	77.8	0.0	-	-	-
Total %	0.0	6.3	0.4	0.0	-	6.7	10.1	5.2	15.3	0.0	-	30.6	45.8	3.4	1.0	0.0	-	50.2	0.0	2.8	9.7	0.0	-	12.5	-
PHF	0.000	0.533	0.167	0.000	-	0.472	0.472	0.361	0.583	0.000	-	0.755	0.740	0.472	0.208	0.000	-	0.781	0.000	0.292	0.583	0.000	-	0.583	0.875
Motorcycles	0	0	0	0	-	0	1	0	0	0	-	1	1	0	1	0	-	2	0	0	0	0	-	0	3
% Motorcycles	-	0.0	0.0	-	-	0.0	2.0	0.0	0.0	-	-	0.6	0.4	0.0	20.0	-	-	0.8	-	0.0	0.0	-	-	0.0	0.6
Cars	0	23	2	0	-	25	47	20	65	0	-	132	187	16	3	0	-	206	0	13	43	0	-	56	419
% Cars	-	71.9	100.0	-	-	73.5	92.2	76.9	84.4	-	-	85.7	81.0	94.1	60.0	-	-	81.4	-	92.9	87.8	-	-	88.9	83.1
Light Goods Vehicles	0	4	0	0	-	4	3	2	10	0	-	15	38	1	1	0	-	40	0	1	6	0	-	7	66
% Light Goods Vehicles	-	12.5	0.0	-	-	11.8	5.9	7.7	13.0	-	-	9.7	16.5	5.9	20.0	-	-	15.8	-	7.1	12.2	-	-	11.1	13.1
Buses	0	4	0	0	-	4	0	4	0	0	-	4	1	0	0	0	-	1	0	0	0	0	-	0	9
% Buses	-	12.5	0.0	-	-	11.8	0.0	15.4	0.0	-	-	2.6	0.4	0.0	0.0	-	-	0.4	-	0.0	0.0	-	-	0.0	1.8
Single-Unit Trucks	0	0	0	0	-	0	0	0	1	0	-	1	3	0	0	0	-	3	0	0	0	0	-	0	4
% Single-Unit Trucks	-	0.0	0.0	-	-	0.0	0.0	0.0	1.3	-	-	0.6	1.3	0.0	0.0	-	-	1.2	-	0.0	0.0	-	-	0.0	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	1	0	-	1	1	0	0	0	-	1	0	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.0	-	-	0.0	0.0	0.0	1.3	-	-	0.6	0.4	0.0	0.0	-	-	0.4	-	0.0	0.0	-	-	0.0	0.4
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	1	
% Bicycles on Road	-	3.1	0.0	-	-	2.9	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	-	0.0	0.0	-	-	0.0	0.2
All Pedestrians	-	-	-	-	-	3	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	8	-
% All Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-

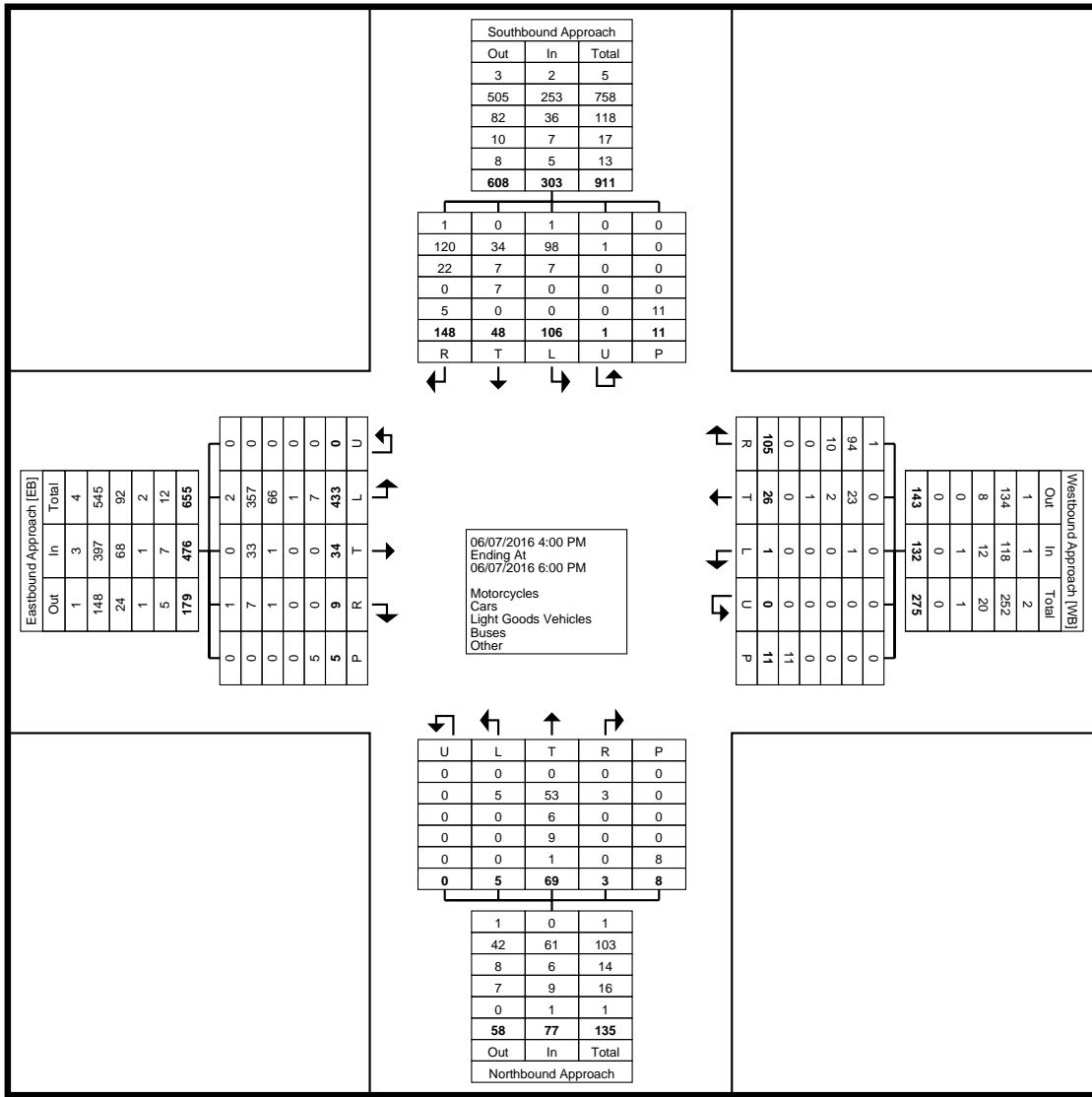


Key Data Network  
5477 SW Joshua St

Tualatin, Oregon, United States 97062  
503.804.3294 conley@k-d-n.com  
Key People serving Key Clients

Location: 45.3019908818485, -  
122.765795588493

Count Name: Town Center Loop  
W & SW Main St TMC  
Site Code:  
Start Date: 06/07/2016  
Page No: 2



Turning Movement Data Plot

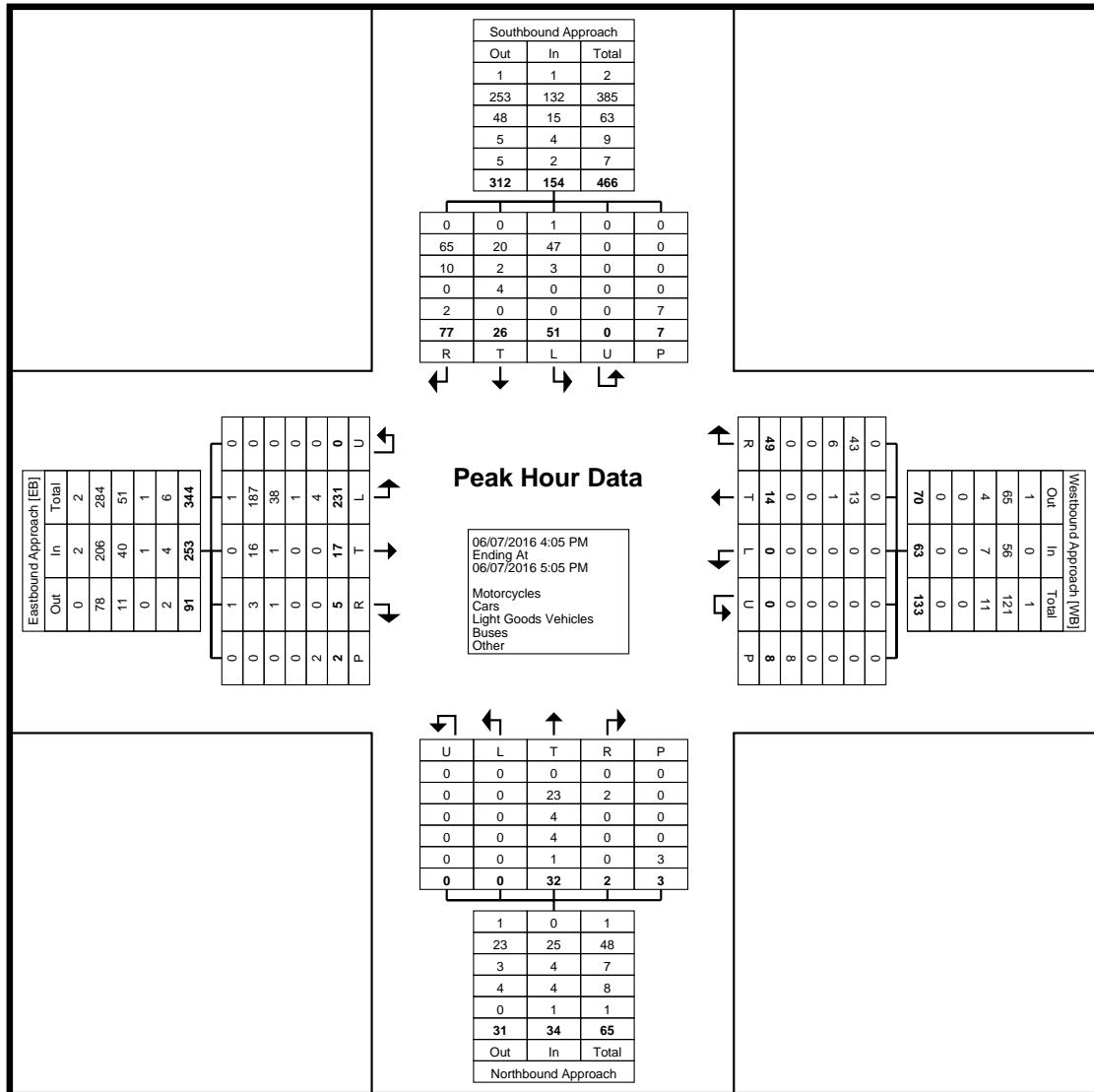


Key Data Network  
5477 SW Joshua St

Tualatin, Oregon, United States 97062  
503.804.3294 conley@k-d-n.com  
Key People serving Key Clients

Location: 45.3019908818485, -  
122.765795588493

Count Name: Town Center Loop  
W & SW Main St TMC  
Site Code:  
Start Date: 06/07/2016  
Page No: 4



Turning Movement Peak Hour Data Plot (4:05 PM)



## Collision Data

---

Crash ID	Crash Date	1st Street	2nd Street	Lat	Long	Road Character	Collision Type	Intersection (Cause)	KABCO Severity	Weather	Road Surface	Light
1402489	2/10/2011	Town Center Loop W	Wilsonville Rd	45.302931	-122.765800	Intersection	Rear	Follow Too Close	PDO	Clear	Dry	Daylight
1417347	4/15/2011	Town Center Loop W	Wilsonville Rd	45.302939	-122.765806	Intersection	Sideswipe	Other Improper Driving	PDO	Clear	Dry	Daylight
1428531	8/1/2011	Town Center Loop W	Wilsonville Rd	45.303431	-122.765803	Alley	Turn	No Yield	PDO	Clear	Dry	Daylight
1441120	11/4/2011	Town Center Loop W	Wilsonville Rd	45.302939	-122.765806	Intersection	Turn	Improper Turn	PDO	Cloudy	Dry	Dusk
1441796	11/16/2011	Town Center Loop W	Wilsonville Rd	45.302939	-122.765806	Intersection	Rear	Follow Too Close	PDO	Cloudy	WET	Daylight
1461395	3/5/2012	Town Center Loop W	Wilsonville Rd	45.303375	-122.765803	Straight	Sideswipe	Improper Lane Change	PDO	Clear	Unknown	Daylight
1466602	4/7/2012	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Rear	Follow Too Close	PDO	Clear	Dry	Daylight
1467440	4/10/2012	Wilsonville Rd	Town Center Loop W	45.302936	-122.766189	Straight	Sideswipe	Improper Lane Change	PDO	Clear	Dry	Daylight
1471722	5/31/2012	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Turn	Disregard Traffic Control	PDO	Clear	Dry	Daylight
1484512	9/2/2012	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Turn	Improper Turn	PDO	Clear	Dry	Daylight
1524478	7/19/2013	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Rear	Follow Too Close	INJC	Clear	Dry	Daylight
1530185	8/25/2013	Wilsonville Rd	Town Center Loop W	45.302936	-122.766195	Straight	Sideswipe	Improper Lane Change	PDO	Cloudy	WET	Daylight
1532922	9/21/2013	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Turn	Disregard Traffic Signal	INJC	Cloudy	Dry	Daylight
1536053	10/20/2013	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Angle	Disregard Traffic Signal	INJC	Clear	Dry	Dark - No Light
1541890	11/29/2013	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Rear	Follow Too Close	PDO	Clear	Dry	Daylight
1575200	7/14/2014	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Rear	Other Improper Driving	INJC	ICE	Dark - No Light	Daylight
1592332	11/13/2014	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Turn	Disregard Traffic Control	PDO	Clear	Dry	Daylight
1595134	11/20/2014	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Turn	Improper Lane Change	PDO	Cloudy	WET	Dark - No Light
1597484	12/18/2014	Wilsonville Rd	Town Center Loop W	45.302942	-122.766889	Straight	Sideswipe	No Yield	INJC	Unknown	Unknown	Daylight
1615104	7/17/2015	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Turn	Improper Lane Change	INJC	Clear	Dry	Daylight
1622616	9/30/2015	Wilsonville Rd	Town Center Loop W	45.302936	-122.766194	Straight	Rear	Improper Lane Change	INJC	Clear	Dry	Daylight
1627485	11/28/2015	Town Center Loop W	Wilsonville Rd	45.302931	-122.765808	Intersection	Rear	Improper Turn	INJC	Rain	Wet	Daylight
1628795	12/16/2015	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Rear	Improper Turn	INJA	Clear	Dry	Daylight
1409961	3/5/2011	Wilsonville Rd	Town Center Loop W	45.302931	-122.765481	Intersection	Rear	Follow Too Close	PDO	Rain	Wet	Dark - With Light
1481279	11/28/2012	Town Center Loop W	Wilsonville Rd	45.302931	-122.765806	Intersection	Rear	Other Improper Driving	INJC	Cloudy	WET	Daylight



## **Level of Service Descriptions**

## **TRAFFIC LEVELS OF SERVICE**

Analysis of traffic volumes is useful in understanding the general nature of traffic in an area, but by itself indicates neither the ability of the street network to carry additional traffic nor the quality of service afforded by the street facilities. For this, the concept of level of service has been developed to subjectively describe traffic performance. Level of service can be measured at intersections and along key roadway segments.

Levels of service categories are similar to report card ratings for traffic performance. Intersections are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is generally diminished in their vicinities. Levels of Service A, B and C indicate conditions where traffic moves without significant delays over periods of peak travel demand. Level of service D and E are progressively worse peak hour operating conditions and F conditions represent where demand exceeds the capacity of an intersection. Most urban communities set level of service D as the minimum acceptable level of service for peak hour operation and plan for level of service C or better for all other times of the day. The Highway Capacity Manual provides level of service calculation methodology for both intersections and arterials<sup>1</sup>. The following two sections provide interpretations of the analysis approaches.

---

<sup>1</sup> 2000 *Highway Capacity Manual*, Transportation Research Board, Washington D.C., 2000, Chapter 16 and 17.

## **UNSIGNALIZED INTERSECTIONS (Two-Way Stop Controlled)**

Unsignalized intersection level of service is reported for the major street and minor street (generally, left turn movements). The method assesses available and critical gaps in the traffic stream which make it possible for side street traffic to enter the main street flow. The 2010 Highway Capacity Manual describes the detailed methodology. It is not unusual for an intersection to experience level of service E or F conditions for the minor street left turn movement. It should be understood that, often, a poor level of service is experienced by only a few vehicles and the intersection as a whole operates acceptably.

Unsignalized intersection levels of service are described in the following table.

***Level-of-Service Criteria: Automobile Mode***

Control Delay (s/vehicle)	LOS by Volume-to-Capacity Ratio	
	$v/c \leq 1.0$	$v/c > 1.0$
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street.

LOS is not calculated for major-street approaches or for the intersection as a whole

## SIGNALIZED INTERSECTIONS

For signalized intersections, level of service is evaluated based upon average vehicle delay experienced by vehicles entering an intersection. Control delay (or signal delay) includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In previous versions of this chapter of the HCM (1994 and earlier), delay included only stopped delay. As delay increases, the level of service decreases. Calculations for signalized and unsignalized intersections are different due to the variation in traffic control. The 2000 Highway Capacity Manual provides the basis for these calculations.

Level of Service	Delay (secs.)	Description
A	<10.00	<b>Free Flow/Insignificant Delays:</b> No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Most vehicles do not stop at all. Progression is extremely favorable and most vehicles arrive during the green phase.
B	10.1-20.0	<b>Stable Operation/Minimal Delays:</b> An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. This level generally occurs with good progression, short cycle lengths, or both.
C	20.1-35.0	<b>Stable Operation/Acceptable Delays:</b> Major approach phases fully utilized. Most drivers feel somewhat restricted. Higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, and the number of vehicles stopping is significant.
D	35.1-55.0	<b>Approaching Unstable/Tolerable Delays:</b> The influence of congestion becomes more noticeable. Drivers may have to wait through more than one red signal indication. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. The proportion of vehicles not stopping declines, and individual cycle failures are noticeable.
E	55.1-80.0	<b>Unstable Operation/Significant Delays:</b> Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are a frequent occurrence.
F	>80.0	<b>Forced Flow/Excessive Delays:</b> Represents jammed conditions. Queues may block upstream intersections. This level occurs when arrival flow rates exceed intersection capacity, and is considered to be unacceptable to most drivers. Poor progression, long cycle lengths, and v/c ratios approaching 1.0 may contribute to these high delay levels.

---

Source: *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C.



## **HCM Analysis – Existing**

HCM Signalized Intersection Capacity Analysis  
1: Town Center Lp West & Wilsonville Rd

Existing PM Peak  
WV Black Bear Diner TIA

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑		↑	↑↑		↑↑	↑↑		↑	↑	↑
Volume (vph)	470	785	60	35	546	46	231	65	32	42	73	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0		4.5	4.5		5.0	5.0	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		*0.95	0.91		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.89	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.97		0.95	1.00	1.00
Satd. Flow (prot)	3000	3508		1805	3526		1665	2600		1805	1587	1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.97		0.95	1.00	1.00
Satd. Flow (perm)	3000	3508		1805	3526		1665	2600		1805	1587	1534
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
Adj. Flow (vph)	500	835	64	37	581	49	246	69	34	45	78	568
RTOR Reduction (vph)	0	4	0	0	5	0	0	13	0	0	108	266
Lane Group Flow (vph)	500	895	0	37	625	0	123	213	0	45	220	52
Confl. Peds. (#/hr)	2		5	5		2			8	8		
Heavy Vehicles (%)	1%	1%	9%	0%	1%	2%	3%	3%	0%	0%	3%	0%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4
Permitted Phases												
Actuated Green, G (s)	22.5	55.7		5.0	38.2		13.8	13.8		18.0	18.0	18.0
Effective Green, g (s)	22.5	55.2		5.0	37.7		13.8	13.8		17.5	17.5	18.0
Actuated g/C Ratio	0.20	0.50		0.05	0.34		0.13	0.13		0.16	0.16	0.16
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.3		2.5	4.3		2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	613	1760		82	1208		208	326		287	252	251
v/s Ratio Prot	c0.17	c0.26		0.02	0.18		0.07	c0.08		0.02	c0.14	0.03
v/s Ratio Perm												
v/c Ratio	0.82	0.51		0.45	0.52		0.59	0.65		0.16	0.87	0.21
Uniform Delay, d1	41.8	18.3		51.2	28.9		45.4	45.8		39.9	45.2	39.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.0	1.1		2.9	1.6		3.7	4.2		0.2	26.6	0.3
Delay (s)	49.8	19.4		54.0	30.5		49.2	50.0		40.1	71.8	40.1
Level of Service	D	B		D	C		D	D		D	E	D
Approach Delay (s)		30.3			31.8			49.7			55.1	
Approach LOS		C			C			D			E	
Intersection Summary												
HCM 2000 Control Delay		38.3									D	
HCM 2000 Volume to Capacity ratio		0.69										
Actuated Cycle Length (s)		110.0									18.5	
Intersection Capacity Utilization		73.8%									D	
Analysis Period (min)		15										
c Critical Lane Group												

**Intersection**

Intersection Delay, s/veh	11.1											
Intersection LOS	B											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	241	17	5	0	14	52	0	35	2	56	28	84
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	19	6	20	0	7	12	0	25	0	6	23	16
Mvmt Flow	259	18	5	0	15	56	0	38	2	60	30	90
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	2
HCM Control Delay	12.9	8.8	9.7	9.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	0%	100%	0%
Vol Thru, %	95%	0%	77%	21%	0%	25%
Vol Right, %	5%	0%	23%	79%	0%	75%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	241	22	66	56	112
LT Vol	35	0	17	14	0	28
Through Vol	2	0	5	52	0	84
RT Vol	0	241	0	0	56	0
Lane Flow Rate	40	259	24	71	60	120
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.068	0.432	0.034	0.102	0.103	0.182
Departure Headway (Hd)	6.172	6.001	5.116	5.162	6.168	5.426
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	576	599	696	689	579	658
Service Time	4.25	3.759	2.874	3.235	3.928	3.186
HCM Lane V/C Ratio	0.069	0.432	0.034	0.103	0.104	0.182
HCM Control Delay	9.7	13.3	8.1	8.8	9.6	9.4
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.2	2.2	0.1	0.3	0.3	0.7

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined



## **HCM Analysis – Existing + Project**

---

HCM Signalized Intersection Capacity Analysis  
1: Town Center Lp West & Wilsonville Rd

Existing + Project PM Peak  
WV Black Bear Diner TIA

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑		↑	↑↑		↑	↑↑		↑	↑	↑
Volume (vph)	470	785	81	47	546	46	245	71	40	42	83	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0		4.5	4.5		5.0	5.0	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		*0.95	0.91		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.89	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.97		0.95	1.00	1.00
Satd. Flow (prot)	3000	3488		1805	3526		1665	2600		1805	1593	1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.97		0.95	1.00	1.00
Satd. Flow (perm)	3000	3488		1805	3526		1665	2600		1805	1593	1534
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
Adj. Flow (vph)	500	835	86	50	581	49	261	76	43	45	88	568
RTOR Reduction (vph)	0	6	0	0	5	0	0	16	0	0	92	268
Lane Group Flow (vph)	500	915	0	50	625	0	130	234	0	45	240	56
Confl. Peds. (#/hr)	2		5	5		2			8	8		
Heavy Vehicles (%)	1%	1%	9%	0%	1%	2%	3%	3%	0%	0%	3%	0%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4
Permitted Phases												
Actuated Green, G (s)	22.1	52.1		6.8	36.8		14.7	14.7		18.9	18.9	18.9
Effective Green, g (s)	22.1	51.6		6.8	36.3		14.7	14.7		18.4	18.4	18.9
Actuated g/C Ratio	0.20	0.47		0.06	0.33		0.13	0.13		0.17	0.17	0.17
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.3		2.5	4.3		2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	602	1636		111	1163		222	347		301	266	263
v/s Ratio Prot	c0.17	c0.26		0.03	0.18		0.08	c0.09		0.02	c0.15	0.04
v/s Ratio Perm												
v/c Ratio	0.83	0.56		0.45	0.54		0.59	0.68		0.15	0.90	0.21
Uniform Delay, d1	42.2	21.0		49.8	30.0		44.8	45.4		39.1	44.9	39.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	9.3	1.4		2.1	1.8		3.2	4.7		0.2	30.6	0.3
Delay (s)	51.5	22.4		51.9	31.8		48.0	50.0		39.3	75.5	39.4
Level of Service	D	C		D	C		D	D		D	E	D
Approach Delay (s)		32.6			33.3			49.4			56.5	
Approach LOS		C			C			D			E	
Intersection Summary												
HCM 2000 Control Delay		40.0										D
HCM 2000 Volume to Capacity ratio		0.73										
Actuated Cycle Length (s)		110.0										18.5
Intersection Capacity Utilization		74.8%										D
Analysis Period (min)		15										
c Critical Lane Group												

**Intersection**

Intersection Delay, s/veh	11.9											
Intersection LOS	B											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	269	18	6	0	15	52	1	35	2	56	28	127
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	19	6	20	0	7	12	0	25	0	6	23	16
Mvmt Flow	289	19	6	0	16	56	1	38	2	60	30	137
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB		EB	SB
Opposing Lanes	1		2	2
Conflicting Approach Left	SB		NB	EB
Conflicting Lanes Left	2		1	2
Conflicting Approach Right	NB		SB	WB
Conflicting Lanes Right	1		2	1
HCM Control Delay	14.3		9.1	9.5
HCM LOS	B		A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	3%		100%	0%	0%	100%
Vol Thru, %	92%		0%	75%	22%	0%
Vol Right, %	5%		0%	25%	78%	0%
Sign Control	Stop		Stop	Stop	Stop	Stop
Traffic Vol by Lane	38		269	24	67	56
LT Vol	35		0	18	15	0
Through Vol	2		0	6	52	0
RT Vol	1		269	0	0	56
Lane Flow Rate	41		289	26	72	60
Geometry Grp	6		7	7	6	7
Degree of Util (X)	0.067		0.492	0.037	0.107	0.105
Departure Headway (Hd)	5.934		6.121	5.22	5.346	6.281
Convergence, Y/N	Yes		Yes	Yes	Yes	Yes
Cap	597		584	680	663	568
Service Time	4.034		3.899	2.997	3.443	4.053
HCM Lane V/C Ratio	0.069		0.495	0.038	0.109	0.106
HCM Control Delay	9.5		14.8	8.2	9.1	9.8
HCM Lane LOS	A		B	A	A	B
HCM 95th-tile Q	0.2		2.7	0.1	0.4	0.4
						1

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined



## **HCM Analysis – Existing + Stage II**

HCM Signalized Intersection Capacity Analysis  
1: Town Center Lp West & Wilsonville Rd

Existing + Stage II PM Peak  
WV Black Bear Diner TIA

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑		↑	↑↑		↑↑	↑↑		↑	↑	↑
Volume (vph)	521	807	63	48	557	50	235	66	46	46	74	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0		4.5	4.5		5.0	5.0	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		*0.95	0.91		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.88	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.98		0.95	1.00	1.00
Satd. Flow (prot)	3000	3507		1805	3523		1665	2600		1805	1585	1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.98		0.95	1.00	1.00
Satd. Flow (perm)	3000	3507		1805	3523		1665	2600		1805	1585	1534
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
Adj. Flow (vph)	554	859	67	51	593	53	250	70	49	49	79	610
RTOR Reduction (vph)	0	4	0	0	6	0	0	20	0	0	114	284
Lane Group Flow (vph)	554	922	0	51	640	0	125	224	0	49	233	58
Confl. Peds. (#/hr)	2			5	5		2			8	8	
Heavy Vehicles (%)	1%	1%	9%	0%	1%	2%	3%	3%	0%	0%	3%	0%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4
Permitted Phases												
Actuated Green, G (s)	25.0	52.9		6.8	34.7		14.2	14.2		18.6	18.6	18.6
Effective Green, g (s)	25.0	52.4		6.8	34.2		14.2	14.2		18.1	18.1	18.6
Actuated g/C Ratio	0.23	0.48		0.06	0.31		0.13	0.13		0.16	0.16	0.17
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.3		2.5	4.3		2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	681	1670		111	1095		214	335		297	260	259
v/s Ratio Prot	c0.18	c0.26		0.03	0.18		0.08	c0.09		0.03	c0.15	0.04
v/s Ratio Perm												
v/c Ratio	0.81	0.55		0.46	0.58		0.58	0.67		0.16	0.90	0.22
Uniform Delay, d1	40.3	20.5		49.8	31.9		45.1	45.7		39.5	45.0	39.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.2	1.3		2.2	2.3		3.3	4.5		0.2	30.2	0.3
Delay (s)	47.5	21.8		52.0	34.2		48.5	50.2		39.7	75.2	39.8
Level of Service	D	C		D	C		D	D		D	E	D
Approach Delay (s)		31.4			35.5			49.6			56.4	
Approach LOS		C			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		39.9										D
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		110.0										18.5
Intersection Capacity Utilization		76.4%										D
Analysis Period (min)		15										
c Critical Lane Group												

**Intersection**

Intersection Delay, s/veh 11.3

Intersection LOS B

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	241	17	5	0	14	52	0	54	2	56	45	84
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	19	6	20	0	7	12	0	25	0	6	23	16
Mvmt Flow	259	18	5	0	15	56	0	58	2	60	48	90
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	2
HCM Control Delay	13.2	9	10	9.8
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	0%	100%	0%
Vol Thru, %	96%	0%	77%	21%	0%	35%
Vol Right, %	4%	0%	23%	79%	0%	65%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	241	22	66	56	129
LT Vol	54	0	17	14	0	45
Through Vol	2	0	5	52	0	84
RT Vol	0	241	0	0	56	0
Lane Flow Rate	60	259	24	71	60	139
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.104	0.44	0.034	0.104	0.104	0.213
Departure Headway (Hd)	6.225	6.115	5.23	5.29	6.212	5.54
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	571	586	680	670	574	644
Service Time	4.314	3.886	3	3.38	3.981	3.309
HCM Lane V/C Ratio	0.105	0.442	0.035	0.106	0.105	0.216
HCM Control Delay	10	13.7	8.2	9	9.7	9.8
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.3	2.2	0.1	0.3	0.3	0.8

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined



## **HCM Analysis – Existing + Project + Stage II**

HCM Signalized Intersection Capacity Analysis  
1: Town Center Lp West & Wilsonville Rd

Existing + Stage II + Project PM Peak  
WV Black Bear Diner TIA

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑		↑	↑↑		↑	↑↑		↑	↑	↑
Volume (vph)	521	807	84	60	557	50	249	72	54	46	84	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0		4.5	4.5		5.0	5.0	4.5
Lane Util. Factor	0.97	0.95		1.00	0.95		*0.95	0.91		1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.89	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.98		0.95	1.00	1.00
Satd. Flow (prot)	3000	3487		1805	3523		1665	2600		1805	1590	1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.98		0.95	1.00	1.00
Satd. Flow (perm)	3000	3487		1805	3523		1665	2600		1805	1590	1534
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
Adj. Flow (vph)	554	859	89	64	593	53	265	77	57	49	89	610
RTOR Reduction (vph)	0	6	0	0	6	0	0	22	0	0	99	277
Lane Group Flow (vph)	554	942	0	64	640	0	135	242	0	49	258	65
Confl. Peds. (#/hr)	2		5	5		2			8	8		
Heavy Vehicles (%)	1%	1%	9%	0%	1%	2%	3%	3%	0%	0%	3%	0%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	Prot
Protected Phases	5	2		1	6		8	8		4	4	4
Permitted Phases												
Actuated Green, G (s)	24.5	50.8		7.2	33.5		14.9	14.9		19.6	19.6	19.6
Effective Green, g (s)	24.5	50.3		7.2	33.0		14.9	14.9		19.1	19.1	19.6
Actuated g/C Ratio	0.22	0.46		0.07	0.30		0.14	0.14		0.17	0.17	0.18
Clearance Time (s)	4.0	4.5		4.0	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	2.5	4.3		2.5	4.3		2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	668	1594		118	1056		225	352		313	276	273
v/s Ratio Prot	c0.18	c0.27		0.04	0.18		0.08	c0.09		0.03	c0.16	0.04
v/s Ratio Perm												
v/c Ratio	0.83	0.59		0.54	0.61		0.60	0.69		0.16	0.93	0.24
Uniform Delay, d1	40.8	22.2		49.8	32.9		44.7	45.3		38.6	44.8	38.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.2	1.6		4.0	2.6		3.6	5.0		0.2	36.7	0.3
Delay (s)	49.0	23.8		53.8	35.5		48.3	50.3		38.8	81.5	39.1
Level of Service	D	C		D	D		D	D		D	F	D
Approach Delay (s)		33.1			37.2			49.7			59.3	
Approach LOS		C			D			D			E	
Intersection Summary												
HCM 2000 Control Delay		41.8									D	
HCM 2000 Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		110.0									18.5	
Intersection Capacity Utilization		77.4%									D	
Analysis Period (min)		15										
c Critical Lane Group												

## Intersection

Intersection Delay, s/veh 12.2

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	269	18	6	0	15	52	1	54	2	56	45	127
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	19	6	20	0	7	12	0	25	0	6	23	16
Mvmt Flow	289	19	6	0	16	56	1	58	2	60	48	137
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	2
HCM Control Delay	14.6	9.3	9.8	10.5
HCM LOS	B	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	2%	100%	0%	0%	100%	0%
Vol Thru, %	95%	0%	75%	22%	0%	26%
Vol Right, %	4%	0%	25%	78%	0%	74%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	269	24	67	56	172
LT Vol	54	0	18	15	0	45
Through Vol	2	0	6	52	0	127
RT Vol	1	269	0	0	56	0
Lane Flow Rate	61	289	26	72	60	185
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.104	0.501	0.038	0.112	0.106	0.287
Departure Headway (Hd)	6.103	6.232	5.33	5.593	6.324	5.59
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	590	573	663	644	562	636
Service Time	4.107	4.032	3.129	3.598	4.117	3.382
HCM Lane V/C Ratio	0.103	0.504	0.039	0.112	0.107	0.291
HCM Control Delay	9.8	15.2	8.3	9.3	9.9	10.7
HCM Lane LOS	A	C	A	A	A	B
HCM 95th-tile Q	0.3	2.8	0.1	0.4	0.4	1.2

## Notes

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined

**Exhibit C1**  
**Public Works Plan Submittal Requirements**  
**and Other Engineering Requirements**

---

1. All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards - 2015.
2. Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

<b>Coverage (Aggregate, accept where noted)</b>	<b>Limit</b>
<b><u>Commercial General Liability:</u></b>	
▪ General Aggregate (per project)	\$3,000,000
▪ General Aggregate (per occurrence)	\$2,000,000
▪ Fire Damage (any one fire)	\$50,000
▪ Medical Expense (any one person)	\$10,000
<b><u>Business Automobile Liability Insurance:</u></b>	
▪ Each Occurrence	\$1,000,000
▪ Aggregate	\$2,000,000
<b>Workers Compensation Insurance</b>	<b>\$500,000</b>

3. No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
4. All public utility/improvement plans submitted for review shall be based upon a 22"x 34" format and shall be prepared in accordance with the City of Wilsonville Public Work's Standards.
5. Plans submitted for review shall meet the following general criteria:
  - a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms.
  - b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department.
  - c. In the plan set for the PW Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print.

- d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum.
  - e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes.
  - f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private utility within the general construction area.
  - g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible.
  - h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance.
  - i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482.
  - j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified.
  - k. All engineering plans shall be printed to PDF, combined to a single file, stamped and digitally signed by a Professional Engineer registered in the State of Oregon.
  - l. All plans submitted for review shall be in sets of a digitally signed PDF and three printed sets.
6. Submit plans in the following general format and order for all public works construction to be maintained by the City:
- a. Cover sheet
  - b. City of Wilsonville construction note sheet
  - c. General construction note sheet
  - d. Existing conditions plan.
  - e. Erosion control and tree protection plan.
  - f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties.
  - g. Grading plan, with 1-foot contours.
  - h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes.
  - i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'.
  - j. Street plans.
  - k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference
  - l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference.
  - m. Detailed plan for storm water detention facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and

- piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set.
- n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set.
  - o. Composite franchise utility plan.
  - p. City of Wilsonville detail drawings.
  - q. Illumination plan.
  - r. Striping and signage plan.
  - s. Landscape plan.
7. Design engineer shall coordinate with the City in numbering the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to City's numbering system.
8. The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
9. Applicant shall work with City's Natural Resources office before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
10. The applicant shall be in conformance with all stormwater and flow control requirements for the proposed development per the Public Works Standards.
11. A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City.
12. The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
13. Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
14. The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be

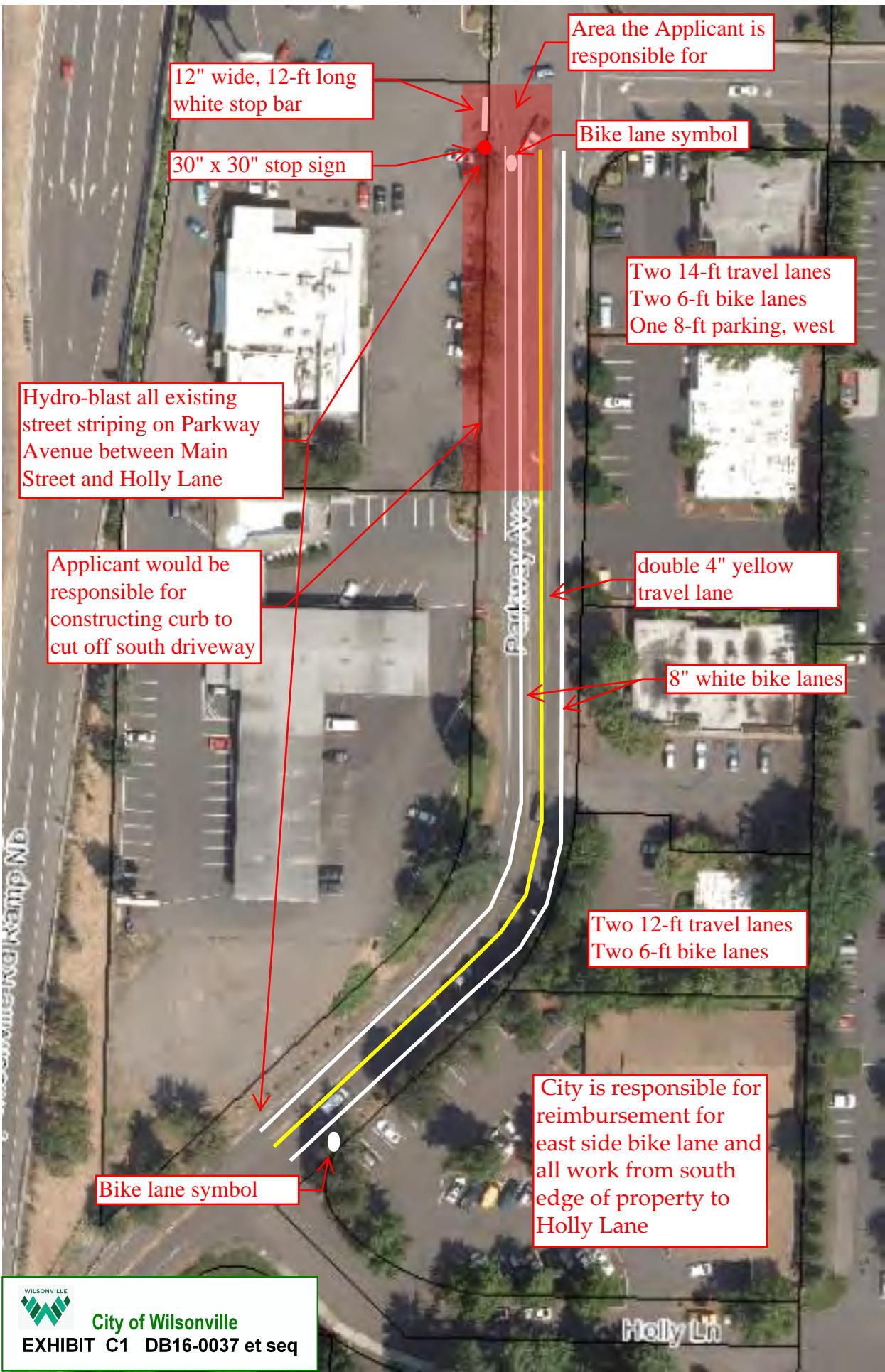
maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly abandoned in conformance with State standards.

15. All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
16. Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
17. No surcharging of sanitary or storm water manholes is allowed.
18. The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
19. A City approved energy dissipation device shall be installed at all proposed storm system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
20. The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
21. All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
22. Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
23. The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
24. The applicant shall provide adequate sight distance at all project street intersections, alley intersections and commercial driveways by properly designing intersection alignments, establishing set-backs, driveway placement and/or vegetation control. Coordinate and align proposed streets, alleys and commercial driveways with existing streets, alleys and

commercial driveways located on the opposite side of the proposed project site existing roadways. Specific designs shall be approved by a Professional Engineer registered in the State of Oregon. As part of project acceptance by the City the Applicant shall have the sight distance at all project intersections, alley intersections and commercial driveways verified and approved by a Professional Engineer registered in the State of Oregon, with the approval(s) submitted to the City (on City approved forms).

25. Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
26. Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
27. The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Stormwater or rainwater LID facilities may be located within the public right-of-way upon approval of the City Engineer. Applicant shall maintain all LID storm water components and private conventional storm water facilities; maintenance shall transfer to the respective homeowners association when it is formed.
28. The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
29. Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
30. For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
31. Mylar Record Drawings:

At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.



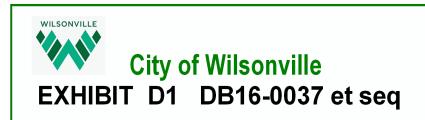
We would love to have Black Bear Restaurant come to Wilsonville. We have a business across the street from the restaurant and we would take advantage of having it so handy. Doctor would enjoy having something handy for meetings that come up.

He is also involved with Lions Club and they have looking for new meeting spot since Denny's closed

PLUS - They have Great food.

Sayle Johnston

Wilsonville Chiropractic Clinic, P.C.  
Dale Burt Johnston, D.C.  
30250 SW Parkway Ave.  
P.O.Box 691  
Wilsonville, Oregon 97070  
Telephone: (503) 682-9046



## PROJECT TEAM

**OWNER**  
**REAL INCOME CORPORATION**  
**Michael Rose**  
3930 Arabian Way, Shingle Springs, CA  
Cell (541) 225-7491  
Indarmik4@gmail.com

**CORPORATE REPRESENTATIVE**  
**BLACK BEAR DINER**  
**Scott Jeter**  
**Director of Construction**  
1880 Shasta St, Redding, CA 96001  
(530) 243-1700  
Cell 354-6327  
scott.jeter@blackbeardiner.com

**ARCHITECT**  
**NICHOLS, MELBURG & ROSETTO**  
**Kurt A. Jorgensen, AIA**  
555 Main St. Suite 300, Chico, CA 95928  
(530) 891-7170  
Cell 588-3881  
jorgensen@mnrdesign.com

**STRUCTURAL**  
**SSW ENGINEERS INC.**  
**Michael A. Cox, P.E.**  
2350 Oakmont Way, Eugene, OR 97401  
(541) 485-4383  
michaelc@sswengineers.com

**FOOD SERVICE**  
**CURTIS EQUIPMENT**  
**Ken McClintock**  
7689 SW Cirrus Dr, Beaverton, OR 97008 (503)  
201-4683  
kenm@curtisretail.com

**PLUMBING**  
**FRONTIER CONSULTING ENGINEERING**  
**Ben Abrahamsen**  
P.O. Box 492174, Redding, CA 96049  
(530) 232-6160  
Cal 351-5989  
ben@frontiereco.com

**ELECTRICAL**  
**PACE**  
**Chris Abrahamsen**  
1730 South St, Redding, CA 96001  
(530) 244-2020  
cabrahamsen@paceengineering.us

**LANDSCAPE**  
**CRYSTAL GREENS LANDSCAPE, INC.**  
**Brian Boag**  
11627 SE Capps Road, Clackamas, OR 97015  
(503) 943-0398  
brianboag@crystalgreens.com

# BLACK BEAR DINER RESTAURANT RENOVATION

30175 SW PARKWAY AVENUE WILSONVILLE, OR 97070



## SITE DESIGN REVIEW

### PROJECT DATA

STREET ADDRESS	30175 SW PARKWAY AVENUE WILSONVILLE, OR 97070
ZONING	PDC PLANNED DEVELOPMENT COMMERCIAL DISTRICT
SITE AREA	10 ACRE (APPROX)
BUILDING	PRE-EXISTING, TWO STORY RESTAURANT AND OFFICE
USE	RESTAURANT
CONSTRUCTION TYPE	V - B, NON-SPRINKLERED
OCCUPANCY CLASSIFICATION	GROUP A-2
1ST FLOOR AREA (GROSS)	7853 SQ. FT.
1ST FLOOR AREA (NET)	7,120 SQ. FT. (AREA OF RESTAURANT)
2ND FLOOR AREA (GROSS)	4,430 SQ. FT. (NO WORK)
1ST FLOOR DEMOLITION AREA (ENCLOSED)	137 SQ. FT. (ENTRANCE VESTIBULE)
1ST FLOOR ADDITION AREA (ENCLOSED)	197 SQ. FT. (NEW ENTRANCE VESTIBULE)
1ST FLOOR DEMOLITION AREA (EXTERIOR COVERED WALKWAY)	372 SQ. FT.
1ST FLOOR ADDITION AREA (EXTERIOR COVERED WALKWAY)	1037 SQ. FT.
PARKING	NO EXPANSION OF RESTAURANT SEATING, THEREFORE NO EXPANSION OF PARKING. EXISTING ACCESSIBLE PARKING TO REMAIN.

### SEPARATE PERMITS

- 1. SIGN PERMIT
- 2. BUILDING PERMIT
- 3. SMOKE DETECTION SYSTEM
- 4. COOKING EXHAUST HOOD FIRE SUPPRESSION SYSTEM
- 5. CLACKAMAS COUNTY PUBLIC HEALTH DEPT. REVIEW



### SHEET INDEX

SHT. #	DESCRIPTION	SC.
<b>SITE DESIGN REVIEW</b>		
A001	TITLE SHEET	NONE
A101	SITE PLAN	T = 10'-0"
A201	FLOOR PLAN	1/4" = T-0"
A241	ROOF PLAN	1/4" = T-0"
A301	EXTERIOR ELEVATIONS	1/4" = T-0"
A302	EXTERIOR ELEVATIONS	1/4" = T-0"
A401	EXTERIOR PERSPECTIVES	NTS
A402	EXTERIOR PERSPECTIVES	NTS
E101	ELECTRICAL SITE PLAN	T = 10'-0"
E102	ELECTRICAL SITE ILLUMINATION PLAN	T = 10'-0"
L10	LANDSCAPE PLANTING PLAN	T = 10'-0"

30175 SW PARKWAY AVENUE  
WILSONVILLE, OR 97070

SHEET TITLE

COVER SHEET

DRAWING STATUS

SITE DESIGN  
REVIEW

REVISIONS  
Sym. Description Date

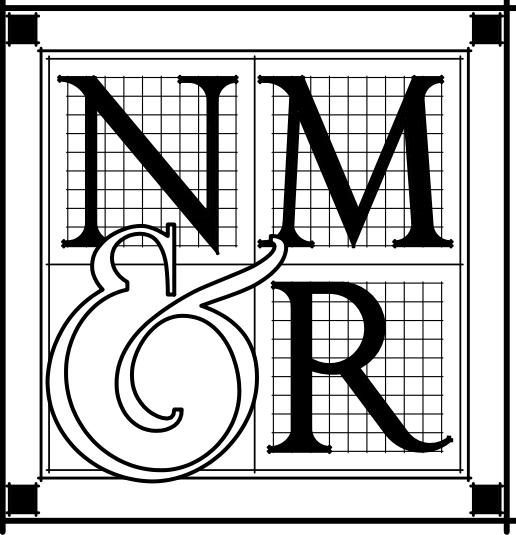
City of Wilsonville  
EXHIBIT B1 DB16-0037 et seq

Drawn By KAJ  
Date Issued 7/20/2016  
Scale NONE  
Project No. 15-5465

SHEET No.

A001

Copyright © 2016  
All ideas, designs, arrangements and/or plans, whether reduced to writing, drawings, photographs, or otherwise, contained in this document are the property of NICHOLS, MELBURG & ROSETTO and were created, evolved and developed for use on this project only. They are to be held in confidence by the recipient and not reproduced, distributed or disclosed to any person, firm or organization, except as specifically authorized in writing by NICHOLS, MELBURG & ROSETTO.



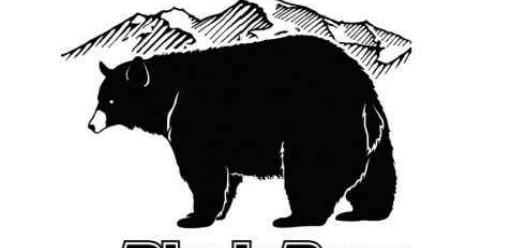
NICHOLS  
&  
MELBURG  
&  
ROSETTO  
ARCHITECTS + ENGINEERS  
555 MAIN STREET, SUITE 300

CONSULTANTS

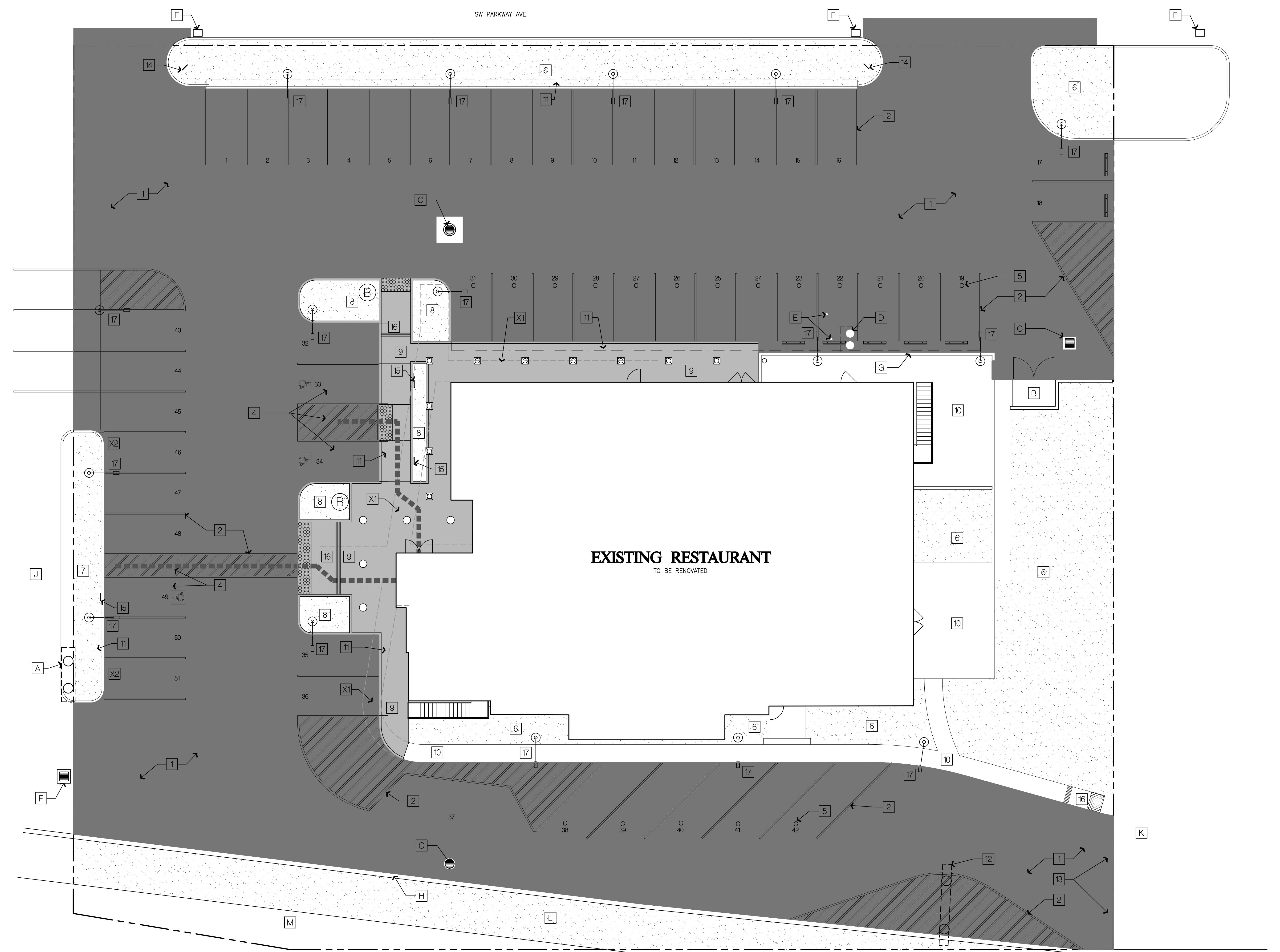
LICENSE STAMPS



PROJECT NAME



WILSONVILLE



SITE PLAN  
SCALE: 1'-0"

#### EXISTING CONDITION NOTES

- [A] (E) POLE-MOUNTED SIGN ON ADJACENT PROPERTY TO REMAIN.
- [B] (E) TRASH ENCLOSURE WITH FENCING & CONC. FLOOR.
- [C] (E) GATED AREA DRAIN TO REMAIN.
- [D] (E) GREASE TRAP TO REMAIN.
- [E] (E) ACCESS COVER PLATE TO REMAIN.
- [F] (E) OFF-SITE GRATED DRAINAGE TO REMAIN.
- [G] (E) C.M.U. WALL TO REMAIN, PAINT AS INDICATED ON EXT. ELEV'S.
- [H] (E) CONC. WALL AT EDGE OF FREEWAY OFF RAMP TO REMAIN.
- [J] (E) GAS STATION
- [K] (E) MOTEL
- [L] (E) LANDSCAPING ALONG FREEWAY OFF-RAMP TO REMAIN, N.I.C.
- [M] (E) FREEWAY OFF-RAMP

#### DEMOLITION NOTES

- [X1] REMOVE EXISTING SIDEWALK AND ASPHALT AT NEW CONFIGURATION.
- [X2] REMOVE CURBS AND ASPHALT AS REQ'D FOR NEW CONFIGURATION.

#### GENERAL NOTES

1. NO EXTERIOR SITE WORK RELATED TO ACCESSIBILITY REQUIRED.
2. LANDSCAPING AND TREES SHALL BE REFURBISHED THROUGHOUT THE SITE. ALL PALMS SHALL BE REFURBED (DEAD LEAVES REMOVED) AND TRUNKS SKINNED. ALL TREES ARE TO BE ALLOWED TO GROW TO THEIR MATURE HEIGHT.

#### PATH OF TRAVEL

1. PATH OF TRAVEL (POT) AS INDICATED IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING  $\frac{1}{4}$ " BEVELED AT 12% MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED  $\frac{1}{4}$ " VERTICAL AND IS AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LIMITED TO 5% MAX. IF OTHERWISE INDICATED, POT SHALL MANTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (ADA 307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" ADA 307.2 PATH OF TRAVEL COMPLIES WITH ADA CHAPTER 4 "ACCESSIBLE ROUTES".
2. GRATING WITHIN THE P.O.T. SHALL HAVE OPENINGS NOT TO EXCEED 1/2" IN THE DIRECTION OF TRAVEL OR EACH WAY IN PLAZAS.

#### SITE ANALYSIS

ITEM	LOT COVERAGE IN SQ. FT.	LOT COVERAGE IN %
BUILDING AREA	7,919 SF	18 %
PARKING AND DRIVES*	30,460 SF	66 %
LANDSCAPING	7,432 SF	16 %
TOTAL SITE AREA	45,811 SF	100 %

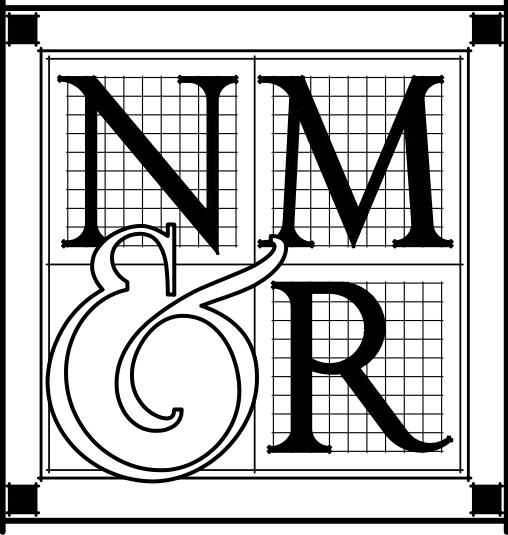
\* INCLUDES ALL HARDCAPPING, INCLUDING SIDEWALKS, CURBS AND FREEWAY OFF RAMP

#### CONSTRUCTION NOTES

UNLESS OTHERWISE INDICATED, ALL ITEMS ARE NEW.

- [1] REPAIR EXISTING ASPHALT; FILL POTHOLES, REMOVE DAMAGED AREAS, RE-TOP WITH SEALING EMULSION. NEW ASPHALT TO MATCH EXISTING, 3" MIN. THICKNESS OVER COMPACTED 4" GRAVEL BASE.
- [2] (N) ASPHALT 4" WIDE WHITE STRIPING, TYP.
- [3] SIDEWALK/WALK WAY COPIES WITH CROSS SLOPE AND RUNNING SLOPE REQUIREMENTS AS SHOWN IN DET. 3.
- [4] ACCESSIBLE PARKING SPACES AND AISLE; MAX. SLOPE IN ANY DIRECTION, 2%.
- [5] INDICATES COMPACT SPACE; 35% OF SPACES ARE COMPACT.
- [6] (E) PLANTING BED; FOR LANDSCAPING MATERIALS AND IRRIGATION (IF ANY) SEE LANDSCAPE DWGS.
- [7] (E) PLANTING BED SURROUNDED BY (N) 6" CONCRETE CURB, FOR LANDSCAPING MATERIALS AND IRRIGATION (IF ANY) SEE LANDSCAPE DWGS.
- [8] (N) PLANTING BED SURROUNDED BY (N) 6" CONCRETE CURB, FOR LANDSCAPING MATERIALS AND IRRIGATION (IF ANY) SEE LANDSCAPE DWGS.
- [9] (N) CONCRETE WALKWAY.
- [10] (E) CONCRETE TO REMAIN, CUT OUT DAMAGED CONCRETE AND FILL/PATCH WHERE REQUIRED, FILL CRACKS WITH CONCRETE PATCH.
- [11] 2"-0" VEHICLE OVERHANG BEYOND CURB.
- [12] (E) POLE MOUNTED SIGN TO BE REPLACED UNDER SEPARATE PERMIT.
- [13] REMOVE VEHICLE BLOCKAGE ON BLACK BEAR SIDE OF PROPERTY LINE, OWNER'S OF ADJACENT PROPERTIES HAVE AGREED TO ALLOW CROSS PROPERTY ACCESS.
- [14] TOW AWAY WARNING SIGN.
- [15] ACCESSIBLE PARKING SPACE SIGN.
- [16] RAMP.
- [17] CUT-OFF LIGHT FIXTURE TYPE 8 ON CONCRETE BASE SEE ELEC DWGS. POLE-MOUNTED LIGHT FIXTURE IS 20 FT. TALL.

Copyright © 2016  
All ideas, designs, arrangements and plans contained or represented by the property of NICHOLS, MELBURG and ROSETTO and were created, evolved and developed for use on this project only. They are the sole and exclusive property of NICHOLS, MELBURG and ROSETTO and arrangements or plans shall be used by, disclosed to any person, firm or entity without the express written permission of NICHOLS, MELBURG and ROSETTO.



NICHOLS  
MELBURG  
ROSSETTO  
ARCHITECTS + ENGINEERS  
555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 / (530) 891-1384  
<http://www.nmrdesign.com>

CONSULTANTS

LICENSE STAMPS



PROJECT NAME



WILSONVILLE

30175 SW PARKWAY AVENUE  
WILSONVILLE, OR 97070

SHEET TITLE

SITE PLAN

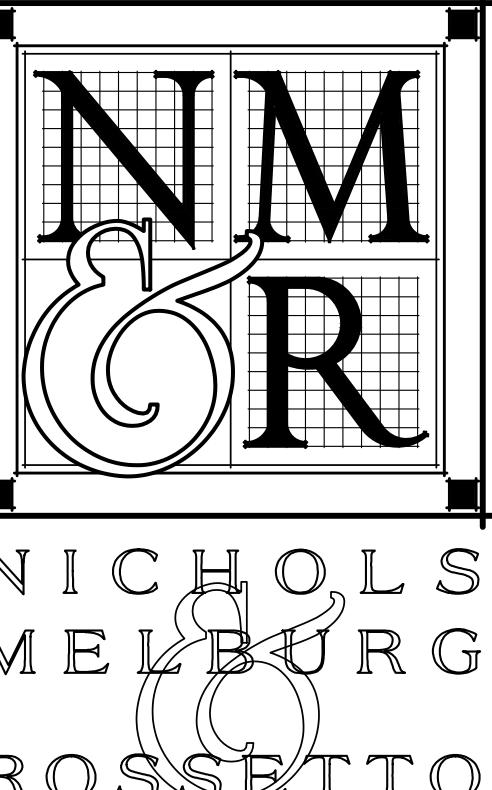
DRAWING STATUS

SITE DESIGN  
REVIEW

REVISED  
Sym. Description Date

Drawn By KAJ  
Date Issued 7/20/2016  
Scale 1" = 10'-0"  
Project No. 15-5465

SHEET No.  
A101



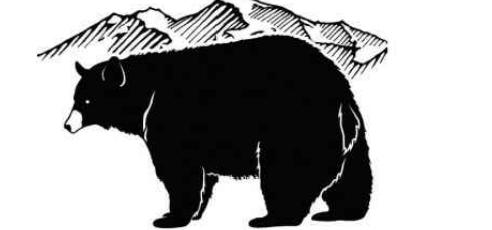
NICHOLS  
MELBURG  
&  
ROSETTO  
ARCHITECTS + ENGINEERS  
555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-138 FAX  
<http://www.nmrdesign.com>

CONSULTANTS

LICENSE STAMPS



PROJECT NAME



WILSONVILLE

30175 SW PARKWAY AVENUE  
WILSONVILLE, OR 97070

SHEET TITLE

FLOOR PLAN

DRAWING STATUS

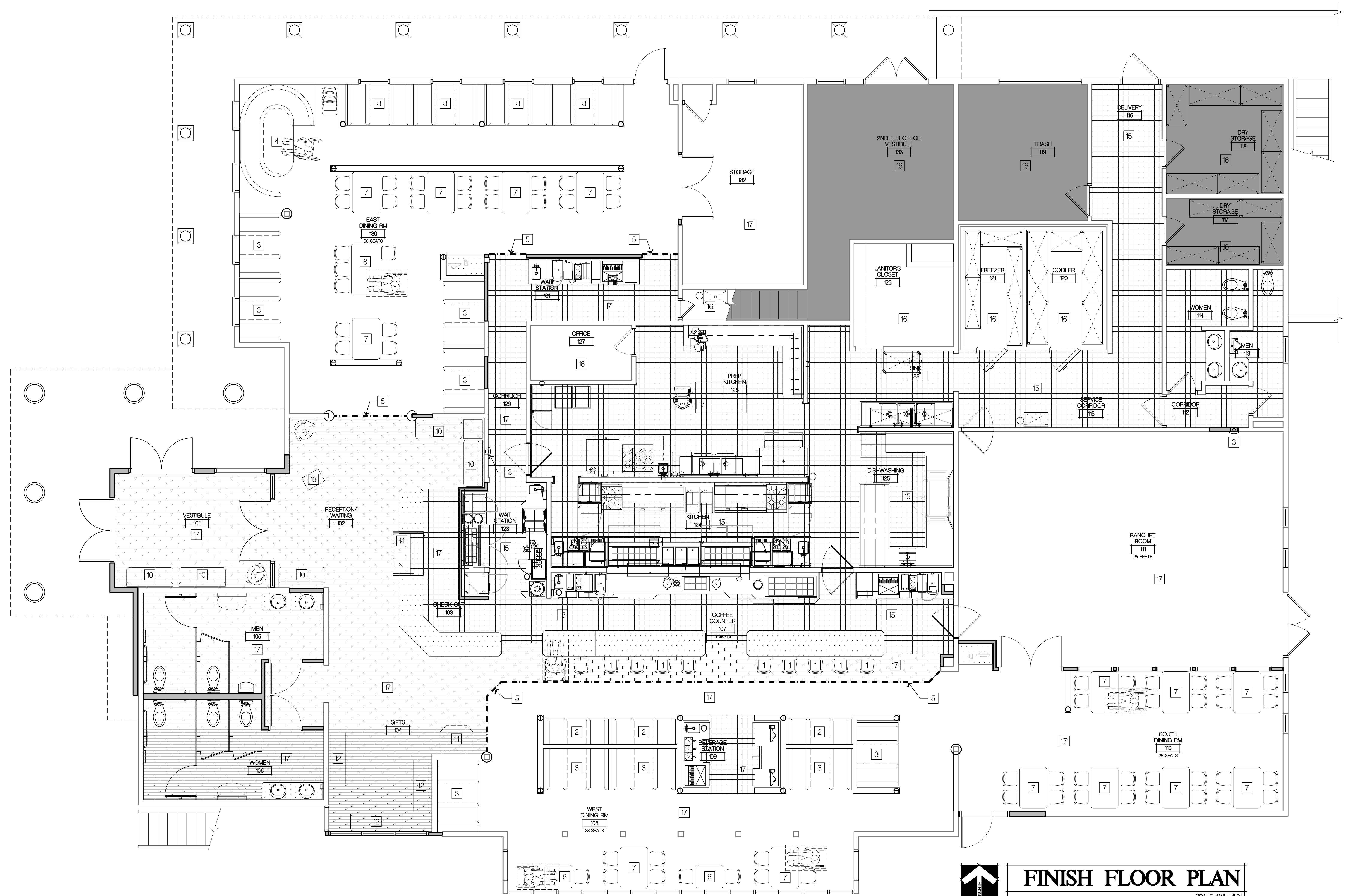
SITE DESIGN  
REVIEW

REVISIONS  
Sym. Description Date

Drawn By KAJ  
Date Issued 7/4/2016  
Scale 1/4" = 1'-0"  
Project No. 15-5465

SHEET No.

A201



#### SHEET NOTES

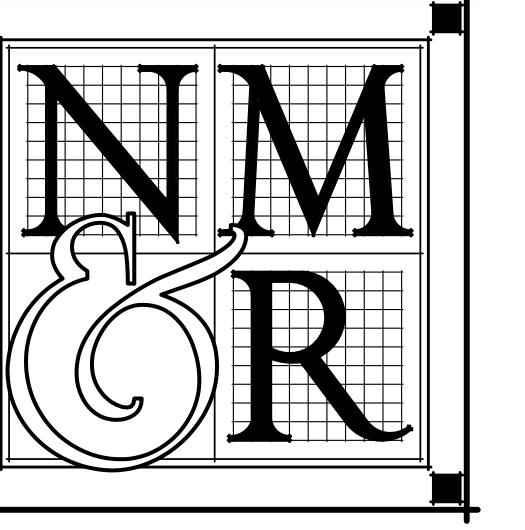
- 1 BAR STOOL
- 2 TWO PERSON BOOTH (2'-6" W x 2'-8" TABLE)
- 3 FOUR PERSON BOOTH (2'-8" x 4'-0" TABLE)
- 4 EIGHT PERSON BOOTH (3'-3" x 7'-0" TABLE)
- 5 FLOORING TRANSITION
- 6 TWO PERSON TABLE (2'-3" W x 2'-8" TABLE)
- 7 FOUR PERSON TABLE (2'-8" x 4'-0" TABLE)
- 8 SIX PERSON SQ. TABLE (2'-8" x 5'-0" TABLE)
- 9 NOT USED
- 10 WAITING AREA BENCH
- 11 JUKE BOX
- 12 GIFT SHELVING
- 13 HOSTESS STAND

- 14 PIE CASE
- 15 EXISTING KITCHEN QT. FLOOR TO REMAIN; INFILL AND PATCH DAMAGED OR REMOVED AREAS TO MATCH EXISTING
- 16 EXISTING FLOOR TO REMAIN; PROTECT IN PLACE
- 17 NEW FLOORING, SEE FIN. SCHED.

#### LEGEND

- NEW MILLWORK, SEE INT. ELEV.
- CERAMIC FLOOR TILE TYPE
- QUARRY TILE TYPE
- EXISTING QUARRY TILE TO BE PATCHED WHERE REQUIRED
- PERMANENT OR ATTACHED FURNITURE
- FLOORING TRANSITION REQUIRED
- (E) CG EXISTING SS. CORNER GUARD TO REMAIN.
- CG-1 3' x 3' SS. CORNER GUARD FROM TOP OF QTB TO CEILING ADHERED TO FRP
- 60" DIAMETER ACCESSIBLE CLEAR TURNING RADIUS TO BE MAINTAINED AT ALL TIMES

- REQUIRED MANEUVERING CLEARANCE AT DOOR
- SEMI-RECESSED FIRE EXTINGUISHER CABINET WITH FE AS PRESCRIBED BY FIRE MARSHAL
- K-TYPE SURFACE-MOUNTED FIRE EXTINGUISHER
- ACCESSIBLE DINING POSITION AT FIXED OR MOBILE TABLE WITH 30" x 48" WHEELCHAIR CLEAR FLOOR SPACE



NICHOLS  
MELBURN  
&  
ROSETTO  
ARCHITECTS + ENGINEERS

555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-138 FAX  
<http://www.nmrdesign.com>

CONSULTANTS

LICENSE STAMPS

REGISTERED ARCHITECT  
DAN S. ROSETTO  
REDDING, CA  
STATE OF OREGON

PROJECT NAME



WILSONVILLE

30175 SW PARKWAY AVENUE  
WILSONVILLE, OR 97070

SHEET TITLE

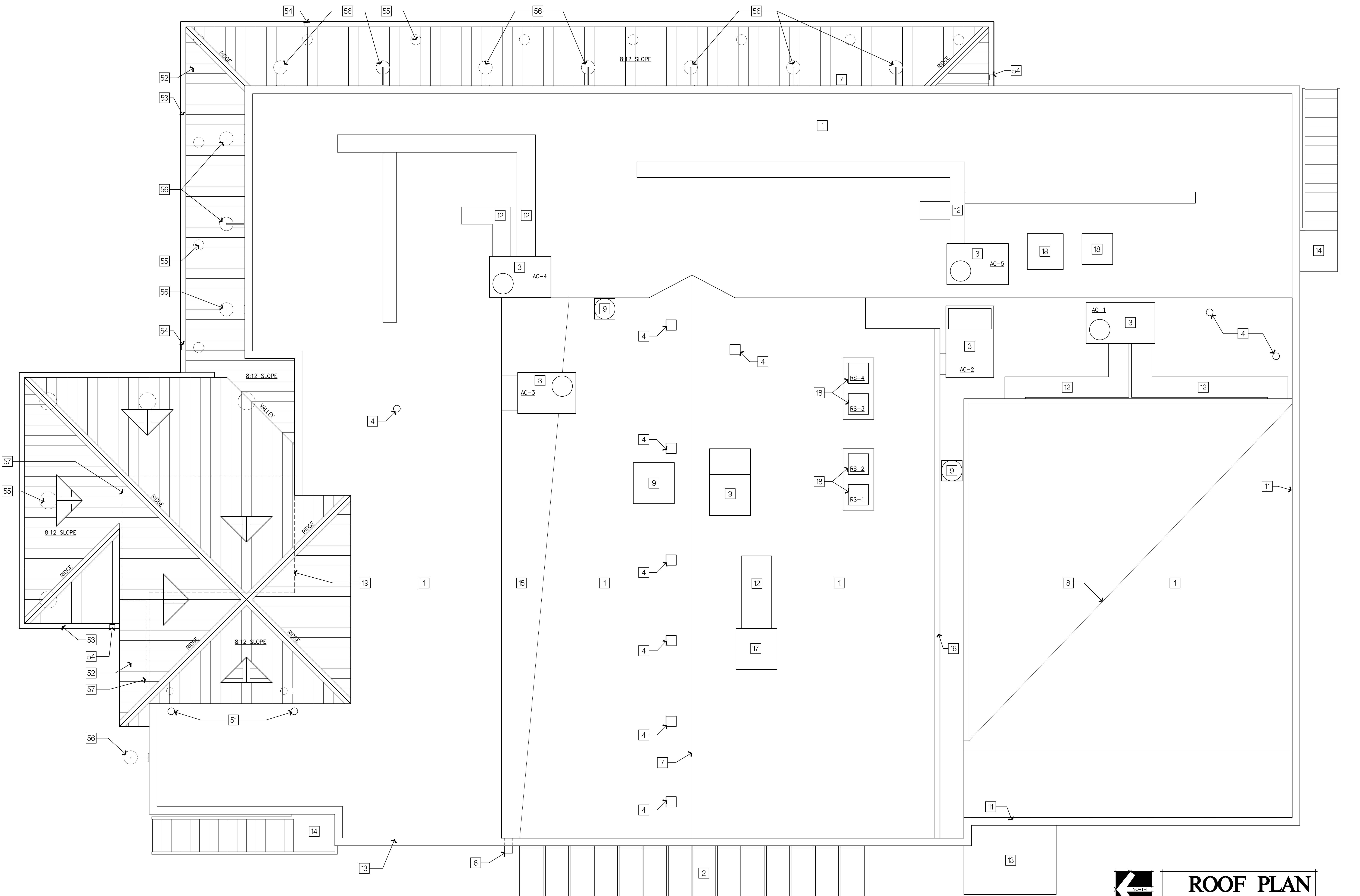
ROOF PLAN

DRAWING STATUS

SITE DESIGN  
REVIEW

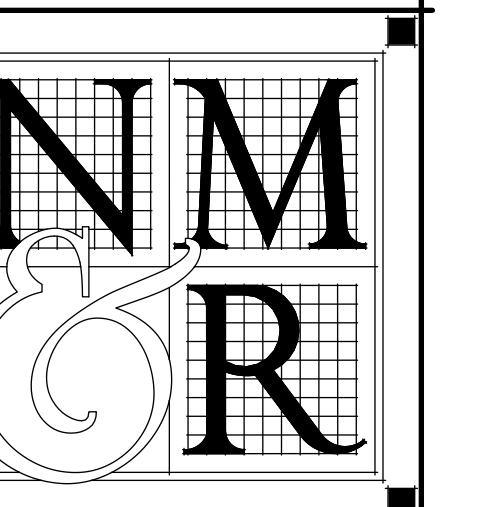
REVISIONS		
Sym.	Description	Date

ROOF PLAN  
SCALE: 1/4" = 1'-0"



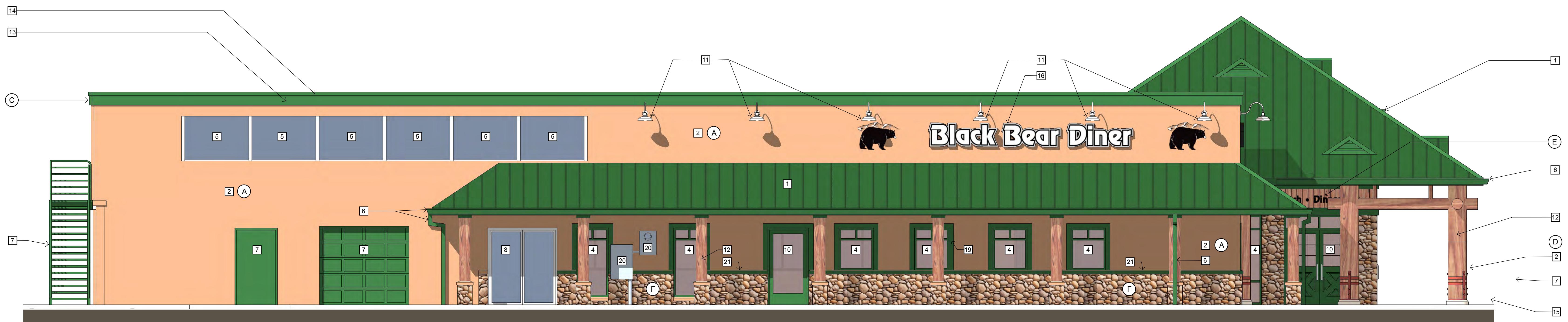
**SHEET NOTES**

<ul style="list-style-type: none"> <li>1 (E) ROOF: REPAIR DAMAGE OR ABANDONED PENETRATIONS PER MANUFACTURER'S REQUIREMENTS.</li> <li>2 (E) SLOPED SKYLIGHT BELOW.</li> <li>3 E.T.R. AIR HANDLING UNIT</li> <li>4 E.T.R. VENT</li> <li>5 E.T.R. ROOF DRAIN</li> <li>6 E.T.R. ROOF SCUPPER AND DOWNSPOUT</li> <li>7 (E) RIDGE</li> <li>8 (E) VALLEY</li> <li>9 E.T.R. EXHAUST FAN</li> <li>10 (E) VENT TO BE ABANDONED/DEMO'D.</li> <li>11 E.T.R. PARAPET</li> <li>12 E.T.R. EXPOSED DUCT</li> </ul>	<ul style="list-style-type: none"> <li>13 E.T.R. ROOF BELOW</li> <li>14 E.T.R. STAIR BELOW</li> <li>15 E.T.R. CRICKET</li> <li>16 E.T.R. GUTTER</li> <li>17 E.T.R. EVAPORATIVE COOLING MAKE UP AIR UNIT</li> <li>18 E.T.R. CONDENSER</li> <li>19 FACE OF (E) WALL BELOW NEW ROOF</li> </ul>	<ul style="list-style-type: none"> <li>51 TOILET PLUMBING VENT</li> <li>52 STANDING SEAM STEEL ROOF, COLOR "HUNTER GREEN"</li> <li>53 6" GALVANIZED STEEL GUTTER, COLOR "HUNTER GREEN"</li> <li>54 DOWNSPOUT LOCATION, SEE EXTERIOR ELEVATIONS. ROUTE WATER INTO EXISTING STORM DRAINAGE SYSTEM OR AWAY FROM BUILDING.</li> <li>55 COLUMN LOCATIONS BELOW ROOF</li> <li>56 EXTERIOR GOOSENECK LIGHT FIXTURES, SEE EXT. ELEVS.</li> <li>57 FACE OF ENTRY / WALL LOCATION BELOW.</li> </ul>	<b>LEGEND</b>  NEW STANDING SEAM STEEL ROOF
--	---	---	---

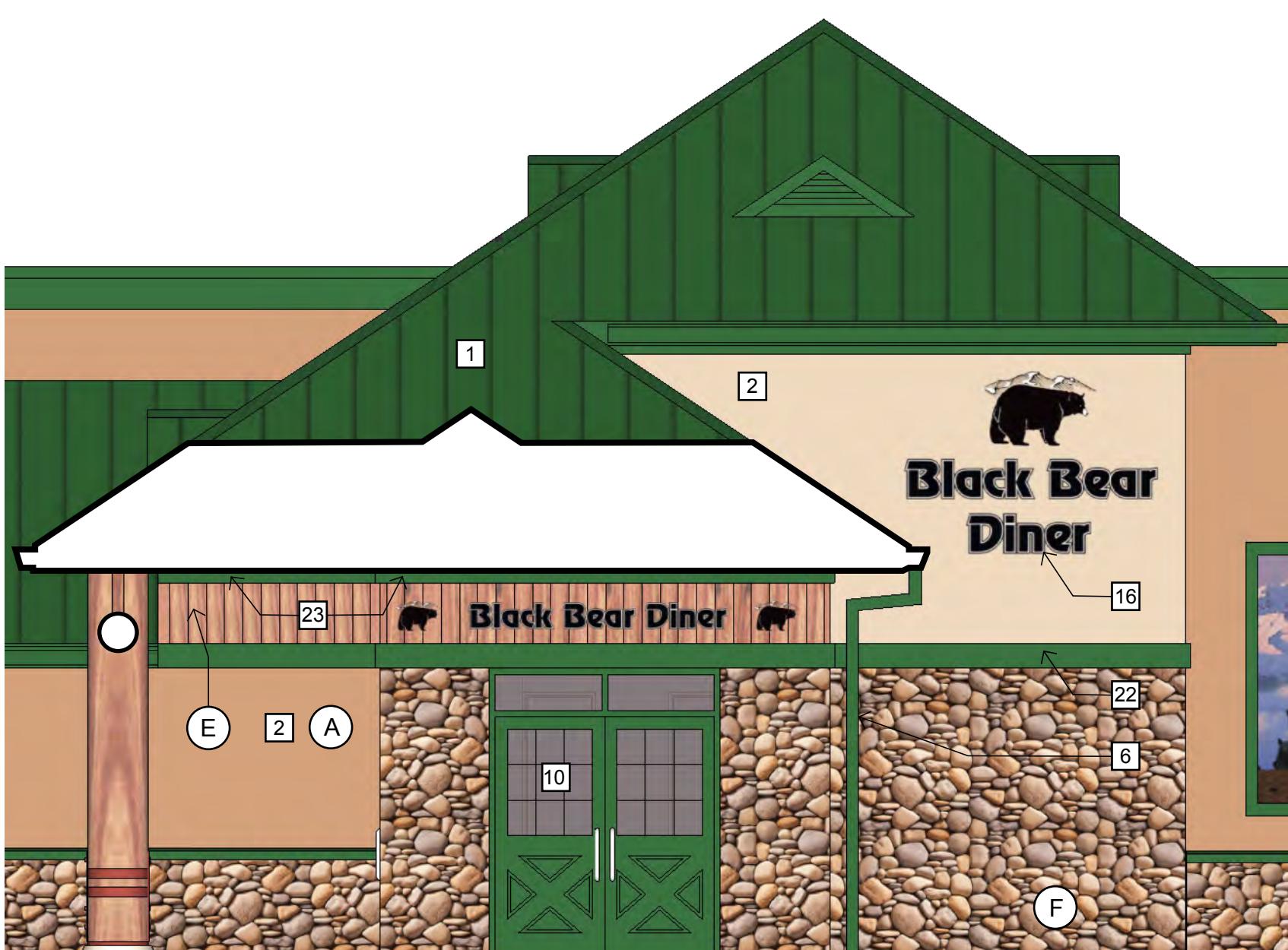


NICHOLS  
MELBURG  
ROSSETTO  
ARCHITECTS + ENGINEERS  
555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-138 FAX  
<http://www.nmrdesign.com>

CONSULTANTS



1 EAST ELEVATION  
SCALE: 1/4"=1'-0"



2 NORTH ELEVATION @ ENTRY  
SCALE: 1/4"=1'-0"



2 NORTH ELEVATION  
SCALE: 1/4"=1'-0"

### KEY NOTES

- ① STANDING SEAM STEEL ROOFING.
- ② ACRYLIC TOP COAT EXTERIOR PLASTER, COLOR AS NOTED.
- ③ EXISTING SIGN TO BE REPLACED WITH BLACK BEAR LOGO.
- ④ STOREFRONT WINDOW, SEE FLOOR PLAN FOR TYPE.
- ⑤ EXISTING WINDOW OR DOOR, POWER WASH, SCRAPE AND PAINT "HUNTER GREEN", 2041-10 BY BENJAMIN MOORE.
- ⑥ PAINTED, GALVANIZED GUTTER AND DOWNSPOUT; ADJUSTABLE CURB MOUNTS, HANGERS, AND DOWNSPOUTS INTO EXISTING SD. SYSTEM WHERE AVAILABLE, AT NEW SIDEWALKS RUN UNDER SURFACE AND DAYLIGHT AT ADJACENT CURB FACE.
- ⑦ EXISTING STEEL STAIR, POWER WASH, SCRAPE AND PAINT "HUNTER GREEN", 2041-10 BY BENJAMIN MOORE.
- ⑧ EXISTING WINDOW OR DOOR, COLOR TO REMAIN, POWER WASH, REMOVE EXISTING SEALANT AND RESEAL WITH SILICONE.
- ⑨ NOT USED
- ⑩ PAINTED OR PRE-FINISHED EXTERIOR DOOR, SEE FLOOR PLAN FOR DOOR TYPE.
- ⑪ GOOSENECK LIGHT FIXTURE, TYPE 6, SEE ELEC'L DWGS.
- ⑫ STRIPPED BARK LOG COLUMN, SEE STRUCT'L DWGS. FINISH WITH NATURAL STAIN COLOR 9204 HEARTWOOD CLEAR BY CABOT.

NOT ALL KEY NOTES ARE USED ON EVERY SHEET.

### GENERAL NOTES

1. ALL FLASHING AND ROOF TOP PENETRATIONS TO BE PAINTED TO MATCH ADJACENT ROOF, WALL OR TRIM COLOR AS APPLICABLE. NO UNPAINTED, GALVANIZED FLASHING OR VENTS TO BE VISIBLE.
2. ALL ITEMS NOTED ARE "NEW" UNLESS SPECIFIED OTHERWISE.
3. ELEV. 0'-0" IS FOR BUILDING REFERENCE ONLY, IS APPROXIMATE, AND DOESN'T CORRESPOND TO ANY KNOWN BENCHMARK.
4. ROOF UNCHANGED EXCEPT AT ADDITION OF METAL ROOF STRUCTURE, SEE BLDG. SECTIONS.
5. AT ELEC'L AND OTHER UTILITY PENETRATIONS PROVIDE FLASHINGS AND FILLERS AS REQUIRED TO PREVENT WATER & PEST INTRUSION.

### LEGEND

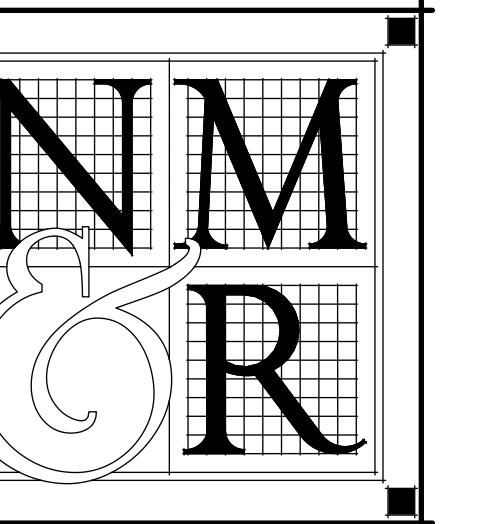
- |  |   |
|--|---|
|  | BASIS-OF-DESIGN EXTERIOR PLASTER: OMEGA PRODUCTS "OMEGAFLEX", FINISH FINE, TEXTURE: IMPERFECT SMOOTH<br>NEW PAINT - "JACKSON TAN" HC-46 BY BENJAMIN MOORE WITH SATIN EXTERIOR LATEX.  |
|  | NEW PAINT - "BROOKLINE BEIGE" HC-47 BY BENJAMIN MOORE WITH SATIN EXTERIOR LATEX.  |
|  | NEW PAINT - "HUNTER GREEN" 2041-10 BY BENJAMIN MOORE SEMI-GLOSS EXTERIOR LATEX.   |
|  | EXISTING MASONRY - REPAINT "JACKSON TAN" HC-46 BY BENJAMIN MOORE WITH SATIN EXTERIOR LATEX.   |
|  | NEW VERTICAL WOOD T & G SIDING - NATURAL STAIN COLOR 9204 HEARTWOOD CLEAR BY CABOT.   |
|  | NEW STONE VENEER - EL DORADO STONE RIVER ROCK "Yakima" COMPLY WITH ICC EVALUATION SERVICE REPORT EST-2125, LAYER OVER CONCRETE AND MASONRY SECTION 4.2.1.2., APPLY VENEER DIRECTLY TO CLEARED SURFACE WITHOUT LATHE. REMOVE EXISTING CULTURED STONE PRIOR TO INSTALLING NEW CULTURED STONE WHERE APPROPRIATE. |

REVISIONS  
Sym. Description Date

Drawn By KAJ  
Date Issued 7/20/16  
Scale 1/4" = 1'-0"  
Project No. 15-5465

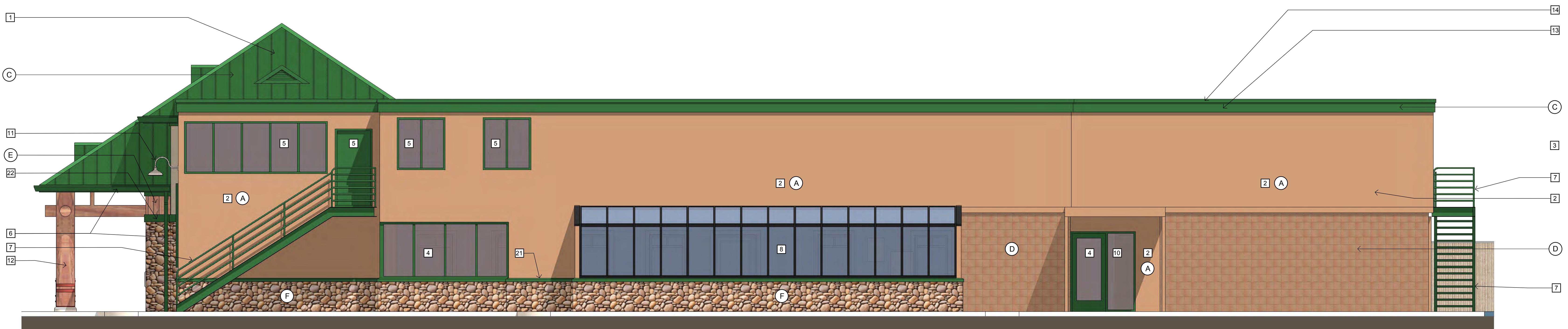
SHEET No.

A301



NICHOLS  
MELBURG  
&  
ROSETTO  
ARCHITECTS + ENGINEERS  
555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-138 FAX  
<http://www.nmrdesign.com>

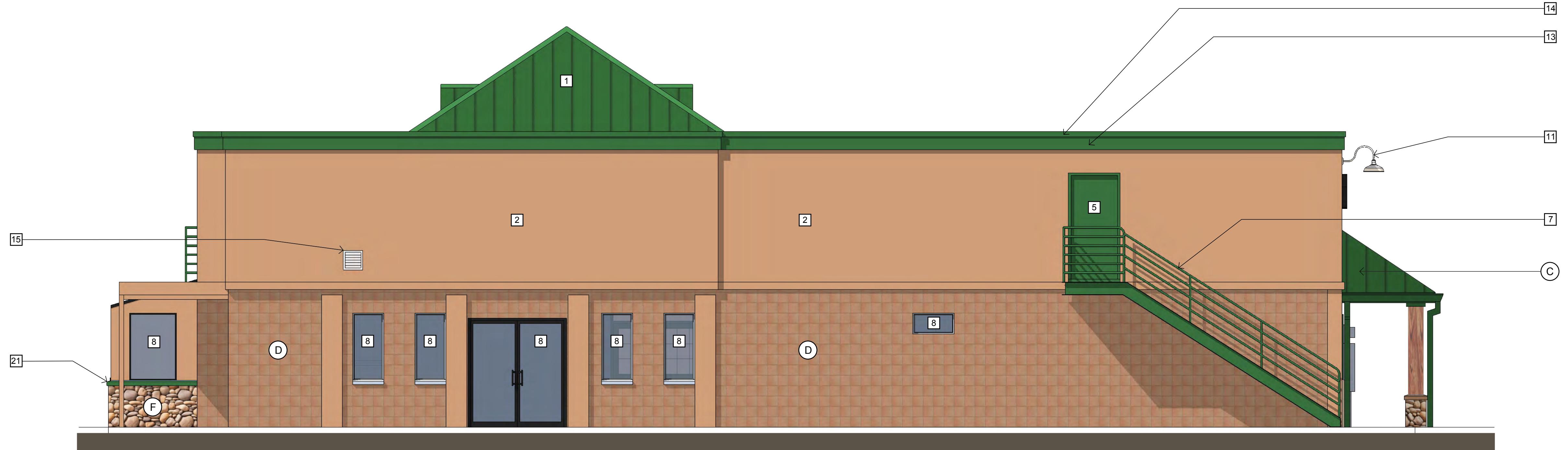
CONSULTANTS



1 WEST ELEVATION  
SCALE: 1/4"=1'-0"



3 EAST ELEVATION @ ENTRY  
SCALE: 1/4"=1'-0"



2 SOUTH ELEVATION  
SCALE: 1/4"=1'-0"



PROJECT NAME  
  
Black Bear  
Diner  
WILSONVILLE

30175 SW PARKWAY AVE  
WILSONVILLE, OR 97070

SHEET TITLE  
EXTERIOR  
ELEVATIONS

DRAWING STATUS  
SITE DESIGN  
REVIEW

REVISIONS  
Sym. Description Date

Drawn By KAJ  
Date Issued 7/20/16  
Scale 1/4" = 1'-0"  
Project No. 15-5465

SHEET No.

A302

### KEY NOTES

- 1 STANDING SEAM STEEL ROOFING.
- 2 ACRYLIC TOP COAT EXTERIOR PLASTER, COLOR AS NOTED.
- 3 EXISTING SIGN TO BE REPLACED WITH BLACK BEAR LOGO.
- 4 STOREFRONT WINDOW, SEE FLOOR PLAN FOR TYPE.
- 5 EXISTING WINDOW OR DOOR, POWER WASH, SCRAPE AND PAINT "HUNTER GREEN", 2041-10 BY BENJAMIN MOORE.
- 6 PAINTED, GALVANIZED GUTTER AND DOWNSPOUT; EXISTING DOWNSPOUTS TO BE REMOVED AND PIPES TIED INTO EXISTING S.D. SYSTEM WHERE AVAILABLE, AT NEW SIDEWALKS RUN UNDER SURFACE AND DAYLIGHT AT ADJACENT CURB FACE.
- 7 EXISTING STEEL STAIR, POWER WASH, SCRAPE AND PAINT "HUNTER GREEN", 2041-10 BY BENJAMIN MOORE.
- 8 EXISTING WINDOW OR DOOR, COLOR TO REMAIN, POWER WASH, REMOVE EXISTING SEALANT AND RESEAL WITH SILICONE.
- 9 NOT USED
- 10 PAINTED OR PRE-FINISHED EXTERIOR DOOR, SEE FLOOR PLAN FOR DOOR TYPE.
- 11 GOOSENECK LIGHT FIXTURE, TYPE 6, SEE ELEC'L DWGS.
- 12 STRIPPED BARK LOG COLUMN, SEE STRUCT'L DWGS. FINISH WITH NATURAL STAIN COLOR 9204 HEARTWOOD CLEAR BY CABOT.

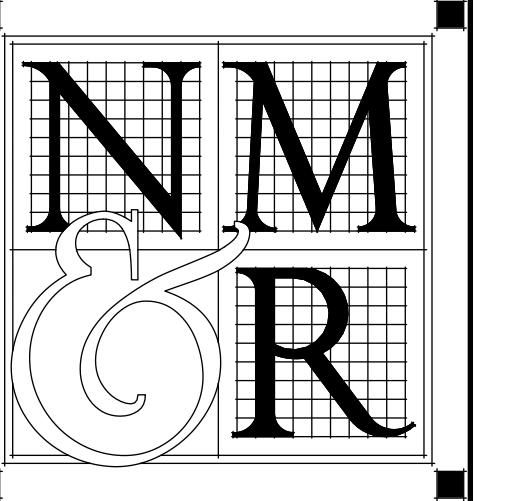
NOT ALL KEYNOTES ARE USED ON EVERY SHEET.

### GENERAL NOTES

- 13 RIGID FOAM BAND, 3" D x 12" W, FINISHED WITH PLASTER AND ACRYLIC TOP COAT, COLOR "HUNTER GREEN".
- 14 GALVANIZED PARAPET CAP FLASHING WITH HURRICANE CLIPS, COLOR AS INDICATED.
- 15 EXISTING VENT OR OTHER ITEM, PAINT TO MATCH SURROUNDING COLOR.
- 16 BLACK BEAR SIGN OR LOGO PROVIDED BY OWNER, INSTALLED BY CONTRACTOR, PROVIDE ELECTRICAL POWER AND AMBIENT DAYLIGHT CONTROL SWITCH, ATTACH DIRECTLY TO STRUCTURE OR MIN. 4 x 6 BLOCKING IN WALL. SEE SIGNAGE PACKAGE.
- 17 NATURE SCENE PROVIDED BY OWNER, INSTALLED BY CONTRACTOR, PROVIDED WITH EXISTING COAT OF PLASTER ON SUBSTRATE, CEDAR ROUGH CUT 1" x 6" SURROUNDING FRAME ANCHORED TO BLOCKING IN WALL WITH COUNTERSUNK BOLTS; PAINT HUNTER GREEN.
- 18 FIRE DEPT. KEY "KNOX BOX".
- 19 RIGID FOAM TRIM, 2" D x 5" W, FINISHED WITH PLASTER AND ACRYLIC TOP COAT, COLOR "HUNTER GREEN".
- 20 EXISTING ELECTRICAL PANEL & METER TO REMAIN, PROTECT IN PLACE.
- 21 RIGID FOAM SILL, 4" D x 4" H SLOPING AWAY FROM WALL, FINISHED WITH PLASTER AND ACRYLIC TOP COAT, COLOR "HUNTER GREEN".
- 22 RIGID FOAM TRIM BAND, 4" D x 8" H SLOPING AWAY FROM WALL, FINISHED WITH PLASTER AND ACRYLIC TOP COAT, COLOR "HUNTER GREEN".
- 23 2 x 4 ROUGH CUT TRIM BAND, COLOR "HUNTER GREEN".

### LEGEND

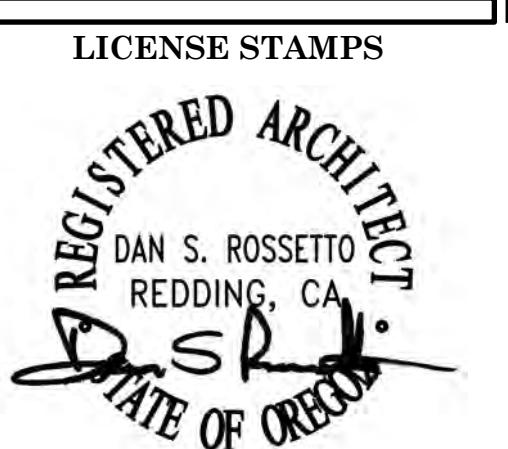
- |  |  |
|--|--|
|  | BASIS-OF-DESIGN EXTERIOR PLASTER: OMEGA PRODUCTS "OMEGAFLEX", FINISH FINE, TEXTURE: IMPERFECT SMOOTH<br>NEW PAINT - "JACKSON TAN" HC-46 BY BENJAMIN MOORE WITH SATIN EXTERIOR LATEX.   |
|  | NEW PAINT - "BROOKLINE BEIGE" HC-47 BY BENJAMIN MOORE WITH SATIN EXTERIOR LATEX.   |
|  | NEW PAINT - "HUNTER GREEN" 2041-10 BY BENJAMIN MOORE SEMI-GLOSS EXTERIOR LATEX.  |
|  | EXISTING MASONRY - REPAINT "JACKSON TAN" HC-46 BY BENJAMIN MOORE WITH SATIN EXTERIOR LATEX.  |
|  | NEW VERTICAL WOOD T & G SIDING - NATURAL STAIN COLOR 9204 HEARTWOOD CLEAR BY CABOT.  |
|  | NEW STONE VENEER - EL DORADO STONE RIVER ROCK "Yakima" COMPLY WITH ICC EVALUATION SERVICE REPORT EST-2125, LAYER OVER CONCRETE AND MASONRY SECTION 4.1.2., APPLY VENEER DIRECTLY TO CLEANED SURFACE WITHOUT LATHE. REMOVE EXISTING CULTURED STONE PRIOR TO INSTALLING NEW CULTURED STONE WHERE APPLICABLE. |



NICHOLS  
MELBURG  
ROSSETTO  
ARCHITECTS + ENGINEERS

555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-138 FAX  
<http://www.nmrdesign.com>

CONSULTANTS



1 PERPSECTIVE FROM NORTHEAST  
EXISTING CONDITIONS



2 PERPSECTIVE FROM NORTHEAST  
PROPOSED ALTERATIONS

PROJECT NAME  
  
**Black Bear Diner**

WILSONVILLE

30175 SW PARKWAY AVE  
WILSONVILLE, OR 97070

SHEET TITLE  
EXTERIOR  
PERSPECTIVES

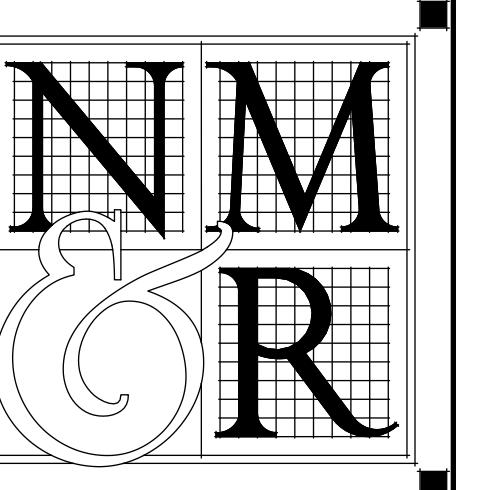
DRAWING STATUS  
SITE DESIGN  
REVIEW

REVISIONS  
Sym. Description Date

Drawn By	KAJ
Date Issued	7/20/16
Scale	N.T.S.
Project No.	15-5465

SHEET No.

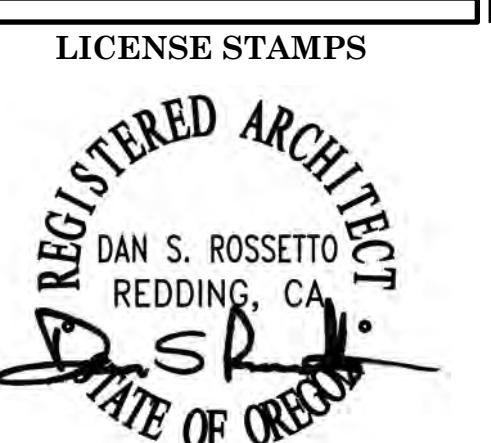
**A401**



NICHOLS  
MELBURG  
ROSSETTO  
ARCHITECTS + ENGINEERS

555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-138 FAX  
<http://www.nmrdesign.com>

CONSULTANTS



1 | PERPSECTIVE FROM NORTHWEST  
EXISTING CONDITIONS



2 | PERPSECTIVE FROM NORTHWEST  
PROPOSED ALTERATIONS

PROJECT NAME  
 Black Bear Diner

WILSONVILLE

30175 SW PARKWAY AVE  
WILSONVILLE, OR 97070

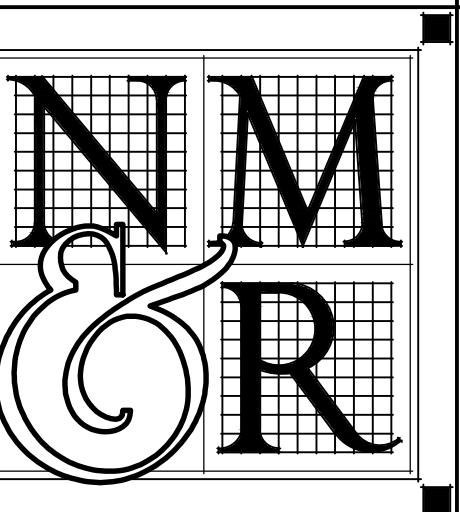
SHEET TITLE  
EXTERIOR  
PERSPECTIVES

DRAWING STATUS  
SITE DESIGN  
REVIEW

REVISONS  
Sym. Description Date

Drawn By	KAJ
Date Issued	7/20/16
Scale	N.T.S.
Project No.	15-5465

SHEET NO.  
A402



NICHOLS  
MELBURG  
ROSSETTO  
ARCHITECTS + ENGINEERS

555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-0138 FAX  
<http://www.mrdesign.com>

CONSULTANTS



LICENSE STAMPS

PROJECT NAME



WILSONVILLE

30175 SW PARKWAY AVENUE  
WILSONVILLE, OR 97070

SHEET TITLE

ELECTRICAL  
SITE PLAN

DRAWING STATUS

CONSTRUCTION  
DOCUMENTS

BUILDING DEPT APPROVAL

REVISIONS

Sym. Description Date

Drawn By	J.S.
Date Issued	6/22/2016
Scale	AS NOTED
Project No.	15-5465

SHEET No.

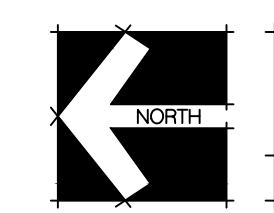
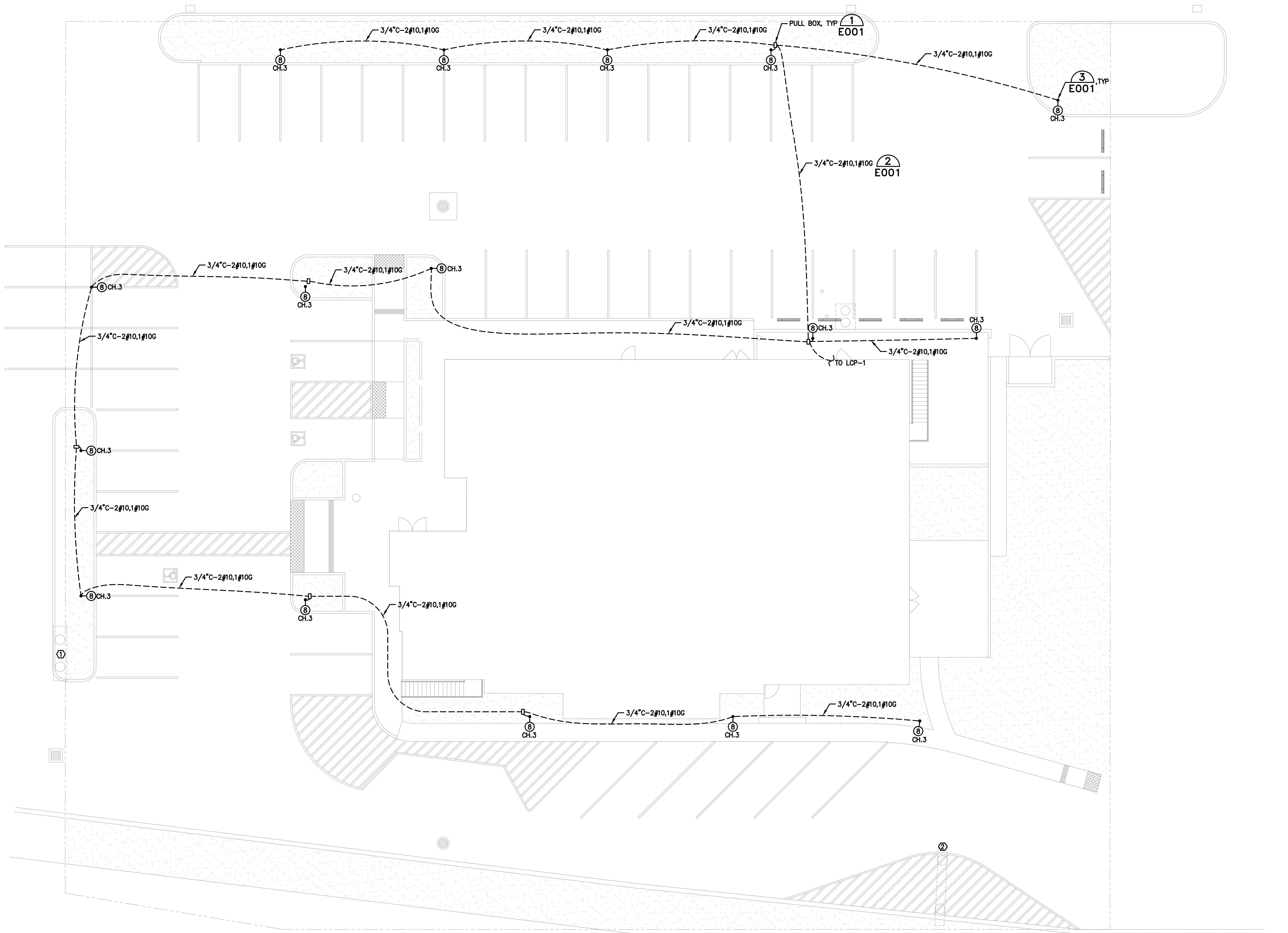
E101

## KEY NOTES

- ① EXISTING POLE-MOUNTED SIGN TO REMAIN. RECONNECT TO NEW PANEL AND MAKE MODIFICATIONS AS REQUIRED FOR SIGN TO REMAIN ENERGIZED.
- ② EXISTING POLE-MOUNTED SIGN TO BE REPLACED UNDER FUTURE PERMIT.

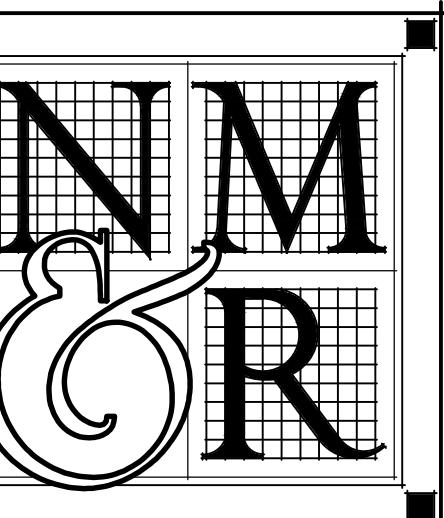
## GENERAL NOTES

1. UNLESS OTHERWISE NOTED EXISTING SITE LIGHTING SHALL BE DISCONNECTED AND REMOVED.
2. COORDINATE REPAIR OF ASPHALT WITH GENERAL CONTRACTOR.



## ELECTRICAL SITE PLAN

SCALE: 1' = 10'-0"



NICHOLS  
MELBURG  
ROSETTO  
ARCHITECTS + ENGINEERS

555 MAIN STREET, SUITE 300  
CHICO, CA 95928  
(530) 891-1710 (530) 891-0138 FAX  
<http://www.mrdesign.com>

**CONSULTANTS**

**PACE**  
ENGINEERING  
REDDING, CALIFORNIA

**LICENSE STAMPS**



WILSONVILLE

30175 SW PARKWAY AVENUE  
WILSONVILLE, OR 97070

**SHEET TITLE**

**PHOTOMETRIC  
SITE PLAN**

**DRAWING STATUS**

**CONSTRUCTION  
DOCUMENTS**

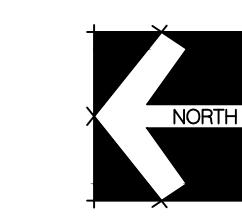
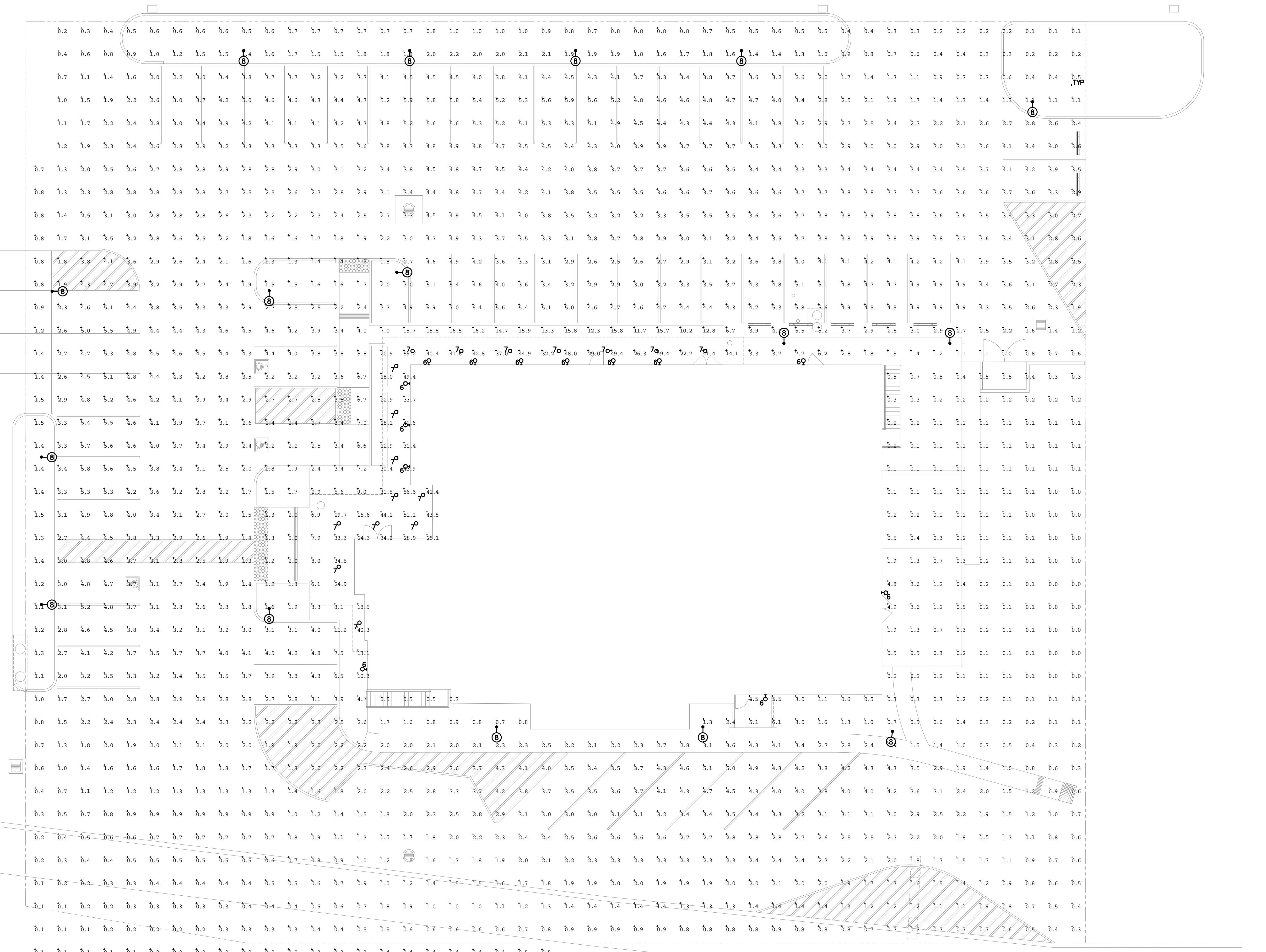
**BUILDING DEPT APPROVAL**

**REVISIONS**

**Sym. Description Date**

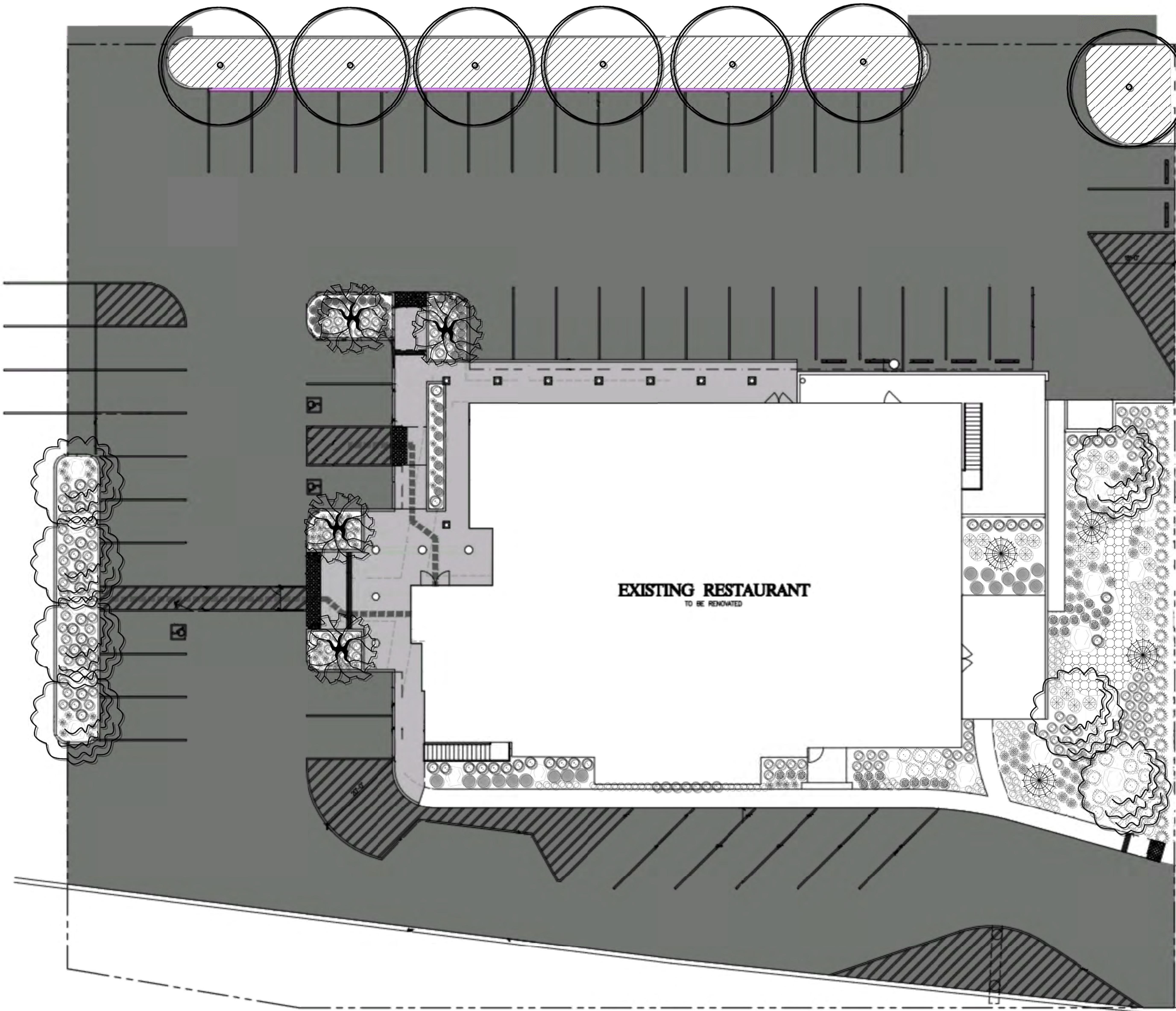
**Drawn By** JS  
**Date Issued** 6/22/2016  
**Scale** AS NOTED  
**Project No.** 15-5465

**SHEET No.** E102



**PHOTOMETRIC SITE PLAN**

SCALE: 1" = 10'-0"



Plant Legend				
Symbol	Qty	Size	Common Name	Botanical
	28	5'-6'	American Arborvitae	<i>Thuja occidentalis</i>
	4	5'-6'	Colorado Blue Spruce	<i>Picea pungens 'Glauca'</i>
	39	1 Gal	Coral Bells	<i>Heuchera</i>
	49	1 Gal	Daylily	<i>Hemerocallis sp.</i>
	4	2" Cal	Eastern Redbud	<i>Cercis canadensis 'Forest Pansy'</i>
	26	1 Gal	English Lavender	<i>Lavandula angustifolia</i>
	156	2 Gal	Evergreen Huckleberry	<i>Vaccinium ovatum</i>
	7		Existing Cherry	<i>Prunus spp.</i>
	28	5 Gal	Oak Leaf Hydrangea	<i>Hydrangea quercifolia 'Pee Wee'</i>
	7	2" Cal	Red Maple	<i>Acer rubrum 'Bowhall'</i>
	25	5 Gal	Rhododendron	<i>Rhododendron 'Pmj'</i>
	18	5 Gal	Rose 'Double Knock Out'	<i>Rosa 'Double Knock Out'</i>
	49	1 Gal	Sword Fern	<i>Polystichum munitum</i>
	84	1 Gal	Variegated Japanese Sedge	<i>Carex oshimensis 'Evergold'</i>
	42	5 Gal	Zebra Grass	<i>Miscanthus sinensis 'Strictus'</i>

Dry Creek Bed (2-6" River Rock)

Existing Landscape to Remain. Add 3" Layer of Bark Mulch

Landscape Boulder 600-900 Lb

## Landscape Planting Plan

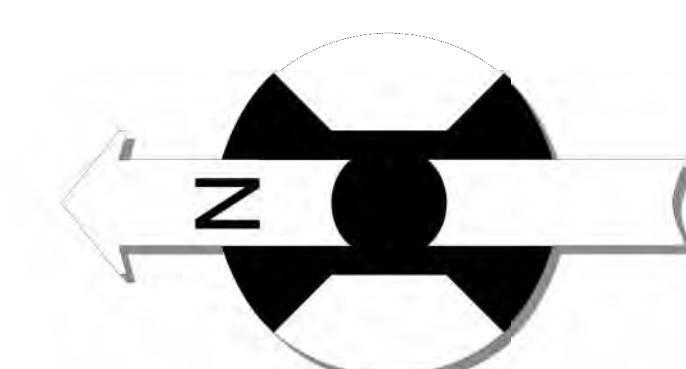


Crystal Greens Landscape, Inc.  
PO Box 568  
11627 SE Capps Rd.  
Clackamas, OR. 97015

Design By: Kyle Kalian  
June 10, 2016

**Black Bear Diner**  
**Wilsonville**  
30175 SW Parkway Avenue  
Wilsonville, OR. 97070

Landscape Planting Plan



Scale 1"-10'  
Sheet No.  
**L1.0**