Critical Infrastructure and Key Resource information for South Kitsap Fire and Rescue

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Certification Statement

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Abstract

The September 11, 2001 attacks on the United States brought a new focus on common response methodology, identification of risks and vulnerabilities, and response preparedness throughout our nation. The federal government provided direction and established national policy to support this focus based on several Presidential Directives issued at that time. These efforts reached from the federal government down to the state and local government level including fire and emergency medical services. The problem is South Kitsap Fire Rescue (SKFR) responders lack immediately available Critical Infrastructure and Key Resource (CIKR) information to assist in developing operational strategies at significant emergency incidents potentially leading to increased injuries, deaths, property damage, and liability. The purpose of this research was to develop methods of providing immediate and accurate information for operational planning at emergency incidents to prevent additional risks of injury, death, and property damage. This Applied Research Project (ARP) used an action research method to answerer the following research questions: How should critical infrastructure and key resources be identified? What reference data should be included with the critical infrastructure and key resource information? What initial action plans should be included for use with the critical infrastructure and key resource information? How should the critical infrastructure and key resource information be maintained and distributed?

A literature review, interviews, and data studies and comparisons supported the need and identified the key issues for the development of CIKR information for SKFR. Recommendations were made to implement the identified CIKR information developed with this ARP into SKFR operations and work towards improving the program through advances in technology and future expansion to include all Kitsap County fire agencies.

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Introduction

Planning and preparedness today is a major concern for all fire agencies across the United States. These topics expanded for all of us with the global war on terrorism which changed the first responder world as we knew it when the World Trade Center was attacked over a decade ago. The need to expand our view of how we should plan for large scale events in our communities has changed over the past eleven years. Now that every community, no matter what the size or make up, has a level of vulnerability the reality is that local first responders will be part of any initial actions taken following an event.

The events of 2001 brought about a national focus on the need for common methodology, practices, and preparedness for all agencies involved with preparation for, mitigation, and response to incidents. This effort made its way down from the federal level to both state and local government including the fire and emergency medical services. The federal government provided direction and established national policy to bring about common operations throughout the nation. Several pieces of this direction came from the highest federal level with Homeland Security Presidential Directives (HSPD). HSPD-5 issued in February of 2003 by President Bush established a national mandate for all responders to work under a common National Incident Management System (NIMS). This directive created the goal for all levels of government nationwide to work more efficiently and effectively using a common framework to manage incidents (HSPD 5, 2003).

Additional direction came that year from HSPD-7 which specifically directed federal agencies to identify, prioritize, and plan for response to Critical Infrastructure and Key Resources (CIKR) assigned to them. HSPD-7 also directs coordination with state and local governments as a part of accomplishing the objectives of this directive (HSPD 7, 2003). During

the past decade, this preparation focus for fire and emergency medical service providers has expanded beyond the original concerns about terrorism into the broader based preparation for all hazards that potentially could threaten our nation's communities. It is now understood that the challenges of terrorist attacks are real for this nation, yet major disasters and other large scale emergency events often require the same level of preparation and information when they occur in our local communities.

The problem is South Kitsap Fire and Rescue's (SKFR) responders lack immediately available critical infrastructure and key resource information to assist in developing operational strategies at significant emergency incidents potentially leading to increased injuries, deaths, property damage, and liability. The purpose of this research is to develop methods of providing immediate and accurate information for operational planning at emergency incidents to prevent additional risks of injury, death, and property damage. This applied research project will use an action research method and answer the following research questions: (a) How should critical infrastructure and key resources be identified? (b) What reference data should be included with the critical infrastructure and key resource information? (c) What initial action plans should be included for use with the critical infrastructure and key resource information?, and (d) How should the critical infrastructure and key resource information be maintained and distributed?

Background and Significance

SKFR is located on the southern third of the Kitsap Peninsula in the center of the Puget Sound Basin in Washington State. Primarily a residential community with an estimated population of 72,046, the district covers 118 square miles. Due to the features of the peninsula, the district has 22 miles of tidal waterfront and adjacent salt-water areas. SKFR's current borders are the Pierce County line on the southern edge, the Mason County line on the western edge, and

the City of Bremerton and Puget Sound to the north and on the east. SKFR is a combination fire district with a career line staffing of 84, office and administrative staff of 16 and volunteer membership of 79. From its start in 1946 as a volunteer organization, the district has made the transition to a substantially career department primarily over the past 35 years with the hiring of career staff starting in the 1970s. Operating from one station at that time, the career staffing has increased gradually over time and has been distributed across the formerly volunteer areas of the district. Today, SKFR is an internationally accredited agency through the Center for Public Safety Excellence (CPSE) and the Commission on Fire Accreditation International (CFAI) with eight of its sixteen stations staffed on a full time basis. The district provides basic and advance life support with transportation to medical facilities and fire suppression services (South Kitsap Fire and Rescue [SKFR], 2012)

The Kitsap Peninsula and SKFR's population has grown considerably over the past 65 years and remains a geographical area isolated by Puget Sound. All fire agencies on the peninsula including Mason and Pierce Counties share a common interest in maintaining mutual aid relationships. Many of the agencies on the peninsula are limited in staffing and rely on this mutual aid for critical tasking both for responses near agency borders and for critical tasking numbers at the first alarm and greater level (South Kitsap Fire and Rescue [SKFR], 2011, p. 15). On region wide events or on multiple alarm responses, there is an understood and expected dependence on neighboring agencies due to this geographical isolation.

SKFR is currently in its twelfth year as an accredited agency through CFAI and continues to actively work on improving and expanding the delivery of services it provides to its citizens. As part of SKFR's Standard of Response Cover (SOC), risk assessment of the community is required. In its current form, the SKFR SOC focuses primarily on building fire risk in

commercial structures. A detailed review and categorizing of these commercial structures and their associated features produces a numerical risk rating which the agency uses when considering the distribution and concentration of resources in the community. The SOC also addresses, primarily in narrative form, a number of potential risks outside of the building fire risk. These general descriptions and identification of potential disaster type events do not provide any responder information or response guidelines (South Kitsap Fire and Rescue [SKFR], 2010, Chapter 4).

The SOC risk assessment requirements from CFAI direct a broad look at the real world factors that represent risks in the community. CFAI's intent in risk assessment is to evaluate community risk factors in the areas of building fire, mobile fire, and non-structural hazards that present risk to the community (Center for Public Safety Excellence, Inc [CPSE], 2008, p. 23). The physical risk factors in every community require identification and understanding for proper documentation, and preventative or response planning to take place. There are a number of key factors to consider. How a community is set up by political boundaries and topography each directly affects response considerations. Transportation networks in the areas of roads, rail lines, airports, and waterways each need assessment. Disaster exposure is dependent on many variables across the county, yet every community has some level of risk to be concerned with. Within SKFR these include a number of reasonably identified and expected risks based on historical data. Included in CFAI's listing of concerns in this area are CIKR (CPSE, 2008, Chapter 3).

The National Fire Academy (NFA) course, Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM), directs the Executive Fire Officer (EFO) to recognize their responsibility in analyzing their agency's and community's level of preparedness. The EAFSOEM course calls for the EFO to not only accept personal responsibility for planning

and preparedness in their community, but teaches the EFO to develop procedures and processes that will enhance their agency's ability to manage events if the events were to occur (National Fire Academy [NFA], 2012). Much of the EAFSOEM course content was directed towards simulations in managing large scale events in a fictitious community known as "Central City". Part of the process involved with the multiple days of simulation was developing an understanding of and defining what the risks were to Central City. Once defined, the students would attempt to apply the most appropriate response based on the event type and use the limited resources effectively in mitigating the problem at hand. One of the invaluable pieces of information during the course was the work completed in class before the event to identify what the important infrastructure and critical resources were in the Central City area of operations. Proper documentation and access to this identified information was instrumental in good decision making at the strategic level during the simulations.

As an accredited agency through CFAI, SKFR has a number of performance indicators it addresses through the self assessment process. In criterion 2.C on non fire risk assessment and response strategies, the agency is directed to assess the nature and magnitude of potential hazards and identify appropriate strategies and methods of operation to mitigate potential emergencies (Center for Public Safety Excellence, Inc [CPSE], 2009, Chapter 4). During the 2010 CFAI site team review when SKFR completed the re-accreditation process for the third time, the site team had several recommendations for areas of improvement. CFAI performance indicator 5H.2 "The agency has conducted and documented a vulnerability assessment and operational plan to protect and secure the agency's specific critical infrastructure including but not limited to materials and supplies, apparatus and facilities security, fuel, and information systems" (Center for Public Safety Excellence, Inc [CPSE], 2006, Chapter 4) is one recommendation that relates to the topic

of this Applied Research Paper (ARP). The site team members directed SKFR towards a more detailed analysis of potential hazards to SKFR itself, as critical community infrastructure and its response operations.

Within SKFR there is a need to have the community's CIKR identified and available to responders during decision making. The limited availability of resources to mitigate large scale events in SKFR combined with the geographical isolation of the community make this critical for SKFR. To assure the most effective use of SKFR's resources in preventing injuries, deaths, property damage, and liability during large scale events; available and known community information must be accessible to responders. The ability to identify and use CIKR in operational decision making within SKFR supports several of the United States Fire Administration (USFA) objectives, most specifically the second and third goals to "improve local planning and preparedness" and "improve the fire and emergency service's capability for response and recovery from all hazards" (United States Fire Administration [USFA], 2011, p. 1-4).

Literature Review

The main focus of this literature review was directed towards the four research questions relating to CIKR information for SKFR. The literature review was conducted with the use of books, journals, magazines, internal Kitsap County and SKFR publications, and internet sources. Materials were gathered through the local library, the Learning Resource Center (LRC) at the National Fire Academy (NFA), internet search engines, and individual collections at SKFR and the Kitsap County Department of Emergency Management (DEM).

In addressing the research questions this ARP is guided by, the researcher started at a broad level looking at what national standards or expectations are in these areas. Homeland Security Presidential Directive 7 issued in December of 2003 established national policy directed

towards the identification, prioritization, and protection of critical infrastructure in the United States (US). This directive was intended to dictate similar actions by all aspects of government, federal, state, and local agencies in planning for and protecting CIKR nationwide. The policy established and goal of this directive was to prevent attacks that could cause a number of impacts to our nation. These included: (a) catastrophic health or casualty incidents, (b) impairment of federal departments or agencies from performing their missions, (c) undermining of state and local governments ability to provide essential services, (d) damage to private sector's capability to orderly function, (e) negative effects on our nations economy, and (e) impacts on the public's morale and confidence in our economy and political institutions. National level infrastructure is broken down into sectors for individual federal agencies to focus on and includes: (a) food and agriculture, (b) public health, (c) drinking water, (d) energy production, (e) banking and finance, (f) national monuments and icons, and (g) defense industrial bases (HSPD 7, 2003). The directive also requires federal department and agencies to work with relevant sectors to reducing the consequences for all possible failures, not only the ones intentionally caused by terrorism.

The National Infrastructure Protection Plan (NIPP) purpose statement directs cooperation between all levels of government, private sector, and non government organizations in achieving the goal of protecting our nation's CIKR (Department of Homeland Security [DHS], 2009, p. 8). The overall goal of the NIPP is to:

> Build a safer, more secure, and more resilient America by preventing, deterring, neutralizing, or mitigating the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit elements of our Nation's CIKR, and to strengthen national preparedness, timely response, and rapid recovery to CIKR in the event of an attack, natural disaster, or other emergency (DHS, 2009, p. 9).

The NIPP continues on to address protecting CIKR beyond the threats from terrorism and calls for protections and preparedness in the “all hazards” context. It addresses the direct impacts and cascading effects of natural disasters or other events on the nations CIKR. The key terms glossary from the NIPP helps with a general definition of CIKR as derived from the national planning level.

> Critical Infrastructure. Systems and Assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction.
>
> Key Resources. As defined in the Homeland Security Act, key resources are publicly or privately controlled resources essential to the minimal operations of the economy and government (DHS, 2009, p. 109).

In the paper, *Disaster Management and Community Planning, and Public Participation: How to Achieve Sustainable Hazard Mitigation*, the author touches on the ideological roots of community planning and disaster management. Although she finds that these topics share some common features, they each address issues that should overlap when it comes to hazard mitigation for a community. Of key importance in understanding and mitigating risks in a community is the identification of hazards located in that community. Local area focus and hazard awareness is important for any decision making process; whether for planning, response, or mitigation. Disasters and large scale emergencies are often community specific and relate directly to local situations which should be identifiable and known to local authorities (Pearce, 2003).

The Washington State Infrastructure Protection Plan (WIPP) addresses many of the same concerns seen at the national level with a more specific Washington State approach. CIKR is generally defined in terms of critical and essential services for the State's security, public health and safety, economic vitality and way of life. The plan draws much of its framework from the many Federal documents that are in use and closely mirrors national level listings of what is considered as CIKR (Washington State Military Department, 2008).

The WIPP addresses CIKR with a risk assessment model in order to determine the level of risk present. It looks at the impact component as they relate to four main areas; these include, people, economy, environment, and property (PEEP). The assessment model defines level of risk as a combination of three areas, consequence, vulnerability, and threat. Consequence refers to the negative effect on a portion of the State's PEEP and can be direct or indirect on how it impacts specific areas or groups. Vulnerability looks at the likelihood that a characteristic of or flaw in a specific CIKR asset makes it more susceptible to destruction, damage, or exploitation. The vulnerability of a specific CIKR could come from an intentional act, mechanical failure, or natural hazard event. The threat area rating involves the likelihood a particular asset, system or network will suffer an attack or event. When assessing the risk from terrorism, analysis requires consideration of the adversary's intent and capability. When the context of the threat is natural disaster or accident, history or probabilities of occurrence are addressed (Washington State Military Department, 2008, p. 5).

The WIPP prioritizes CIKR primarily to assist with informed decision making considering the impacts at all levels from local to international. The prioritization is intended to focus on planning, interagency cooperation, and to support effective resource allocation decisions during response and restoration. Once the highest rated or most vulnerable CIKR's are

identified based on the anticipated impact to the state's PEEP, decision makers can take action and deploy resources to help mitigate the situation. The WIPP does not maintain a standing list of prioritized CIKR as it requires ongoing evaluation and assessment based on the areas of consequence, vulnerability and threat (Washington State Military Department, 2008, p. 7).

In appendix one of the WIPP, Washington State sectors are defined as they relate to CIKR. These sectors generally follow the national level sectoring for CIKR yet also defines them in more detail as they relate specifically to the Washington State situation. The Washington State CIKR sectoring identifies 18 areas of concern: (a) agriculture and food, (b) banking and finance, (c) chemical industry and hazardous materials industry, (d) defense industrial base, (e) energy, (f) emergency services, (g) information technology, (h) telecommunications, (i) postal and shipping, (j) healthcare and public health, (k) transportation, (l) water and wastewater, (m) national monuments and icons, (n) commercial assets, (o) government facilities, (p) dams and levees, (q) commercial nuclear reactors, materials, and waste, and (r) critical manufacturing (Washington State Military Department, 2008, appendix 1).

In Kitsap County a Hazard Identification and Vulnerability Analysis (HIVA) was completed to specifically look at issues within the local county area. This document was drafted and is maintained by the local Department of Emergency Management (DEM) in Kitsap County and covers all areas within the county including SKFR. The Kitsap County HIVA is in support of the Washington State Comprehensive Emergency Management Plan (CEMP) which addresses hazards to the community by natural, manmade, and technological threats. In order to prepare and plan for emergencies which have the potential to occur in Kitsap County, the HIVA's intent is to understand and identify the most likely threats. The plan addresses these threats by looking

at the historical, geologic projections, and social and technological trends of potential threats (Kitsap County Department of Emergency Management [KCDEM], 2008).

The HIVA addresses a number of natural hazard threats that could potentially affect Kitsap County. The two major issues are earthquakes and severe storms. Concerns of a lesser nature include wildland urban interface fires, tsunamis, hazardous materials transportation and sites, and volcanic ash fall. The HIVA views the greatest threat to the residents of Kitsap County as a large scale earthquake of a magnitude eight or higher. A catastrophic earthquake could potentially cause hundreds of injuries, deaths, and high dollar loss with property destruction. Kitsap County has several fault zones including one of the two Seattle faults that run through a portion of SKFR. Specific areas mentioned in the HIVA include building destruction, water, electrical and gas utility failure, communications shutdown, roadway, and bridge damage (KCDEM, 2008, p. 17).

Severe storms affect Kitsap County on a somewhat regular basis every few years and create a potential for damage throughout the county. Storms historically experienced over the past 70 years have been high wind, heavy rain, and heavy snowfall. Severe storms also bring a potential for isolated flooding or landslides in areas prone for these events. During storm events, citizens experience disruption of utilities and are often physically isolated due to the storm and tree debris (KCDEM, 2008, p. 30).

The potential for issues relating to hazardous materials transported, stored, or used in Kitsap County are addressed in a section of the HIVA. There have only been moderate issues in this area during recent history although Kitsap County has a number of Environmental Protection Agency (EPA) superfund sites, abandoned landfills, and Superfund Amendments and

Reauthorization Act (SARA) facilities requiring Tier 2 reporting addressed in the HIVA (KCDEM, 2008, p. 41).

One specific area identified with potential impacts to Kitsap County is radiological incidents. Kitsap County has a large military presence with both the Puget Sound Navel Shipyard (PSNS) and a number of military bases consolidated under a joint navy command. Historically the area has not experienced an event of this type, yet it is recognized that the potential exists and plans and procedures need to address the response and recovery efforts that may be required if one were to occur (KCDEM, 2008, p. 46).

The Fire and Emergency Service Self Assessment Manual (FESSAM) is one of the formative documents in the CFAI accreditation process. It directs agencies through a detailed self assessment for all agency operations and business practices. In category 2, Assessment and Planning, the intended goal is to identify community specific response needs and develop a plan of action to help meet these identified needs. Category 2 contains the requirements for agency SOC compliance in several criterions. Criterion 2A, documentation of area characteristics, includes several specific performance indicators for an agency to meet that relate to the topic of this ARP. Agency requirements in the area of geospatial boundaries, planning zones, loss data, area demographics, and economic indicators all share CIKR potential. Criterion 2C, non fire risk assessment and response strategies, assesses the nature and magnitude of non fire hazards or risks that a community should identify and plan for with response or mitigation plans. Performance indicator 2C.3 specifically touches on key or special hazards which if destroyed would be critical or economic losses to the community (CPSE, 2009, Chapter 4).

The CFAI SOC process is intended to provide the written procedures for the distribution and concentration of both the fixed and mobile assets of an organization. It recognizes that each

community is unique; not only in its physical make up but also in its expectations for the emergency services it receives from its tax dollars. The type and number of responses an agency receives varies across the nation and requires each agency to conduct an assessment of issue that impact their community. Once this self assessment is completed, the deployment of resources to best manage the risks identified and historical needs of the community can be accomplished. Utilizing the SOC process helps develop an in-depth approach to define staffing and resource needs from the single engine response up to a large scale event or natural disaster. A SOC development process should involve a group of individuals who understand mapping, geo-analysis, dispatch, and risk assessment. Understanding and defining the risks in a community is an integral part of a SOC document and the response plan driven by it (CPSE, 2008).

The second step of the SOC development process, once current deployments and demands are defined, is conducting a risk assessment for the community. The purpose of this assessment is to identify the real world factors that the agency and community agree are the risks that exist in the response area. The assessment of risk is viewed as critical in the SOC development and in providing information needed for updated resource deployment and mitigation of anticipated emergencies. Risk factors to be evaluated include building fire issues, mobile fire issues and any non structural hazards in the community. These non-structural hazards include a number of different concerns that apply to any given community; they may include Emergency Medical Services (EMS), specialty rescue, and hazardous materials response. The risk assessment process should also look at the geospatial characteristics of the service area and any topography and climate issues that may impact response considerations. Transportation network assessment should include any road systems, rail lines, airports, and waterways. Considerations in the disaster exposures assessment needs to look at risks typically known to

exist in the given community. Disaster exposure potential risks include; (a) earthquakes and landslides, (b) floods, (c) wildland interface, (d) wind events, (e) CIKR, and (f) any other known issues (CPSE, 2008, Chapter 3).

The SKFR SOC risk assessment is based on an all hazards approach intended to cover all potential or likely risks for the community. It addresses infrastructure limitations, topography, transportation networks, climate impacts, hazardous materials storage, and disaster exposure. These areas along with building and population profiles help build a picture of the community and its risks (SKFR, 2010, p. 38). The risk assessment for natural disaster type events include a number of known or expected threats based on historical data. Earthquakes present one of the greatest expected threats to the community with a history of regular occurrences back through local recorded time. Isolated or tidal flooding occurs seasonally at a modest level with a very low potential for a tsunami event on the Puget Sound to the twenty foot level. Annual winter storm events with high winds or snow occur every few years and cause significant impact to power and road infrastructure as well as trees falling into structures. Other potential events addressed include volcanic eruptions and lahars, transportation accidents, and Weapons of Mass Destruction (WMD) although the WMD terror threats are viewed as low probability (SKFR, 2010, p. 65).

The EAFSOM class student manual contains a unit on Community Hazards Emergency Response-Capability Assurance Process (CHER-CAP) with a terminal objective of performing a vulnerability and capability assessment for target hazard infrastructure sites. The manual defines three general categories of hazards that planners should be concerned with: natural threats, human caused or technological threats, and terrorism. Although different in detail, each of these

place similar demands on fire service responders providing services within a normal response role (NFA, 2012, p. 2-3).

The CHER-CAP process is intended to improve local area response using the all-hazard approach by identifying planning, community, and resource needs before events occur. The two main components include identifying critical community infrastructure and assessing its vulnerability. Vulnerability identifies what may be exposed or at risk in the community and includes five areas or factors to consider. Factor one is danger and destruction which includes life loss and destruction of physical elements in the community. The second factor is economic; analyzing what the economic impacts will be in response and physical replacement costs as well as for long and short term changes it brings to the communities economy. The third factor addressed is environmental impacts to land and water for both the short and long term recovery. The fourth and fifth areas include social aspects and political considerations. Social aspects include care and safety for both the public and responders as well as how the community values its recreational and social recovery. Political considerations tie into the scope of the event and at what level it can be managed, both immediately and for the long term (NFA, 2012, p. 2-15).

In addressing what critical infrastructure is within the community, a break down of community assets that are critical to society and economy is recommended. The three divisions suggested include contents, occupancy, and purpose (COP). Contents include manufacturing, retail, and warehouse occupancies. The occupancy area includes high habitation areas, buildings or complexes with high occupancy potential and areas addressing people’s special needs. The area of purpose looks at critical infrastructure sites located in the community. These could include various utilities, transportation networks and public buildings (NFA, 2012, p. 2-7).

The manual lists a more specific Federal Emergency Management Agency (FEMA) infrastructure target hazards breakdown which applies to most communities at some level. The FEMA listing of infrastructure includes: (a) schools, (b) total student counts, (c) students in daycare, (d) highrise buildings, (e) public assemblages, (f) apartments and hotels, (g) hospitals and health care centers, (h) nursing homes, (i) jails and prisons, (j) shopping malls and mercantile, (k) hazardous occupancies, (l) fire and law enforcement stations and, (m) local, state and federal buildings (NFA, 2012, p. 2-10).

A combination of the COP divisioning of a community and the FEMA suggested CIKR targets located there allows for charting and mapping of the information for use by responders. The CHER-CAP CIKR site chart uses a color coded series of numbered shapes or icons to map identified information. The identification number located in the shape directs the user to an information page with selected site information. Content identified CIKR is colored red and includes a diamond for hazardous materials, circle for retail occupancies and a square for warehouse type occupancies. The occupancy area of the chart consists of shapes that are blue in color and use a diamond shape for high habitation, circle for special occupancies and a square shape for public assembly areas. The final category of purpose uses green as an identifying color and includes community lifelines such as utilities designated with a diamond, transportation areas with a circle and public buildings designated with a square. All of these color coded numbered icons are then overlaid on a map of the response area (NFA, 2012, p. 2-12).

The mechanics of the assessment process and CIKR information being placed in a mapping system requires a map system designed to work with Geographic Information Systems (GIS). There are many available systems to choose from as long as the size and detail meets the user agencies needs. Base mapping features to be considered could include a number of items

and their identification can be better defined with a map legend. Political boundaries including subdivisions of the community is one potential starting point for base map size. Maps should include transportation routes and important items such as bridges or airports. Identified target hazards from within the community, both fixed and mobile, should be mapped. Principle community assets like hospitals, dams and levees, waterways, and utility infrastructure should also be considered for base map features. The mapping of potential damage or destruction zones could potentially provide responders with information that could be combined with the CIKR icons to assist with decision making. Mapping of floodplains, predicted hazmat plumes, transportation corridors, wildland urban interface areas, geologic zones, and natural hazards and barriers all are included in this area (NFA, 2012, p. 2-30).

The mapping of CIKR with icons that include identifying numbers is intended to communicate selected information to the users. This information is available on a separate reference sheet in a simple format to quickly offer basic information to responders. The EAFSOM manual has this information displayed in column form for use by responders. The first and second columns contain site name and number, address and geographical area located within the jurisdiction. Columns three and four address internal site vulnerability and protective measures that may apply during an incident. Columns five and six provide information on external site vulnerability and protective measure that may apply when considering impacts on the nearby community. All information available through this method is brief and concise intended to provide a starting point for response actions and general overview of site specific characteristics (NFA, 2012, p. 2-38).

In the book “Designing Better Maps, a Guide for GIS Users” the author expresses that the starting point for any map design process must take into account the map’s purpose and medium.

Questions to be addressed early in a design process include what type of information is being mapped, who will be using the map, is the map coordinated with written text, and the map size and display medium. Maps that are intended to communicate simple purposes in a timely manor should be intentionally kept to a simple design. The more knowledge of the topic and time a reader is expected to have when using a map allows for more detail and complexities. Resolution and viewing locations also need to be taken into account for both the ability to see and understand the information. Color selection, icon size and shape, data size, and the overall scope of the mapped area all need to be considered. Each of these detailed pieces place constraints on how the map is used and its level of success with conveying information in a timely manor (Brewer, 2005, Chapter 1).

Map design requires the development of “feature hierarchy” when determining what will be placed on the map and what level of importance items represent in achieving the intent of the map. A map may not require details about the road or transportation system in a given area if it is focusing on water areas and tidal zones. Simplicity in design intended to convey to the reader relevant information to achieve the map’s intended purpose should be kept in mind during development (Brewer, 2005, Chapter 3).

There are several visual variables that impact map symbol design. They include lightness, size, pattern, shape, and pattern arrangement. A combination of variables and the associated data they represent can produce a wide variety of map symbols intended to convey information. Point symbol shapes are simple geometric forms such as circles, squares, stars or triangles used to represent specific data. Symbols can be used to build intricate maps that represent qualitative data. Pictograms can be used in the same manor as a more elaborative use of shapes to convey information on specific topics. Pictograms can help a reader quickly identify specific items such

as parking, gas stations, campgrounds, etc. All symbols used should be readily identifiable and look markedly different from each other to assist readers with quick identification as they scan the map (Brewer, 2005, p. 148).

The U.S. Department of Transportation (DOT) produces an annual "Emergency Response Guidebook" for use by first responders. This document is intended to assist with identification and decision making during the initial phase of a dangerous goods or hazardous material transportation incident. The guide is broken down into sections designed to help all levels of responders achieve this intent. The DOT has defined a hazard classification system to separate all materials into one of nine classifications based on type. This classification system is the basis for the placards and labeling the fire service has used for years across the nation when dealing with hazardous or dangerous materials. A combination of visual icons and numbering are used to help responders identify what the likely material is that they are involved with (U.S. Department of Transportation [DOT], 2012, p. 7).

Once a material is identified, the guidebook contains a basic initial response guide for the responder to quickly assess information for use in developing an initial action plan. The guidebook has 61 general guides that work for a wide range of hazards. Each guide addresses potential hazards, public safety, and emergency response for fire, spills or leaks, and first aid. Due to the nature of dangerous goods and hazardous materials, the guidebook provides a section on initial isolation and protective actions distances. Protective actions have a number of factors used in decision making including the material involved and the degree of hazard, the population threatened, and weather conditions. This information helps drive plans for isolation of hazards, denial of site entry, evacuations, or shelter in place plans. Isolation distances are based on nature and rates of release, downwind dispersion and toxicology (DOT, 2012, p. 285).

SKFR Standard Operating Procedure (SOP) 6-40 on prefire planning has a stated purpose of providing accurate building and facility information for incident commanders to assist when managing emergency events. The information is intended to help provide greater firefighter safety, survival for citizens, and to limit property loss. All structures over 10,000 square feet in size or those identified with special hazards are included in the program. The information on structures to be preplanned is managed and stored in the occupancy area of the district's records management system (RMS). Two primary levels of plans are developed, one for first arriving companies and one for command level. The company level first arrival plans include basic information formatted to provide information on ten different topics in a quick and simple manor. The command level plans include the same information plus more detail on interior features and site information. All plans are accessed through mobile computer terminals on the apparatus and updated on a regular basis by the program manager. The drawing program used by SKFR is "The Fire Zone" software and includes preset symbols selected for use (South Kitsap Fire and Rescue [SKFR], 2008).

In summarizing the literature review, national level concerns for our nations CIKR is apparent and intended to be addressed by all levels of government from the national to the state and local level. The literature review was valuable in developing the knowledge base necessary to better understand the specifics of what is considered CIKR and how information related to CIKR is developed, stored and used by responders nationwide. It also strengthened the authors understanding of what CIKR mapping should contain and how it potentially could be effectively utilized in the SKFR jurisdiction. The review confirmed the ideal that preplanning and thorough knowledge of the response area is required for any fire agency to be fully effective in delivering quality service to its citizens, especially during large scale or challenging incidents.

Procedures

The procedures utilized to prepare this ARP included the development of research questions, literature review for background development, interviews, and data acquisition and analysis. The research included a review of literature on topics relating to CIKR identification, mapping and response. The research began initially at the Learning Resource Center (LRC) at the NFA where searches were conducted with staff to acquire available information relating to the topic. Similar processes were undertaken through the Kitsap County Library System to broaden the resources utilized. In addition, research was conducted online utilizing the common internet search features available today. Additional documents relating to the subject were also gathered from fire department's in-house and local sources. The overall literature review included books, journals, manuals, agency reports and other written materials as well as information available from internet sources.

Following the completion of the literature review, a series of questions (Appendix A) were developed to guide a structured interview process. The questions developed were intended to focus on and gain information relating to all four research questions for this ARP. These research questions involved information that would require input from an internal SKFR member who has responsibilities related to command level response and from a representative of the KCDEM and the Kitsap County GIS department who have responsibilities and information in this area at the county level. It was expected that any one interview subject may not have information relevant to all four research questions targeted in the interview process.

The internal SKFR member chosen for the interview was Battalion Chief J. Gudmundsen, a shift command officer and also chair of the Kitsap County Integrated Tactical Accountability and Communications (ITAC) committee. The interview with J. Gudmundsen occurred at the

SKFR headquarter office located at 1974 Fircrest Dr SE, Port Orchard Washington on September 2, 2012 at 10:00 am and was about two hours in length. The interview began with reviewing the purpose of this research project and the specific questions the researcher was attempting to address with his assistance. The interview consisted of a number of questions (Appendix A) intended to provide specific information on the research questions for this ARP as well as any other related information or insight that touched on the general research topic based on his experience and background.

To gain information for this research project from the KCDEM office, this researcher accessed the KCDEM official website at www.kitsapdem.org to find contact information for their agency. The researcher contacted the KCDEM office at the e-mail link provided on August 16, 2012 and requested information and assistance with this project. A meeting was scheduled at the KCDEM office located at 911 Carver Street, Bremerton Washington for August 27, 2012 at 2:00 pm. The meeting was with M. Gordon the operations officer for the KCDEM and began with reviewing the purpose of this research project and the specific questions the researcher was attempting to address with his assistance. The interview consisted of a number of questions (Appendix A) intended to provide specific information on the questions for this ARP as well as any related information that was shared on the general research topic. The interview was about an hour and a half in length.

Following the interview, M.Gordon e-mailed an excel spreadsheet of CIKR information maintained by the KCDEM for Kitsap County. The information had been developed by KCDEM and was intended to be utilized in the post disaster rapid assessment and damage assessment process and procedures. Once received, the spreadsheet was edited to create a listing of CIKR in

the South Kitsap community (Appendix B) from the KCDEM list. The data was analyzed, reviewed and organized by name for use in the findings portion of this ARP.

To contact Kitsap County GIS, this researcher requested contact information from the SKFR Information Technology (IT) department for a contact point at Kitsap County for the GIS office. Contact information for an E. Kaltenbacher, a GIS specialist was given and an e-mail was sent on August 16, 2012 to establish communications. The e-mail explained the purpose of this research project and the specific questions the researcher was attempting to address with the assistance of the Kitsap County GIS office. A meeting was scheduled at the Kitsap County administration building 614 Division Street, Port Orchard Washington for September 11, 2012 at 2:00 pm. The meeting was with the Kitsap County GIS analyst E. Kaltenbacher and began with reviewing the purpose of this research project and the specific questions the researcher was attempting to address with her assistance. The interview consisted of a number of questions (Appendix A) intended to provide specific information on the research questions for this ARP as well as any related information that touched on the general topic.

Following the interview Kitsap County GIS forwarded a data package of the CIKR information and maps they had on file for the South Kitsap area. This information was a product of the work their office had completed in 2010 for the KCDEM in this area. The data was filtered and analyzed to create a spreadsheet (Appendix C) and saved for use in the findings portion of this ARP.

The interviews with J. Gudmundsen, M. Gordon and E. Kaltenbacher were scheduled at their perspective offices at a mutually agreed on time. The interviews required between one and two hours to conduct depending on the depth and scope of the answers given. All members interviewed were allowed to freely discuss and expand on each question asked. All information

gained in the interviews was analyzed and summarized for use in the results and discussion sections of this project.

Within SKFR an analysis of the occupancy module from the Records Management System (RMS) data was completed to identify what the commercial and industrial structures were in SKFR that could potentially qualify as CIKR. Also addressed in the RMS data analysis were the Tier 2 reports that SKFR receives annually relating to hazardous materials. This data is stored in the occupancy module under the hazardous materials tab of the RMS. SKFR currently uses Emergency Reporting System (ERS) as its records management software and the current year's data was utilized in the study. Data entry in this area is completed by prevention office staff and is filtered and edited for completeness and quality by administrative staff as an on going process. The SKFR structures and Tier 2 data were analyzed and filtered and exported from ERS into excel to create a large preliminary list of potential CIKR from the RMS.

The analysis and study began with filtering down the data into CIKR occupancies or structures common within all three information groups utilized. Spreadsheets created with data from KCDEM, Kitsap County GIS and SKFR were compared for common data points. Additional break down occurred to determine occupancies or structures for CIKR information identified by only one or two of the listings. A new spreadsheet (Appendix D) sorted by SKFR division was created identifying the defined CIKR in the South Kitsap community based on the combined data of the three spreadsheets. Throughout this data review process, the researcher worked closely with SKFR administrative office staff and (IT) personnel.

The structured personal interviews and data gathering and analysis provided the information needed to address the four ARP research questions. The literature review also helped identify and narrow down questions into specific areas. Once drafted, the interview questions for

appendix A were submitted to three individuals not involved in this project for review. These three individuals were also provided with a copy of the four ARP questions directing this research. Their review checked question structure, intent, and ability for the question to relate back to and answer the ARP research questions.

It is important to identify certain limitations of this action research project and the procedures used. The personal interview conducted with the SKFR staff member made the assumption that the interviewee was qualified by position to have accurate information relating to the topic and questions utilized during the interview. There also existed a potential for personal bias in some answers as the subject related directly to the member's personal work situation and future program activities. In the study of agency data from ERS and the outside agency contributors, a limitation exists with regards to the quality of the data entered by each reporting agency. Data from the KCDEM and the Kitsap County GIS office was two years old and needed to be cross checked against the SKFR current occupancy module information. Also, with the interviews involving outside agency members, there exists some potential for bias or misunderstanding by both individuals involved based on limited background or experience with fire and emergency services delivery.

Results

How should critical infrastructure and key resources be identified?

The answers from the interviews conducted with J. Gudmundsen and M.Gordon along with the KCDEM, Kitsap County GIS and internal SKFR data provided the results for the first research question and correlated with the information gained in the literature review on the topic. The structured interview questions (Appendix A) that specifically provided information in this area included questions 2, 3, 4, and 6.

Looking at CIKR identification from the response perspective identified the need for this information to be simple to understand and accessible for quick decision making in the field during initial operations. Based on the nature of the command level decision making historically experienced in SKFR, the identification of CIKR and any related data must be available for quick "at a glance" type access and be designed to provide the incident commander or first arriving company officer the awareness of the CIKR location and nature or type of CIKR potentially involved.

The information received from the KCDEM and Kitsap County GIS office all related to their specific mission and produced a listing of potential CIKR that applied to the South Kitsap community (Appendix B and C). The definition used for the KCDEM CIKR identification followed the national and state level definitions available on this topic.

> Critical Infrastructure: Systems and Assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction.
>
> Key Resources: As defined in the Homeland Security Act, key resources are publicly or privately controlled resources essential to the minimal operations of the economy and government (DHS, 2009, p. 109).

This KCDEM breakdown of CIKR in Kitsap County also follows the definition in appendix one of the WIPP, as they relate to CIKR. These county and state listings generally followed the national level sectoring for CIKR yet also defines them in more detail as they relate specifically to the Washington State or Kitsap County situation. The Washington State CIKR sectoring identifies 18 areas of concern: (a) agriculture and food, (b) banking and finance, (c)

chemical industry and hazardous materials industry, (d) defense industrial base, (e) energy, (f) emergency services, (g) information technology, (h) telecommunications, (i) postal and shipping, (j) healthcare and public health, (k) transportation, (l) water and wastewater, (m) national monuments and icons, (n) commercial assets, (o) government facilities, (p) dams and levees, (q) commercial nuclear reactors, materials, and waste, and (r) critical manufacturing (Washington State Military Department, 2008, appendix 1).

A review and list of the South Kitsap community risks commonly expected or anticipated in a disaster situation was created based on information gathered in the structured interview process. This list also correlated with the SKFR's SOC document and CFAI's information covered in the literature review. The listing of community risks commonly expected or anticipated in a disaster situation that could be considered in operational planning and CKIR identification included a number of topics of general nature. These include a number of areas that would apply to the South Kitsap community: (a) dams and waterways, mapping of floodplains and low lying areas with known potential for flooding, (b) utility infrastructure including major distribution sites or system infrastructure, (c) mapping of potential damage or destruction zones relating to specific events, earthquakes, liquefaction, landslides, fault zones, tsunami or tidal flooding events, (d) potential hazmat plumes or releases, (e) natural hazards and barriers known to exist within the jurisdiction, (f) wildland interface areas, (g) annual winter storm, high winds or snow events.

The identification of CIKR that applies to the South Kitsap community should follow these national and state level definitions as they have proven to be comprehensive and widely used across the nation. A list of identified CIKR in the South Kitsap community was created using these definitions and analyzing them against the data sets (Appendix B and C) and the

SKFR ERS occupancy and Tier 2 data to produce a spreadsheet of identified CIKR in the South Kitsap community (Appendix D). This data and its use will be discussed later in this ARP.

What reference data should be included with the critical infrastructure and key resource information?

The information needed to address the second research question relating to inclusion of reference data with any CIKR project came primarily from the structured interview with J. Gudmundsen due to his background in this area. Specifically structured interview questions number 5, 8, 9, and 10 related to this ARP question. Examples from the NFA EAFSOEM class simulations were also shared to create reference or discussion points during the interview.

Addressing references data that would be useful for responders when utilizing preplanned CIKR information in the field brought forward concern about the reference information being quick to access and utilize in the initial decision making process. CIKR charting and corresponding reference materials should provide a way for the on-scene command officer to have an awareness of the CIKR locations and the nature or type of CIKR potentially involved or threatened with the incident.

SKFR currently has a prefire planning program that provides a tiered approach to reference data on commercial occupancies within the jurisdiction. This preplanning was accomplished with two goals in mind when addressing field information use. An initial arrival basis plan for the company level officers includes ten basic, yet key pieces of information SKFR responders felt were important for initial operations. Beyond this basic information, a second level of prefire plan was developed that goes into greater details with site specific information to be utilized by the command officer on larger events of longer duration. This concept of information availability at various levels with quick access for initial decision making should be

mirrored with any reference data included with SKFR CIKR charting. Notation of any prefire planning documents completed and available for any specific CIKR should be considered for inclusion with any reference data on SKFR CIKR charting.

The KCDEM CIKR data and charting included a prioritization ranking of identified CIKR based on a level of importance or significance that it holds within the community. This KCDEM prioritization is intended to help direct and prioritize response efforts during events based on the anticipated limited resources available. There are three priority levels established. First is CIKR that is critical to response during or after events. This level of CIKR includes law enforcement, fire stations, county road facilities, medical facilities, etc. The second and third levels progressively receive their ranking based on life safety considerations, community utilities and health, and key services and supplies depending on the duration and nature of the event. Included with any reference data used with SKFR CIKR, charting the KCDEM prioritization information could be included to assist decision makers with deployment of resources or awareness for potential starting points during the initial operations.

The CIKR charting used at the NFA with the EAFSOEM class curriculum produced information on external and internal site vulnerabilities that also included recommendations for protective measures to be considered. This site specific information is intended to provide quick access to general information. It addresses what a specific site has in regards to internal content or the site's potential use. Examples include hazardous materials, fire loads, occupancy characteristics, bulk storage, etc. Looking at specific CIKR sites for external concerns included listings of related information that would potentially impact the close proximity or local community if the nature of the event took any hazards outside of the sites immediate location. This type of information would be valuable to SKFR responders when utilizing CIKR charting.

Reference data included with CIKR charting for SKFR should include all of these factors within a simple and quick to use format. Topics should include information on site name, location or address, KCDEM prioritization ranking, Tier 2 information and note of any completed SKFR prefire plans that would apply. Site internal contents or characteristics and potential threats and resource considerations should also be included. These reference data points will correlate with any developed CIKR mapping and follow the format in Table 1.

Table 1

Site Name Address	Prefire Plan on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations

What initial action plans should be included for use with the critical infrastructure and key resource information?

The nature of this research question held similar information and responses to the second research question for this ARP due to their similarity and that both questions involved information that would be included with any SKFR CIKR information. The information needed to address the third research question relating to inclusion of action plans with any CIKR documentation again came primarily from the structured interview with J. Gudmundsen due to his background in this area. Specifically structured interview questions number 5, 6, 10, and 11 related to this ARP question.

SKFR has an ITAC Operations Manual and Emergency Operating Procedures (EOP) Manual currently in place for company officers and Incident Commanders (IC) to use during responses. These procedures are well established and the foundation for most emergency scene decision making. They have been revised and updated on a regular basis to reflect the state of the industry as best as possible in regards to an SKFR individual situation as it relates to funding,

community make up and expectations. One concern that was discussed with J. Gudmundsen during the interview was the need to not conflict with these established procedures or duplicate them with another layer of guidance for the SKFR membership to learn or operate under. Any initial guidance or direction should reflect or align with any established practices currently in place with SKFR.

This third ARP question with its similarities to the second ARP question also requires that any information provided with SKFR CIKR documentation would need to meet the requirement of being quick to access and simple to apply in formulating initial stage action plans or deployments. For the SKFR CIKR information, simply stated guidance with the ability to direct decision makers to more complex established procedures as time allows should be the goal.

Basic notations for decision makers to help guide their initial action plans during an event should include established guidance such as the use of the DOT guide book on hazardous materials responses. Suggested protective measures and evacuation distances could also be noted based on the nature of the CIKR. In the area of response assets, recommendations for mutual aid or other outside agency assistance that may be required should be noted. All information involved with initial action planning should be intended to help "jog" the initial decision maker's memory or guide him or her to a broader starting point for the incident. An initial action considerations section should be included with the other CIKR information documented for SKFR's responders to use when addressing CIKR documentation and will be included in the recommendations section of this ARP.

How should the critical infrastructure and key resource information be maintained and distributed?

The work completed and forwarded to SKFR from the Kitsap County GIS office included mapping and CIKR identification based on the KCDEM CIKR list. This work covers all of Kitsap County and represents the complete picture of CIKR in Kitsap County from the KCDEM's area of responsibility. The sections of this work that cover SKFR's jurisdiction documents many of SKFR's identified CIKR. The Kitsap County GIS mapping is divided into areas representative of the Kitsap County Sheriff's Office sectors for use in rapid or damage assessment and therefore do not overlay with any SKFR division or response configurations. The Kitsap County GIS mapping was completed in the ESRI ArcMap 10.0 program and is the same program used in SKFR for mapping and SOC development.

The Kitsap County GIS Office in conjunction with the KCDEM made the decision for CIKR mapping to use a simple set of "stock" icons to place CIKR on the mapping throughout Kitsap County. These icons were the standard set available in the ESRI ArcMap 10.0 computer mapping program and meet the need for basic site identification. Due to the geographic size of Kitsap County and the limited number of CIKR sites, each icon also displays a corresponding text box which helps to quickly identify the CIKR by name.

The SKFR CIKR mapping to be developed with this ARP will use the same ESRI ArcMap 10.0 mapping program and icon set up as the Kitsap County GIS Office and separate out the SKFR jurisdiction into divisions that correspond to the operational breakdown in the SKFR SOC. The findings in this area lead to the consideration that SKFR CIKR mapping should be maintained and correspond as much as possible with the work already completed and in place with other Kitsap County response agencies.

Within SKFR, the ability to maintain the identified CIKR data for use in mapping with corresponding reference information and response considerations required a detailed look at

what the ERS RMS system could do in this area. It was identified that all of SKFR data of this nature was stored and maintained in the ERS program within a number of different areas. These areas within ERS are interlinked and available for searching or report generation of desired fields or data. This common data base follows the district's direction to keep all SKFR data in this one program if at all possible and is updated on a regular basis as new information or changes occur. The ERS program is Web based and available for crews to log into as long as connectivity is available from their field location.

ERS, in the occupancies module under information has a critical infrastructure dropdown menu that aligns with many of the recognized CIKR sections at both the state and national level. There also exists an area for documentation of Tier 2 information and site hazards as well as other information desired for storage and searching.

Once the SKFR identified CIKR in Appendix D was entered into ERS and combined with the SKFR SOC divisional maps and Kitsap County GIS Office selected CIKR icons, CIKR maps for SKFR were produced (Appendix E).These maps and corresponding data storage reflect the method chosen to maintain SKFR CIKR information and package it for distribution to the responders through a number of methods.

The overall intent of any CIKR program is to have this information available and distributed to responders for use in operational decision making. This question on distribution of CIKR information starts at the individual agency level based on their particular circumstances. Within SKFR there exist a number of methods used currently for information distribution in the area of response. SKFR prefire plans are maintained on the hard drive of the Mobile Computer Terminals (MCT) per an agreement with the Kitsap County dispatch agency, Central Communications (CENCOM) who "own" and oversee this hardware. Due to unreliable

connectivity in many parts of Kitsap County, this information is physically downloaded into the individual unit's hard drive on a twice yearly schedule. This agreement and process was reached after considerable discussion and communications on the issue. SKFR also maintains a number of computers in the area of response that have this information stored and available for reference.

Within the large scale emergency or disaster response areas of SKFR's operations, there are a number of places that information is distributed to responders. The Area Command Center (ACC) configuration in place with all Kitsap County fire agencies and the KCDEM includes a number of computers and files of hard copy storage of information at a central location in SKFR. This hard copy storage of information is also duplicated and kept in sealed packages on response apparatus in the SKFR fleet.

The SKFR SOC is a well understood and available document for all SKFR personnel. It is reviewed and updated on a regular basis and is available on the SKFR server. The SOC maintains a section on fire risk assessment for SKFR that produces a map of commercial building risks in the jurisdiction. The SOC also breaks down the overall SKFR jurisdiction map into individual division maps for greater detail. If response units have internet connectivity in the field they have the ability to log into the SKFR system and access this document. Hard copies of the SOC are also stored in fire stations and command level apparatus.

The overall intent for distribution of CIKR information is to provide quick access of current information to responders in the field. A number of approaches will be needed and recommended to provide reliable redundancy that accomplishes this goal within SKFR.

Discussion

The results of this ARP correlated with the information gained in the literature review and provided information to assist SKFR with development of a CIKR program for responder

use. The research conducted for this ARP determined that SKFR had a need and application potential for the use of CIKR information to assist in developing operational strategies at significant emergency incidents to help reduce the potential of injuries, deaths, property damage, and liability. Without CIKR information, SKFR responders lack potentially important information that could be used during decision making. The development of a CIKR program for SKFR responders would provide immediate access to accurate information for operational planning at emergency incidents.

A needs assessment should be accomplished early in any program development to determine what the "gap" is between current realty and the desired knowledge, skills, or actions (Gupta, 1999, Chapter 1). At SKFR, responders have historically utilized a number of different policies and procedures to assist in operational decision making. The changes experienced in SKFR over the past twenty plus years have brought about the need for CIKR type information to be available for company and command level officers. As the SKFR workforce expands and the community grows in complexities, preplanned CIKR information will provide valuable knowledge and insight to assist decision makers during complex operations.

The focus of this research project was to develop a CIKR program for SKFR responders. A number of organizations have requirements or goals established in this area. The CFAI maintains several performance indicators directing agencies towards this goal. The importance of identifying community risks and developing plans concerning response that help reduce or mitigate these risks is well documented in the accreditation requirements (CFAI, 2006, p. 78). The U.S Department of Homeland Security, in their National Preparedness Goal document, identifies the importance of community level response and the need for systematic preplanning

of the community to determine potential areas of concern or higher value during response operations (U.S. Department of Homeland Security, 2011, p. 11).

In determining how CIKR should be identified in the South Kitsap Community, individual interviews with the SKFR battalion chief and the operations officer for the KCDEM identified several pieces of information. The KCDEM is the only agency in Kitsap County who has taken on and completed a CIKR identification program. The focus of the KCDEM CIKR program is intended for use in post "disaster" rapid assessment and damage assessment programs overseen by their organization. All Kitsap County fire agencies interact with the KCDEM during Emergency Operations Center (EOC) activations but were intentionally not incorporated into these assessment programs. The fire agencies intended use and focus during large scale events or EOC activations is in the response area of operations which is not where the KCDEM CIKR information was focused.

The KCDEM CIKR program was completed for all areas of Kitsap County including incorporated areas. The KCDEM CIKR mapping uses the Kitsap County Sheriffs Office patrol sectors as a method for division due to its countywide coverage. The development process of the KCDEM CIKR lists followed established definitions for CIKR from both the federal and state level definitions available on the topic. While not all eighteen recognized sectors of CIKR apply to Kitsap County or SKFR, the KCDEM list and the SKFR CIKR identification process followed the WIPP breakdown of consequence as they relate to people, economy, environment, and property as well as considering individual site vulnerabilities and threats (Washington State Military Department, 2008, p. 5).

The KCDEM CIKR list that covered the SKFR jurisdiction provided a good starting point for SKFR specific CIKR identification. The KCDEM list was developed over three years

ago and was slightly out of date due to growth in the community. When overlaid with the SKFR current occupancies list, a number of applicable CIKR topics were identified and added to the SKFR listing. Other additions for the SKFR identified CIKR were in the areas of key resources from the response perspective; these were items that may have value from SKFR's perspective on smaller incidents in the areas of food, fuel, and supplies (J. Gudmundsen, 2012).

This positive relationship between SKFR and the KCDEM, and their willingness to work together is a strength that can be capitalized on as the SKFR CIKR program is developed and expanded in the future. Many of the key components of networking, forming coalitions and working together towards a common goal are present in this relationship. Future opportunities for expanding the CIKR program to all fire agencies in Kitsap County will benefit from this relationship and common interest in the topic. The national level support and emphasis on working at the local level in this subject area is understood and a key component of any expanded response during large scale events (U.S. Department of Homeland Security, 2007, p. 26).

The research conducted for this ARP found that the SKFR CIKR identification process should generally follow the national and state level breakdown for CIKR as it applies to the South Kitsap community demographics. The rural nature of SKFR and the expected risks for the most part were modest when looking at the KCDEM breakdown of CIKR across Kitsap County as a whole.

To identify what the reference data and or initial action plans that should be included with the South Kitsap community CIKR information required an overview of what others had experienced in this area. The KCDEM CIKR breakdown for Kitsap County was not intended for use in response operations or for providing guidance in this area. This plans intent is directed

towards assessment of damage and identification of the overall scope of an events impact on the area affected. The major areas included with this plan that would also provide value to the SKFR CIKR reference data include site identification by name, address, and priority ranking based on the overall value related to CIKR community impacts.

The information gained from the interview with J. Gudmundsen on SKFR response supported the concept of keeping any reference data or initial action plans at a simple level that did not conflict with established policy or procedure. The Kitsap County ITAC Manual has procedures established for the specific purpose of promoting standardization and interoperability between all Kitsap County fire agencies. The ITAC program for Kitsap County contains specific operational directions in a number of areas including risk management, incident management, action planning, communications, hazardous materials, and post incident analysis (Kitsap County Integrated Tactical Accountability and Communications committee [KCITAC], 2005).

The major value of CIKR identification and mapping for SKFR should be just that, a quick and reliable method for decision makers to “get the big picture” and develop an understanding of what the potential impacted areas of noted value may be, based on the current incident. Along with this identification of CIKR sites, brief and concise information that could accelerate initial actions or plan development should be included. Information on specific site details available in prefire plans or Tier 2 documentation as well as specific known site characteristics or contents would assist responders (J. Gudmundsen, personal communications, September 2, 2012). Also potentially valuable for a responder who is making initial decisions or plans for an event that may have an overwhelming presentation, would be direction on specific resources needed or initial action steps to get the incident started. This resource consideration list may involve requesting resources outside of the normal or experienced response. Guidance for

potential requests of specific assists or teams, notification of agency officials or personnel call back and larger scope activation of regional, county and state plans all would apply. Initial action plans or recommendations should follow the same concept with some key processes or actions to help get the incident started efficiently. Recommendations may include contact with and unified command establishment with other applicable agencies, suggestions on life safety evacuations, or other strategic reminders that potentially would apply. This type of information is similar in nature to the breakdown used in the EAFSOEM class curriculum at the NFA and follows the CHER-CAP procedures intent by providing brief information to assist initial decision makers (NFA, 2012, Chapter 2).

Addressing how to maintain and distribute the SKFR CIKR information brought about a realization that this process would require a number of approaches that need to line up with the current reality of the SKFR or Kitsap County systems currently in place. The awareness that the CIKR information needed to be available and accessible under a number of different situations, many of which could be outside of the normal day to day scenarios, also became apparent as this project progressed. The ability to have CIKR information distributed to responders in a simple quick to access and easy to understand manor is one of the core pieces of all CIKR programs researched for this project. The industry practice of maps used to distribute this information in a clear manor for field use was supported as common practice. The ability for responders to quickly align the identified and mapped CIKR with the “picture” of the jurisdiction that each responder has in memory allows for this quick, big picture understanding of the situation.

The essentials of designing maps to achieve a specific purpose requires the cartographer to consider the audience using the map, the environment it will be utilized in, resolution, size and

map details based on intended purpose. Maps should be tailored to the specific needs of the audience and the intended use (Brewer, 2005, Chapter 1).

At SKFR the base mapping used extensively in the SOC is recognized and familiar to responders. These maps broken down to specific response area or “Divisions” identify specific details at a level that is understandable and functional for responders. Utilization of these maps in this configuration for CIKR information would follow a logical process. The ESRI ArcMap 10.0 mapping program used by both SKFR and the Kitsap County GIS office would also allow for common interface of data and opportunities for future expansion or alignment of the programs. The acceptance of the Kitsap County GIS selected map icons and the use of text boxes to quickly identify CIKR also would asset in this area.

The use of labels and symbology are recognized as an inherent part of map making and need to be analyzed to assure they complement the map’s intended use. The balance between the effective use of labels to add clarity to the map and not clutter the map needs to be considered during the design phase (Brewer, 2005, p. 63).

To off set any issues with CIKR information becoming old or out of date will require it to be incorporated into a number of areas within SKFR business operations that maintain an ongoing review and or update process. The SKFR SOC document has risk assessment mapping and response breakdowns that would correlate with CIKR information. Adding CIKR information to the SKFR SOC will provide a method to maintain its current status and also provide a common access point for the information.

In order to keep CIKR information current and maintained on a regular basis as data for mapping and placement into the SOC or other field documents, utilization of the SKFR ERS program should be considered. With ERS used as the data base for all SKFR information and the

program's ability to interface between modules, CIKR data would be kept up to date with the yearly inspections processes or program activities and would also note any new businesses or structures added into the data base for potential CIKR mapping.

The methods used to have CIKR mapping and information available for SKFR responders would need to take a number of different approaches. Currently hard copy information for disaster response is kept in each apparatus and in the ACC at SKFR. CIKR mapping and information should be added to these areas. The SKFR SOC and CIKR data in ERS would be available for responders electronically if they have access to the internet, although it would require connectivity and a dedicated amount of time to bring this information up. The ability to download CIKR information onto the hard drives of various laptop computers that are used throughout SKFR would also place the CIKR information in additional accessible positions. The SKFR command staff and duty chief response vehicle all have this capability. Future expansion of this CIKR program and placement into the MCT units will be addressed in the recommendations section of this ARP.

SKFR currently maintains a number of response "assistance" type documents for responder use in the field. One thing that became apparent during this ARP process was that SKFR did not have "all encompassing" type documents or large scale overview of information for responders. The CIKR identification and mapping produced with this ARP will provide a broader global view of the SKFR jurisdiction and what the major identified areas of concern may be based on a given response situation. Conducting a community CIKR assessment to identify vulnerabilities, resource shortfalls and mapping of CIKR are all objectives of the EAFSOEM class curriculum as they relate to response preparedness in this area (NFA, 2012, Chapter 2).

The information gained during the development of this ARP along with the developed CIKR maps and corresponding response information will allow SKFR to implement positive changes to its operations involving CIKR in the South Kitsap community.

Recommendation

The research conducted for this ARP has identified and mapped CIKR information in the South Kitsap community. The availability of this CIKR information will assist SKFR responders in operational decision making during complex incidents in the future. In addition to the specific topic of this ARP on developing CIKR information for SKFR, this research also identified several potential areas to expand or improve the overall SKFR CIKR program as technology advances become available or at the county level where common agency interests can be aligned. Based on the information gathered for this ARP, the author recommends the following points of consideration for the initial implementation and potential future improvements to the CIKR program for not only SKFR but for all response agencies in Kitsap County.

1. With the completion of the SKFR CIKR mapping and response information as an outcome of this ARP, the agency must now work to train and inform the membership of this new program. The SKFR 2012 SOC update will have the CIKR maps and reference information added to the document. Distribution of the CIKR information in hard copy and any downloads will also need to be communicated with the responders. Once the awareness of this new program and materials is understood by the membership, crew level reviews and application at the individual division level should be conducted by the shift officers to verify complete understanding with this program and information. At a future staff and chief officer meeting, standard administrative processes should be followed to assure proper implementation of this new program throughout the agency. When future countywide KCDEM disaster drills are

planned and scheduled, SKFR should incorporate the CKIR information into the drill scenario as it applies in the South Kitsap community.

The goal for SKFR to work towards is a fully developed and institutionalized SKFR CIKR program with the information being incorporated into operational planning and decision making as a standard practice.

2. The research conducted for this ARP along with the EAFSOEM class curriculum clearly showed operational value for an agency to have a CIKR program established as part of their response operations. With this program having value at the local level, SKFR should work towards expanding it too include other county partners. Common agency response throughout Kitsap County and the oversight given by the KCDEM on large scale events or disasters would benefit from a countywide CIKR program. SKFR should present the CIKR information program to the Kitsap County Operations Chiefs with the goal to develop a common program for all fire agencies in the county. The relationships and history of working together that is required to successfully expand any program to involve multiple agencies currently exist in Kitsap County. There are several areas of common operations or shared procedures involving all county fire agencies and the KCDEM to use as examples of past successes. Facilitating and expanding this program to benefit all the citizens of the Kitsap Peninsula is achievable and recommended in the future.

3. The ability to have the CIKR information available for all SKFR responders to use in the field is a major tenant of the program. The initial set up of the SKFR CIKR program will need to be expanded as time and opportunity allows. The placement of the SKFR CIKR information in the SOC will help assure regular updates and availability for members. This document, although not considered a field response type document, is a natural place for the

CIKR information to be stored and maintained. Making the CIKR information easily available for responders beyond the SOC should continue to receive attention. The printing of hard copies and placement into defined storage as well as the downloading onto SKFR owned computers will hold a level of availability and dependability. What needs to be addressed is the ability to have the CIKR information loaded into the MCT units on all SKFR response apparatus. These MCT units are an established tool for most day to day response information and a common place for responders to look when dealing with issues or seeking information. With the MCT units being owned by CenCom and having a high level of control established to maintain system security, individual agencies have not been allowed to place agency specific information or programs into the units. Communications should be started with CenCom to work towards the goal of downloading the CIKR mapping and information onto the MCT hard drives. Currently CenCom completes a twice yearly download of information onto the hard drives of the MCT's. This provides access to key information regardless of connectivity issues or large scale internet interruptions. One type of information stored in this manner throughout Kitsap County is the prefire plans utilized by all six county fire agencies. CIKR information should be addressed in the same manor, initially starting with SKFR if possible, but working towards a common program and placement for CIKR information for all Kitsap County fire agencies.

4. The final recommendation for this ARP is in the area of future program improvements. The world of technology and its interface with fire service or emergency response is a rapidly growing and changing environment. Whether addressing current programs or expansion into new areas, these technological advances are often costly and time consuming to implement. Each community and supporting fire agency is required to make decisions as to what level they commit resources to in this area. Over the past twenty years SKFR and Kitsap County have made

good progress keeping pace with technological advances yet as with many other agencies, still has room for improvement. As funding or technology becomes available there are a number of recommendations for future program improvements in the area of information availability for responder decision making.

The ability to fully integrate response information programs into a user friendly format that is robust and reliable under all conditions should be a goal as the future unfolds. Currently, internet connectivity in Kitsap County provides ongoing challenges. In the future as the ability to utilize the concept of “the cloud” for information storage off site and highly reliable access, all response programs including CIKR information should be utilized through this medium. This would also give SKFR the ability to link together programs into a common information location for responders to access easily during field operations.

Programs such as CIKR information, prefires plans, GIS map layers and street view type visuals would all have value in the response decision making realm. The ability to link together this type of information and have it available reliably and quickly for responders will provide an increased level of safety and effectiveness during emergency operations.

References

Brewer, C. A. (2005). *Designing better maps A guide for gis users* (1st ed.). Redlands, California: ESRI Press.

Center for Public Safety Excellence, Inc. (2006). *Fire and emergency service self assessment manual* (7th ed.). Chantilly, VA: Author.

Center for Public Safety Excellence, Inc. (2008). *Standards of cover* (5th ed.). Chantilly, VA: Author.

Center for Public Safety Excellence, Inc. (2009). *Fire and emergency service self assessment manual* (8th ed.). Chantilly, VA: Author.

Department of Homeland Security. (2009). *National infrastructure protection plan* (). Washington, DC: U.S. Government Printing Office.

Gupta, K. (1999). *A practical guide to needs assessment.* San Francisco, CA: Jossey-Bass.

Homeland Security Presidential Directive 5: Management of Domestic Incidents, 5 United States Department of Homeland Security § http://www.whitehouse.gov/news/releases/20030228-9.html (2003).

Homeland Security Presidential Directive 7 Critical Infrastructure Identification , Prioritization, and Protection, 7 United States Department of Homeland Security § http://www.dhs.gov/xabout/laws/gc (2003).

Kitsap County Department of Emergency Management. (2008). *Kitsap county hazard identification and vulnerability assessment* (Issue Brief). Bremerton, WA: Author.

Kitsap County Integrated Tactical Accountability and Communications committee. (2005). *Kitsap county ITAC manual* (procedure manual). Kitsap County, WA: Author.

National Fire Academy. (2012, January). *Executive analysis of fire service operations in emergency management* (Student Manual 2nd edition). Emmitsburg, MD: Author.

Pearce, L. (2003, March). Disaster management and community planning, and public participation: how to achieve sustainable hazard mitigation. *Natural Hazards*, *28*(2&3), 211-228.

South Kitsap Fire and Rescue. (2008, January 9). *Pre fire policy* (Policy 6-40). Port Orchard, WA: Author.

South Kitsap Fire and Rescue. (2010). *Standards of Cover* (Response Standard). Port Orchard, WA: South Kitsap Fire and Rescue.

South Kitsap Fire and Rescue. (2011). *2011 Annual Report*. Annual Report. Port Orchard, WA.

South Kitsap Fire and Rescue. (2012, April 10). *2011 Service level objectives and evaluation report* (Fact Sheet). Port Orchard, WA: Author.

U.S. Department of Homeland Security. (2007). *The national response framework* (). Washington, DC: U.S. Government Printing Office.

U.S. Department of Homeland Security. (2011, September). *National preparedness goal* (Issue Brief). Washington D.C.: Author.

U.S. Department of Transportation (Ed.). (2012). *Emergency response guidebook*.United States: Author.

United States Fire Administration. (2011, January). *Executive analysis of community risk reduction* (Student Manual 2nd edition). Emmitsburg, MD: Author.

Washington State Military Department. (2008). *Washington infrastructure protection plan* (). Washington, DC: U.S. Government Printing Office.

Appendix A

Structured interview questions.

The intention of this interview process is to gain information and insight from members who have responsibilities related to command level response, community planning or data storage, CIKR determination and display. Information relating to all research questions for this ARP listed below were the focus of this interview.

1. How should critical infrastructure and key resources be identified?

2. What reference data should be included with the critical infrastructure and key resource information?

3. What initial action plans should be included for use with the critical infrastructure and key resource information?

4. How should the critical infrastructure and key resources information be maintained and stored.

Person interviewed: _____

Introduction with CIKR definition,

> Critical Infrastructure: Systems and Assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction.
>
> Key Resources: As defined in the Homeland Security Act, key resources are publicly or privately controlled resources essential to the minimal operations of the economy and government (DHS, 2009, p. 109).

1. What has been your personal involvement or background with planning of CIKR or CIKR related programs?

2. Within your area of responsibility, do you have a CIKR listing or breakdown for the South Kitsap Community?

3. If so, what were the factors used to identify the CIKR on your list?

4. With the work you may have done for your agency in this area, are you aware of any other methods commonly used for identifying CIKR?

5. With any identified CIKR programs you have worked with, what has been the typical method used for documentation?

6. With any identified CIKR programs you have worked with, what has been the intended use for CIKR during response?

7. With any identified CIKR you have worked with, what has been the typical method used for mapping or charting?

8. With CIKR mapping intended for use during response, do you know of or recommend any additional information or details for incorporation into the materials?

9. With any identified CIKR you have worked with, has there been any corresponding reference data included for use by responders?

10. Do you have any recommendations on types of CIKR reference data that could be included for responders?

11. With any CIKR programs you have worked with, has there been any initial action plans or steps provided for responder use?

12. Do you have any recommendations on types of initial action plans or steps that could be included for responders with CIKR information?

13. With any CIKR programs you have worked with, what has been the methods used for maintaining and distributing the information or materials?

14. Within the scope of your understanding of today's technology and the GIS/mapping available, do you know of or recommend any other effective way to document, relay or store CIKR information for responder use?

15. What obstacles or opportunities for future CIKR program improvements or success do you currently know of or recommend?

16. Do you have anything else to add on this topic that was not already covered?

Appendix B

Facility Name	Facility Address	P	Category	Type
Airport - Port Orchard	Glenwood Road	3	Transportation Route - Secondary	Airport
Orchard Pointe Memory Care Community	300 S Kitsap Blvd	2	Institutional Occupancy	Alzheimer's & Dementia Care Facility
Cedar Heights	333 Lippert Dr W	2	High Occupancy Structure/Location	Apartment Complex
Conifer Ridge	1721 Fircrest Dr SE	2	High Occupancy Structure/Location	Apartment Complex
Heritage/Viewmont Apartments	1904 Pioneer Lane	2	High Occupancy Structure/Location	Apartment Complex
Village Green Apartments	3888 SE Madrona Dr	2	High Occupancy Structure/Location	Apartment Complex
Ridgemont Terrace	2055 Pottery	2	Institutional Occupancy	Assisted Living Facility
Bridge - Burley Creek	SR 16	2	Transportation Route - Primary	Bridge or Overpass
Burley Olalla Rd	South Road Shop	1	Transportation Route - Primary	Bridge or Overpass
Crescent Valley Rd Bridge	Crescent Valley S of Banner	2	Transportation Route - Primary	Bridge or Overpass
East Fenton Rd Bridge	SE Fenton E of Bethel Burley	2	Transportation Route - Primary	Bridge or Overpass
East Oak St Bridge	SE Oak Rd E of Bethel	2	Transportation Route - Primary	Bridge or Overpass
Long Lake Rd Bridge	Long Lake Rd S of Lake Valley RD	2	Transportation Route - Primary	Bridge or Overpass
Lund Avenue Bridge	SE Lund Ave between Sidney/Bethel	1	Transportation Route - Primary	Bridge or Overpass
Mullenix Rd Overcrossing (East)	SR 16 at Mullenix	1	Transportation Route - Primary	Bridge or Overpass
Mullenix Rd Overcrossing (West)	SR 16 at Mullenix	1	Transportation Route - Primary	Bridge or Overpass
N-S Ramp SR 16 Overcrossing	SR 16 at SR 3	1	Transportation Route - Primary	Bridge or Overpass
Sedgwick Rd Bridge	SR160 E of Locker Rd	1	Transportation Route - Primary	Bridge or Overpass

Sidney Rd Overcrossing (North)	SR 16 over Sidney/Pottery	1	Transportation Route - Primary	Bridge or Overpass
Sidney Rd Overcrossing (South)	SR 16 over Sidney/Pottery	1	Transportation Route - Primary	Bridge or Overpass
Southworth Drive Bridge	Southworth Dr Locker/Banner	1	Transportation Route - Primary	Bridge or Overpass
Spruce Rd Bridge	SE Spruce Rd W of Bethel Burley	1	Transportation Route - Primary	Bridge or Overpass
SR 16 Overcrossing	SR 160 at SR 16	1	Transportation Route - Primary	Bridge or Overpass
SR 16 Overcrossing	SR 3 at SR 16 (Gorst)	1	Transportation Route - Primary	Bridge or Overpass
SR 16 Overcrossing - Bethel Rd	SR 16 at Bethel Rd	1	Transportation Route - Primary	Bridge or Overpass
SR 166 Overcrossing	SR 16 at SR 166 (Bay Street)	1	Transportation Route - Primary	Bridge or Overpass
Tremont St Overcrossing (West)	SR 16 at Tremont	1	Transportation Route - Primary	Bridge or Overpass
Tremont St Overcrossing (East)	SR 16 at Tremont	1	Transportation Route - Primary	Bridge or Overpass
West Belfair Bridge	Belfair Valley (Minard/Wilkinson)	1	Transportation Route - Primary	Bridge or Overpass
Gorst Creek	SR 3 near SR 16 Junction	3	Transportation Route - Secondary	Bridge or Overpass
Gorst Creek Bridge	SR 3 near SR 16 Junction	3	Transportation Route - Secondary	Bridge or Overpass
Big 5 Sporting Goods	1027 Bethel Avenue	2	High Occupancy Structure/Location	Business
South Sound Cinema 10	1435 Olney Avenue	2	High Occupancy Structure/Location	Business
Staples	1805 Lund Avenue	2	High Occupancy Structure/Location	Business
Walgreens	3099 Bethel Avenue	3	High Occupancy Structure/Location	Business
Wal-Mart	3497 Bethel Avenue	2	High Occupancy Structure/Location	Business
Doctor's Clinic	450 S Kitsap Blvd	2	Medical Facility	Clinic
Franciscan Medical Building	451 Sedgwick Road	2	Medical Facility	Clinic

Group Health Coop - Port Orchard	1400 Pottery Ave	2	Medical Facility	Clinic
Olalla Guest Lodge		2	Medical Facility	Clinic
Given's Community Center	715 Sidney	2	High Occupancy Structure/Location	Community Center
Long Lake Community Center		2	High Occupancy Structure/Location	Community Center
Bonneville Power Administration (BPA)	3621 Solid	2	Essential Lifeline - Utilities	Electrical Provider
South Kitsap Family Kitchen (1st Lutheran)	2483 Mitchell Rd	3	Community Resource Provider	Feeding Site
Ferry - Annapolis to Bremerton	Beach Drive	3	Transportation Route - Secondary	Ferry Terminal
Ferry - Port Orchard to Bremerton	1 Sidney Ave	3	Transportation Route - Secondary	Ferry Terminal
Ferry - Southworth to Seattle	11564 SE St Hwy 160	3	Transportation Route - Secondary	Ferry Terminal
SKFR - Station 6	6000 SW Rhododendron DR	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 7	7650 SW Sylvan St	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 8	1974 Fircrest Dr SE	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 9	7433 SE Mile Hill Dr	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 10	5629 Banner Rd SE	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 11	6249 Bethel Rd	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 12	8696 Olalla Valley Rd SE	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 13	5770 SE Nelson Rd	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 14	12685 Bethel Burley Rd SE	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 15	13591 Glenwood Rd SW	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 16	4057 W ST HWY 3	1	Critical Response Agency/Facility	Fire Station

SKFR - Station 17	7990 McCormick Woods	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 18	8850 ST HWY 3	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 20	1500 Rocky Point Rd	1	Critical Response Agency/Facility	Fire Station
SKFR - Station 31	200 Tremont St	1	Critical Response Agency/Facility	Fire Station
South Kitsap Helpline	1351 Bay St	3	Community Resource Provider	Food Bank
KC - Building	715 Sidney	1	Critical Response Agency/Facility	Govt Bldg
Environmental Protection Agency	7411 Beach Drive	2	Govt Service	Govt Bldg
KC - Prosecutors/ Child Support	730 Prospect	2	Govt Service	Govt Bldg
Port Orchard City Hall	216 Prospect	1	Govt Service	Govt Bldg
SKSD - Transportation (Bus Barn)	1962 Hoover	2	Govt Service	Govt Bldg
US Post Office	1125 Bethel	2	Govt Service	Govt Bldg
Washington National Guard Armory	1950 Mile Hill Drive	2	Govt Service	Govt Bldg
KC - Juvenile Detention Facility	1338 Old Clifton Rd	2	Institutional Occupancy	Govt Bldg
KC - Work Release	661 Taylor	2	Institutional Occupancy	Govt Bldg
Albertsons	370 Sedgwick Road	2	High Occupancy Structure/Location	Grocery Store
Albertsons	1434 Olney Avenue	2	High Occupancy Structure/Location	Grocery Store
Fred Meyer	1900 Sedgwick Road	2	High Occupancy Structure/Location	Grocery Store
QFC Food Center	1735 Village Lane	2	High Occupancy Structure/Location	Grocery Store
Safeway	3355 Bethel Avenue	2	High Occupancy Structure/Location	Grocery Store
Rite Aid	3282 Bethel Avenue	3	Community Resource Provider	Pharmacy

South Park Pharmacy	1743 Village Lane	2	High Occupancy Structure/Location	Pharmacy
KC - Sheriff's Office, Jail	614 Division St	1	Critical Response Agency/Facility	Police Station
KC - Sheriff's Office, Main	614 Division St	1	Critical Response Agency/Facility	Police Station
Port Orchard Police	546 Bay St	1	Critical Response Agency/Facility	Police Station
Port of Manchester		3	Transportation Route - Secondary	Port
Port of Waterman		3	Transportation Route - Secondary	Port
Bethany Lutheran Church & School	151 Tremont	2	School	Private School
Discovery Montessori School	1026 Sidney	2	School	Private School
Holly Ridge Center	1026 Sidney	2	School	Private School
Olalla Valley Elementary/ECAP 2 Buildings	6100 Denny Bond	2	School	Public School
SKSD - Burley-Glenwood Elementary School	100 SW Lake way Blvd	2	School	Public School
SKSD - Cedar Heights Junior High School	2220 Pottery Ave	2	School	Public School
SKSD - East Port Orchard Elementary School	1964 Hoover Ave SE	2	School	Public School
SKSD - Explorer Academy	2150 Fircrest Dr SE	2	School	Public School
SKSD - Hidden Creek Elementary School	5455 Converse Rd SE	2	School	Public School
SKSD - John Sedgwick Junior High School	8995 SE Sedgwick Rd	2	School	Public School
SKSD - Madrona Heights - 3 Buildings	2150 Fircrest Dr SE	2	School	Public School

SKSD - Manchester Elementary School	1901 California Ave E	2	School	Public School
SKSD - Marcus Whitman Junior High School	1887 Madrona Dr SE	2	School	Public School
SKSD - Mullenix Ridge Elementary School	3900 SE Mullenix Rd	2	School	Public School
SKSD - Olalla Elementary School	6100 Olalla-Burley Rd SE	2	School	Public School
SKSD - Orchard Heights Elementary School	2288 Fircrest Dr SE	2	School	Public School
SKSD - Sidney Glen Elementary School	500 SW Birch Rd	2	School	Public School
SKSD - South Colby Elementary School	3281 Banner Rd SE	2	School	Public School
SKSD - South Kitsap High School	425 Mitchell Ave	2	School	Public School
SKSD - Sunnyslope Elementary/ECAP 2 Bldgs	4183 Sunnyslope Rd SW	2	School	Public School
KC - Public Works	507 Austin	1	Critical Response Agency/Facility	Public Works Facility
KC - Public Works, Annex	8600 SW Imperial Way	1	Critical Response Agency/Facility	Public Works Facility
KC - Public Works, South Road Shed	2339 SE Cedar Rd	1	Critical Response Agency/Facility	Public Works Facility
Port Orchard Public Works	2051 Sidney	1	Critical Response Agency/Facility	Public Works Facility
Public Works - Maintenance	717 Taylor Avenue	1	Critical Response Agency/Facility	Public Works Facility
Public Works Shed	1535 Vivian	1	Critical Response Agency/Facility	Public Works Facility
WSDOT - Road Shop	8293 Spring Creek	1	Critical Response Agency/Facility	Public Works Facility
South Kitsap Mall	Mile Hill Drive	2	High Occupancy Structure/Location	Shopping Mall

Life Care Center of Port Orchard	2031 Pottery Ave	2	Institutional Occupancy	Skilled Nursing Home
Park Vista	2944 SE Lund Ave	2	Institutional Occupancy	Skilled Nursing Home
Retsil Veteran's Home (Washington State)	1141 Beach Dr E	2	Institutional Occupancy	Skilled Nursing Home
Ridgemont Terrace	2051 Pottery Ave	2	Institutional Occupancy	Skilled Nursing Home
Stafford Suites	1761 Pottery Ave	2	Institutional Occupancy	Skilled Nursing Home
Sydney House	155 W Lippert	2	Institutional Occupancy	Skilled Nursing Home
Qwest Comm Network Switching	2386 Sidney	2	Essential Lifeline - Utilities	Telephone Provider
Kitsap Transit - Bus Shed	1430 Retsil Rd E	2	Public Service Provider	Transit
HMC - Port Orchard	450 S Kitsap Blvd	2	Medical Facility	Urgent Care Facility
Karcher Creek Sewer District – Plant	1165 Beach Dr	2	Essential Lifeline - Utilities	Wastewater Treatment Plant
Manchester WW Treatment Plant	8020 E Caraway Rd	2	Essential Lifeline - Utilities	Wastewater Treatment Plant
Annapolis Water District	2924 SE Lund Ave	2	Essential Lifeline - Utilities	Water Provider
Manchester Water District	2081 E Spring St	2	Essential Lifeline - Utilities	Water Provider
Sunnyslope Water District	4401 Sunnyslope Rd	2	Essential Lifeline - Utilities	Water Provider

Appendix C

Area	P	Type	Symbol	Facility Name	St No.	St Name
SKFR	3	Airport	Airport	Airport - Port Orchard		Glenwood
SKFR	2	Alzheimer/ Dementia Care Facility	Institutional Complex	Orchard Pointe Memory Care Community	300	Kitsap
Port Orchard	2	Apartment Complex	High Occ Structure/ Location	Cedar Heights	333	Lippert
SKFR	2	Apartment Complex	High Occ Structure/ Location	Conifer Ridge	1721	Fircrest
SKFR	2	Apartment Complex	High Occ Structure/ Location	Heritage/Viewmont Apartments	1904	Pioneer
SKFR	2	Apartment Complex	High Occ Structure/ Location	Village Green Apartments	3888	Madrona
SKFR	2	Assisted Living Facility	Institutional Complex	Ridgemont Terrace	2055	Pottery
Port Orchard	2	Business	High Occ Structure/ Location	South Sound Cinema 10	1435	Olney
SKFR	2	Business	High Occ Structure/ Location	Staples	1805	Lund
SKFR	3	Business	High Occ Structure/ Location	Walgreens	3099	Bethel
SKFR	2	Business	High Occ Structure/ Location	Wal-Mart	3497	Bethel
Port Orchard	2	Clinic	Medical Facility	Doctor's Clinic	450	Kitsap
SKFR	2	Clinic	High Occ Structure/ Location	Franciscan Medical Building	451	Sedgwick
Port Orchard	2	Clinic	Medical Facility	Group Health Coop - Port Orchard	1400	Pottery

SKFR	2	Clinic	Medical Facility	Olalla Guest Lodge		
Port Orchard	2	Community Center	High Occ Structure/ Location	Given's Community Center	715	Sidney
SKFR	2	Community Center	High Occ Structure/ Location	Long Lake Community Center		
SKFR	2	Electrical Provider	Utilities	Bonneville Power Administration (BPA)	3621	Solid
Port Orchard	3	Feeding Site	Community Resource Provider	South Kitsap Family Kitchen (1st Lutheran)	2483	Mitchell
SKFR	3	Ferry Terminal	Marina	Ferry - Southworth to Seattle	11564	St Hwy 160
SKFR	1	Fire Station	Fire	SKF&R - Station 6	6000	Rhododendron
SKFR	1	Fire Station	Fire	SKF&R - Station 7	7650	Sylvan
SKFR	1	Fire Station	Fire	SKF&R - Station 8 Admin	1974	Fircrest
SKFR	1	Fire Station	Fire	SKF&R - Station 9	7433	Mile Hill
SKFR	1	Fire Station	Fire	SKF&R - Station 10	5629	Banner
SKFR	1	Fire Station	Fire	SKF&R - Station 11	6249	Bethel
SKFR	1	Fire Station	Fire	SKF&R - Station 12	8696	Olalla Valley
SKFR	1	Fire Station	Fire	SKF&R - Station 13	5770	Nelson
SKFR	1	Fire Station	Fire	SKF&R - Station 14	12685	Bethel Burley
SKFR	1	Fire Station	Fire	SKF&R - Station 15	13591	Glenwood
SKFR	1	Fire Station	Fire	SKF&R - Station 16	4057	St Hwy 3
SKFR	1	Fire Station	Fire	SKF&R - Station 17	7990	McCormick Woods
SKFR	1	Fire Station	Fire	SKF&R - Station 18	8850	St Hwy 3
SKFR	1	Fire Station	Fire	SKF&R - Station 20	1500	Rocky Pt

SKFR	1	Fire Station	Fire	SKF&R - Station 31	200	Tremont
Port Orchard	3	Food Bank	Community Resource Provider	South Kitsap Helpline	1351	Bay
SKFR	2	Govt Building	Govt Service	Environmental Protection Agency	7411	Beach
SKFR	1	Govt Building	Govt Service	KC - Building	715	Sidney
SKFR	2	Govt Building	Institutional Complex	KC - Juvenile Detention Facility	1338	Old Clifton
Port Orchard	1	Govt Building	Govt Service	Port Orchard City Hall	216	Prospect
Port Orchard	2	Govt Building	Govt Service	Washington National Guard Armory	1950	Mile Hill
SKFR	2	Grocery Store	High Occ Structure/ Location	Albertsons	1434	Olney
SKFR	2	Grocery Store	High Occ Structure/ Location	Albertsons	370	Sedgwick
SKFR	2	Grocery Store	High Occ Structure/ Location	Fred Meyer	1900	Sedgwick
SKFR	2	Grocery Store	High Occ Structure/ Location	QFC Food Center	1735	Village
SKFR	2	Grocery Store	High Occ Structure/ Location	Safeway	3355	Bethel
SKFR	3	Pharmacy	Community Resource Provider	Rite Aid	3282	Bethel
SKFR	2	Pharmacy	High Occ Structure/ Location	South Park Pharmacy	1743	Village
Port Orchard	1	Police Station	Police	Port Orchard Police	546	Bay
Port Orchard	2	Private School	School	Bethany Lutheran Church & School	151	Tremont

Port Orchard	2	Private School	School	Discovery Montessori School	1026	Sidney
Port Orchard	2	Private School	School	Holly Ridge Center	1026	Sidney
SKFR	2	Public School	School	Olalla Valley Elementary/ECAP 2 Buildings	6100	Bond
SKFR	2	Public School	School	SKSD - Burley-Glenwood Elementary School	100	Lakeway
SKFR	2	Public School	School	SKSD - Cedar Heights Junior High School	2220	Pottery
SKFR	2	Public School	School	SKSD - East Port Orchard Elementary School	1964	Hoover
SKFR	2	Public School	School	SKSD - Explorer Academy	2150	Fircrest
SKFR	2	Public School	School	SKSD - Hidden Creek Elementary School	5455	Converse
SKFR	2	Public School	School	SKSD - John Sedgwick Junior High School	8995	Sedgwick
SKFR	2	Public School	School	SKSD - Madrona Heights - 3 Buildings	2150	Fircrest
SKFR	2	Public School	School	SKSD - Manchester Elementary School	1901	California
SKFR	2	Public School	School	SKSD - Marcus Whitman Junior High School	1887	Madrona
SKFR	2	Public School	School	SKSD - Mullenix Ridge Elementary School	3900	Mullenix
SKFR	2	Public School	School	SKSD - Orchard Heights Elementary School	2288	Fircrest
SKFR	2	Public School	School	SKSD - Sidney Glen Elementary School	500	Birch

SKFR	2	Public School	School	SKSD - South Colby Elementary School	3281	Banner
SKFR	2	Public School	School	SKSD - South Kitsap High School	425	Mitchell
SKFR	2	Public School	School	SKSD - Sunnyslope Elementary/ECAP 2 Bldgs	4183	Sunnyslope
SKFR	1	Public Works Facility	Public Works	KC - Public Works	507	Austin
SKFR	1	Public Works Facility	Public Works	KC - Public Works South Road Shed	2339	Cedar
Port Orchard	1	Public Works Facility	Public Works	Port Orchard Public Works	2051	Sidney
Port Orchard	1	Public Works Facility	Public Works	Public Works - Maintenance	717	Taylor
Port Orchard	1	Public Works Facility	Public Works	Public Works Shed	1535	Vivian
SKFR	1	Public Works Facility	Public Works	WSDOT - Road Shop	8293	Spring
Port Orchard	2	Shopping Mall	High Occ Structure/ Location	South Kitsap Mall		Mile Hill
SKFR	2	Skilled Nursing Home	Institutional Complex	Life Care Center of Port Orchard	2031	Pottery
SKFR	2	Skilled Nursing Home	Institutional Complex	Park Vista	2944	Lund
SKFR	2	Skilled Nursing Home	Institutional Complex	Retsil Veteran's Home (WA State)	1141	Beach
SKFR	2	Skilled Nursing Home	Institutional Complex	Ridgemont Terrace	2051	Pottery
SKFR	2	Skilled Nursing Home	Institutional Complex	Stafford Suites	1761	Pottery
SKFR	2	Skilled Nursing Home	Institutional Complex	Sydney House	155	Lippert
SKFR	2	Telephone Provider	Utilities	Qwest Comm Network Switching	2386	Sidney
SKFR	2	Transit	Transit	Kitsap Transit - Bus Shed	1430	Retsil

SKFR	2	Wastewater Treatment Plant	Utilities	Karcher Creek Sewer District - Plant	1165	Beach
SKFR	2	Wastewater Treatment Plant	Utilities	Manchester WW Treatment Plant	8020	Caraway
SKFR	2	Water Provider	Utilities	Annapolis Water District	2924	Lund
SKFR	2	Water Provider	Utilities	Manchester Water District	2081	Spring
SKFR	2	Water Provider	Utilities	Sunnyslope Water District	4401	Sunnyslope
SKFR	3		Marina	Port of Manchester		Main
SKFR	3		Marina	Port of Waterman		

Appendix D

Name	PreFire on File	Address	DEM Priority	DEM Type	KCGIS Symbol	Latitude	Longitude	Tier II
Air Gas Nor-Pac	Y	912 National Ave			High Risk HazMat	47.5536	-122.66764	Oxygen
Albertson's	Y	370 Sedgwick Rd	2	Grocery Store	High Occ Structure - Location	47.4962	-122.65211	
Albertson's	Y	1434 Olney Ave	2	Grocery Store	High Occ Structure - Location	47.53564	-122.6105	
Alta Point Apts	Y	2099 Jefferson Ave			High Occ Structure - Location	47.52982	-122.62697	
Annapolis Apts	Y	1833 Bay St			High Occ Structure - Location	47.54811	-122.61989	
Arbor Terrace Apts	Y	1800 Sidney Ave			High Occ Structure - Location	47.52123	-122.64525	
Arrow Lumber	Y	6100 Bethel Rd			High Occ Structure - Location	47.4939	-122.63215	
Bethany Lutheran Church & School	Y	151 Tremont St	2	Private School	School	47.52581	-122.64829	
Big 5 Sporting Goods	Y	1027 Bethel Ave	2	Business	Comm Resource Provider	47.53318	-122.62777	
Bonneville Power Admin (BPA)	Y	3621 Solid Ln	2	Electrical Provider	Utilities	47.52976	-122.70334	
Bridge - Burley Creek	N	SR 16 Burley Creek	2	Bridge	Bridge / Overpass	47.47033	-122.62506	
Bridge - Crescent Valley Rd	N	Crescent Valley S of Banner	2	Bridge	Bridge / Overpass	47.42149	-122.54183	
Bridge - East Fenton Rd	N	SE Fenton E of Bethel Burley	2	Bridge	Bridge / Overpass	47.4168	-122.63026	

Bridge - East Oak	N	SE Oak Rd E of Bethel	2	Bridge	Bridge / Overpass	47.42883	-122.62788	
Bridge - Gorst Creek	N	SR 3 near SR 16 Junction	3	Bridge	Bridge / Overpass	47.52815	-122.69891	
Bridge - Long Lake Rd	N	Long Lake Rd S of Lake Valley Rd	2	Bridge	Bridge / Overpass	47.49918	-122.5804	
Bridge - Lund Avenue	N	SE Lund Ave Sidney - Bethel	1	Bridge	Bridge / Overpass	47.52363	-122.63916	
Bridge - Sedgwick Rd	N	SR160 E of Locker Rd	1	Bridge	Bridge / Overpass	47.50532	-122.5669	
Bridge - Southworth Dr	N	Locker - Banner	1	Bridge	Bridge / Overpass	47.52337	-122.54615	
Bridge - Spruce Rd	N	SE Spruce Rd W of Bethel Burley	1	Bridge	Bridge / Overpass	47.41438	-122.63118	
Bridge - West Belfair Valley	N	Minard - Wilkinson	1	Bridge	Bridge / Overpass	47.51089	-122.79169	
Cascade Natural Gas Corp – Pipeline	N	Lake Flora Rd		Pipeline Utilities	Pipeline			
Cedar Heights Apts	Y	333 Lippert Dr	2	Apt Complex	High Occ Structure - Location	47.51894	-122.6551	
Century Link	Y	1475 Woods Rd			Utilities	47.53524	-122.56722	Diesel, Sulfuric Acid, Lead
Century Link Network Switching	Y	2386 Sidney Ave	2	Tele-phone Provider	Utilities	47.51228	-122.65031	Diesel, Sulfuric Battery Acid, Lead
Century Link Port Orchard Remote	Y	10324 Orchard Ave			Utilities	47.45506	-122.55831	Sulfuric Acid
Century Link Sunnyslope Co.	N	4032 Sunnyslope Rd			Utilities	47.51257	-122.73471	Sulfuric Acid
CenturyTel Port Orchard Co.	N	14199 Colony Ave			Utilities	47.41826	-122.63448	Sulfuric Acid

Colonial Arms Apts	Y	3620 Colonial Ln			High Occ Structure - Location	47.51549	-122.61221	
Colonial Lane Apts	Y	3621 Colonial Ln			High Occ Structure - Location	47.51547	-122.61148	
Comfort Inn	Y	1121 Bay St			High Occ Structure - Location	47.54315	-122.63022	
Conifer Ridge Apts	Y	1721 Fircrest Dr	2	Apt Complex	High Occ Structure - Location	47.53198	-122.59838	
DOE	N	2350 Colchester Dr			Govt Service	47.55518	-122.54542	
Elementary School - Burley Glen	Y	100 Lakeway Blvd	2	Public School	School	47.43853	-122.64829	
Elementary School - EPO	Y	2649 Hoover Ave	2	Public School	School	47.52427	-122.62691	
Elementary School - Hidden Crk	Y	5455 Converse Ave	2	Public School	School	47.49908	-122.61961	
Elementary School - Manchester	Y	1901 California Ave	2	Public School	School	47.5512	-122.55542	
Elementary School - Mullenix	Y	3900 Mullenix Rd	2	Public School	School	47.46762	-122.60362	
Elementary School - Sid Glen	Y	500 Birch Rd	2	Public School	School	47.50606	-122.65424	
Elementary School - South Co	Y	3281 Banner Rd	2	Public School	School	47.51839	-122.5452	
Elementary School / Boys Girls Club – Orchard Hts	Y	2288 Fircrest Dr	2	Public School	School	47.52746	-122.59883	
Elementary School / ECAP - Olalla Valley ECAP	Y	6100 Denny Bond Blvd	2	Public School	School	47.43193	-122.5717	

Elementary School / ECAP - Sunnyslope	Y	4183 Sunnyslope Rd	2	Public School	School	47.51158	-122.73027	
Environmental Protection Lab	Y	7411 Beach Dr	2	Govt Bldg	Govt Service	47.56791	-122.55206	Heating Oil #2, Sulfuric Acid
Evergreen Lumber	N	9654 Southworth Dr			Comm Resource Provider	47.52172	-122.52294	
Evergreen Lumber	Y	1325 Lloyd Pky			Comm Resource Provider	47.52406	-122.66565	
Farrell's Pharmacy	Y	450 South Kitsap Blvd			Comm Resource Provider	47.52248	-122.65674	
Ferrellgas	Y	1405 Lumsden Rd			High Risk HazMat	47.52456	-122.6679	Propane
Ferry - Annapolis to Bremerton	N	Beach Drive	3	Ferry Terminal	Marina	47.54765	-122.61627	
Ferry Terminal - Southworth	N	11425 Sedgwick Rd	3	Ferry Terminal	Marina	47.51212	-122.49797	
FISCP Manchester Fuel Depot	N	7501 Beach Dr			Govt Service	47.56713	-122.55114	Hydrogen Peroxide, Diesel Fuel Reclaimed Jet Fuel, Diesel Fuel #2, Kerosene, Diethylene Glycol Monoethyl Ether
Franciscan Medical	Y	451 Sedgwick Rd	2	Clinic	High Occ Structure - Location	47.49801	-122.65581	
Fred Meyer	Y	1900 Sedgwick Rd	2	Grocery Store	High Occ Structure - Location	47.50326	-122.62937	
Givens Community Center	Y	1026 Sidney Ave	2	Comm Center	High Occ Structure - Location	47.53327	-122.63726	

Goodwill	Y	1720 Mile Hill Dr			Comm Resource Provider	47.53264	-122.62277	
Group Health	Y	1400 Pottery Ave	2	Clinic	Medical Facility	47.52635	-122.65396	
Heritage Apts	N	145 Lippert Dr	2	Apt Complex	High Occ Structure - Location	47.51879	-122.64854	
High School & Pool	Y	425 Mitchell Ave	2	Public School	School	47.53738	-122.62469	
Holly & Hidden Terrace Apts	Y	4106 Madrona Dr			High Occ Structure - Location	47.5316	-122.60139	
Jiffy Lube	Y	5057 Bethel Rd			Comm Resource Provider	47.5036	-122.63105	Motor Oil
Jiffy Lube	Y	2253 Bethel Ave			Comm Resource Provider	47.52824	-122.63063	Motor Oil
Jr High - Cedar Hts	Y	2220 Pottery Ave	2	Public School	School	47.51587	-122.65367	
Jr High School - Marcus Whit	Y	1887 Madrona Dr	2	Public School	School	47.52832	-122.60299	
Jr High School - Sedgwick	Y	8995 Sedgwick Rd	2	Public School	School	47.50613	-122.53125	
KC Admin Bldg	N	619 Division St			Govt Service	47.53817	-122.63885	Diesel
KC Courthouse	Y	614 Division St			Govt Service	47.53763	-122.63834	Unleaded Gasoline
KC Jail	Y	614 Division St	1	Police Station	Police	47.53763	-122.63834	
KC Juvenile Detention Center	Y	1338 Old Clifton Rd	2	Govt Bldg	Institute Complex	47.52063	-122.66586	
KC Maintenance	N	717 Taylor St	1	Public Works Facility	Public Works	47.53639	-122.63668	
KC Prosecutor's Office	Y	715 Sidney Ave	1	Govt Bldg	Govt Service	47.53649	-122.63669	
KC Prosecutors Office & Child Support	N	730 Prospect St	2	Govt Bldg	Govt Service	47.54114	-122.63696	

KC Public Works	Y	507 Austin Ave	1	Public Works Facility	Public Works	47.53825	-122.63741	
KC Road Maintenance Shop	Y	2339 Cedar Rd	1	Public Works Facility	Public Works	47.49483	-122.62371	Engine Oil, Hydraulic Brake Fluid, Gasoline, Diesel Fuel #2
KC Sheriff's Office	Y	614 Division St	1	Police Station	Police	47.53763	-122.63834	
KC Work Release	Y	661 Taylor St	2	Govt Bldg	Institute Complex	47.53647	-122.63806	
Kitsap Lumber	Y	450 National Ave			Comm Resource Provider	47.55857	-122.66721	
Kitsap Transit South Base	N	1430 Retsil Rd	2	Transit	Transit	47.53609	-122.61838	
KPLU Radio Telecommunications Tower	N	8869 View Pk Rd			Utilities	47.48039	-122.5336	Chlorine Gas
Leader Intl	Y	1540 Leader Intl Blvd			Comm Resource Provider	47.52631	-122.6674	
Life Care Center	Y	2031 Pottery Ave	2	Skilled Nursing Home	Institute Complex	47.51684	-122.6516	
Long Lk Comm Park	N	5448 Long Lake Rd	2	Comm Center	High Occ Structure - Location	47.5005	-122.58355	
Lowe's	Y	150 Sedgwick Rd			Comm Resource Provider	47.49939	-122.64611	
Lund Pointe Apts	Y	3300 Valentine Ln			High Occ Structure - Location	47.51917	-122.62631	
Madrona Hts Discovery, Head Start, Explorer Academy	Y	2150 Fircrest Dr	2	Public School	School	47.52945	-122.60036	

Madrona Manor Senior Apts	Y	3900 Madrona Dr			High Occ Structure - Location	47.53087	-122.59504	
Manchester Heights Apts	Y	1750 Jackson Ave			High Occ Structure - Location	47.53269	-122.61001	
Manchester Waste Water Treatment	Y	8020 Caraway Rd	2	Waste water treatment Plant	Utilities	47.55888	-122.54525	
Manchester Water District	N	2081 Spring Ave	2	Water Provider	Utilities	47.55235	-122.54574	
Manchester Water District (Well 6)	N	2160 Garfield Ave			Utilities	47.5287	-122.55322	
Mariners Glenn Apts	Y	3418 Navigation Ln			High Occ Structure - Location	47.52138	-122.60356	
Marlee Apts	Y	1029 Bay St			High Occ Structure - Location	47.54297	-122.63122	
McLendon's Hardware	Y	1692 Mile Hill Dr			Comm Resource Provider	47.53276	-122.62498	
Mutual Materials	Y	1515 Vivian Ct			Comm Resource Provider	47.52601	-122.66895	Portland Cement, Dolomitic Hydrated Lime
NOAA Marine Fisheries	N	7305 Beach Dr			Govt Service	47.56897	-122.5539	Liquid Oxygen, #2 Diesel Fuel
Olalla Recovery Center	Y	12851 Lala Cove Ln	2	Clinic	Medical Facility	47.43175	-122.54104	
Olney Creek Condos	Y	2929 Mile Hill Dr			High Occ Structure - Location	47.5346	-122.61393	
Olympic Pointe Apts	Y	3100 Orlando St			High Occ Structure - Location	47.53727	-122.60826	

Orchard on the Green Apts	Y	2250 Sidney Ave			High Occ Structure - Location	47.51447	-122.64896	
Orchard Pointe Apts	Y	200 Lippert Dr			High Occ Structure - Location	47.51788	-122.65133	
Orchard Pointe Memory Care	Y	300 South Kitsap Blvd	2	Dementia Care Facility	Institute Complex	47.52186	-122.65296	
Overpass - Burley Olalla Rd (East)	N	SR 16 at Burley Olalla - East	1	Overpass	Bridge / Overpass	47.43241	-122.62338	
Overpass - Burley Olalla Rd (West)	N	SR 16 at Burley Olalla - West	1	Overpass	Bridge / Overpass	47.43242	-122.62307	
Overpass - Mullenix Rd (West)	N	SR 16 at Mullenix	1	Overpass	Bridge / Overpass	47.46867	-122.62451	
Overpass - N-S Ramp SR 16	N	SR 16 at SR 3	1	Overpass	Bridge / Overpass	47.52512	-122.69863	
Overpass - Sidney Rd (North)	N	SR 16 over Sidney - Pottery	1	Overpass	Bridge / Overpass	47.51186	-122.65262	
Overpass - Sidney Rd (South)	N	SR 16 over Sidney - Pottery	1	Overpass	Bridge / Overpass	47.51146	-122.65265	
Overpass - SR 16	N	SR 160 at SR 16	1	Overpass	Bridge / Overpass	47.5012	-122.64562	
Overpass - SR 16	N	SR 3 at SR 16 Gorst	1	Overpass	Bridge / Overpass	47.52737	-122.70019	
Overpass - SR 16 - Bethel Rd	N	SR 16 at Bethel Rd	1	Overpass	Bridge / Overpass	47.48463	-122.63063	
Overpass - SR 166	N	SR 16 at SR 166 Bay Street	1	Overpass	Bridge / Overpass	47.52818	-122.67797	
Overpass - SR 166 - Black Jack Crk	N	SR 166 at Black Jack Crk	1	Overpass	Bridge / Overpass	47.5422	-122.62733	
Overpass - SR 166 - Mitchell	N	SR 166 at Mitchell	1	Overpass	Bridge / Overpass	47.53408	-122.62587	

Overpass - Tremont St (West)	N	SR 16 at Tremont	1	Overpass	Bridge / Overpass	47.5216	-122.65998	
Overpass - Tremont St (East)	N	SR 16 at Tremont	1	Overpass	Bridge / Overpass	47.52156	-122.66039	
Panorama Apts	Y	1617 Admiralty Heights Ln			High Occ Structure - Location	47.54661	-122.67828	
Park Vista Retirement Comm	Y	2944 Lund Ave	2	Skilled Nursing Home	Institute Complex	47.5189	-122.61125	Chlorine
Peninsula Feed	Y	901 Bay St			Comm Resource Provider	47.54196	-122.63453	
Peninsula Work Release	Y	1340 Lloyd Pky			Institute Complex	47.52297	-122.66833	
PO Airport Hangars	Y	12300 Sidney Rd	3	Airport	Airport	47.43425	-122.66231	
PO City Hall	Y	216 Prospect St	1	Govt Bldg	Govt Service	47.54123	-122.63885	
PO Marina	N	707 Sidney Pky			Marina	47.544	-122.63768	
PO Medical Clinic	Y	451 Sedgwick Rd			Medical Facility	47.49801	-122.65581	Chlorine Gas
PO Police	Y	546 Bay	1	Police Station	Police	47.54106	-122.63884	
PO Public Works Shop	N	1535 Vivian Ct	1	Public Works Facility	Public Works	47.52671	-122.67053	
PO Readiness Center	Y	1950 Mile Hill Dr	2	Govt Bldg	Govt Service	47.5332	-122.61953	
PO Valley Apts	Y	4698 Conifer Park Dr			High Occ Structure - Location	47.52093	-122.59252	
PO Vista	Y	900 Mitchell Ave			High Occ Structure - Location	47.53536	-122.62594	
Port of Manchester	N		3	Port	Marina	47.55577	-122.54337	
Port of Waterman	N		3	Port	Marina	47.5731	-122.58125	

Premier Rentals	Y	2618 Mile Hill Dr			Comm Resource Provider	47.53367	-122.61606	
Public Works South Shed	N	2051 Sidney Ave	1	Public Works Facility	Public Works	47.51693	-122.64666	
QFC	Y	1735 Village Ln	2	Grocery Store	High Occ Structure - Location	47.5328	-122.59434	
Retsil Vets Home (Business)	Y	1141 Beach Dr	2	Skilled Nursing Home	Institute Complex	47.54568	-122.61525	
Retsil Vets Home (Kitchen)	Y	1141 Beach Dr			Comm Resource Provider	47.54568	-122.61525	
Ridgemont Terrace Apts	Y	2049 Pottery Ave	2	Assisted Living Facility	Institute Complex	47.51566	-122.65146	
Rite Aid	Y	3282 Bethel Rd	3	Pharmacy	Comm Resource Provider	47.519	-122.63212	
Saar's	Y	1415 Olney Ave			Comm Resource Provider	47.53506	-122.60747	
Safeway	Y	3355 Bethel Rd	2	Grocery Store	High Occ Structure - Location	47.51818	-122.63026	
Sherman Heights Apts	Y	4606 Sherman Heights Rd			High Occ Structure - Location	47.54207	-122.67757	
Sinclair View Condominiums	Y	2250 Highview			High Occ Structure - Location	47.54305	-122.67724	
SK Family Kitchen (1st Lutheran)	Y	2483 Mitchell Ave	3	Feeding Site	Comm Resource Provider	47.52554	-122.62917	
SK Helpline	Y	1012 Mitchell Ave	3	Food Bank	Comm Resource Provider	47.53389	-122.62655	
SK Mall	Y	1700 Mile Hill Dr	2	Shopping Mall	High Occ Structure - Location	47.53258	-122.62348	

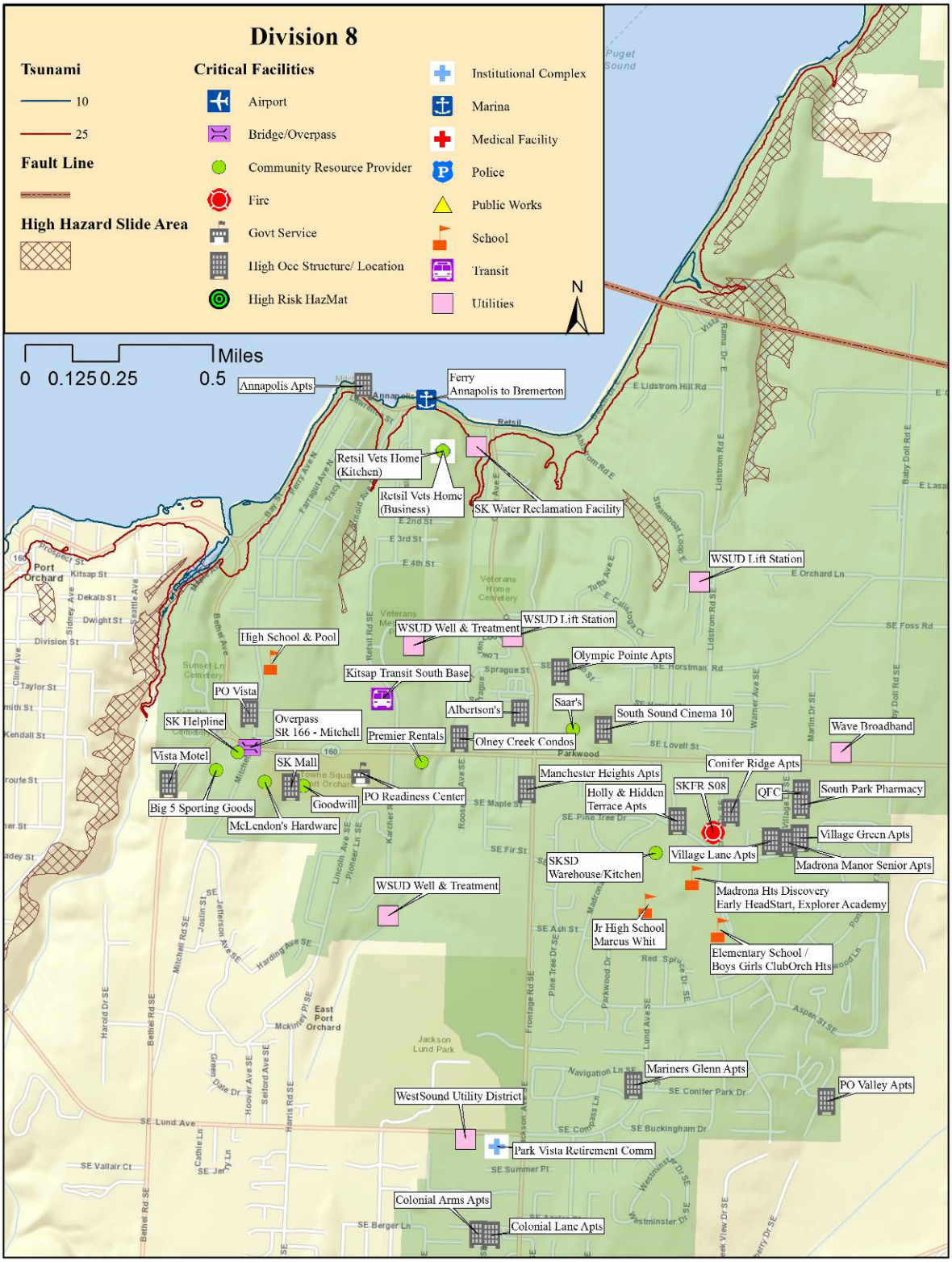
SK Urgent Care Bldg	Y	450 South Kitsap Blvd	2	Urgent Care Facility	Medical Facility	47.52248	-122.65674	
SK Water Reclamation Facility	Y	1165 Beach Dr	2	Waste water treatment Plant	Utilities	47.5459	-122.61335	
SKFR S06	N	6170 Rhododendron Dr	1	Fire Station	Fire	47.50193	-122.73133	
SKFR S07	N	7651 Sylvan St	1	Fire Station	Fire	47.42796	-122.75518	
SKFR S08	Y	1974 Fircrest Dr	2	Fire Station	Fire	47.53121	-122.59934	
SKFR S09	Y	7433 Mile Hill Dr	1	Fire Station	Fire	47.53429	-122.55388	
SKFR S10	Y	5629 Banner Rd	1	Fire Station	Fire	47.49711	-122.54519	
SKFR S11	N	6249 Bethel Rd	1	Fire Station	Fire	47.4919	-122.63136	
SKFR S12	Y	8696 Olalla Valley Rd	1	Fire Station	Fire	47.46934	-122.57335	
SKFR S13	Y	5770 Nelson Rd	1	Fire Station	Fire	47.41774	-122.57538	
SKFR S14	Y	12685 Bethel Burley Rd	1	Fire Station	Fire	47.43435	-122.63051	
SKFR S15	Y	13591 Glenwood Rd	1	Fire Station	Fire	47.42529	-122.68973	
SKFR S16	N	4058 State Hwy 3	1	Fire Station	Fire	47.5248	-122.70563	
SKFR S17	N	7990 McCormick Woods Dr	1	Fire Station	Fire	47.48769	-122.66569	
SKFR S20	N	1550 Rocky Pt Rd	1	Fire Station	Fire	47.57596	-122.6674	
SKFR S31	Y	200 Tremont St	1	Fire Station	Fire	47.52495	-122.64588	
SKSD 402 Admin	Y	2689 Hoover Ave	2	Govt Bldg	School	47.52368	-122.62648	
SKSD Facilities - Maintenance	Y	1650 Cedar Rd			School	47.4936	-122.63116	

SKSD Transportation	Y	2710 Lincoln Ave			Transit	47.52323	-122.62525	
SKSD Warehouse – Kitchen	Y	1695 Madrona Dr			Comm Resource Provider	47.53037	-122.6026	
South Park Pharmacy	Y	1743 Village Ln	2	Pharmacy	High Occ Structure - Location	47.53234	-122.59437	
South Sound Cinema 10	Y	1435 Olney Ave	2	Business	High Occ Structure - Location	47.53507	-122.60573	
St. Vincent DePaul	Y	1209 Bay St			Comm Resource Provider	47.54338	-122.62939	
Stafford at Ridgemont	Y	2051 Pottery Ave	2	Skilled Nursing Home	Institute Complex	47.51561	-122.65146	
Stafford Suites	Y	1761 Pottery Ave	2	Skilled Nursing Home	Institute Complex	47.52184	-122.6513	
Staples	Y	1805 Lund Ave	2	Business	High Occ Structure - Location	47.52007	-122.62908	
Sunn Fjord Condo	Y	1730 Sunn Fjord			High Occ Structure - Location	47.54713	-122.67786	
Sunnyslope Water District	N	4401 Sunnyslope Rd	2	Water Provider	Utilities	47.50909	-122.73479	
Sydney House	Y	155 Lippert Dr	3	Skilled Nursing Home	Institute Complex	47.51866	-122.64997	
The Doctor's Clinic	Y	450 South Kitsap Blvd	2	Clinic	Medical Facility	47.52248	-122.65674	
US Post Office	N	14831 Burley Ave			Govt Service	47.41403	-122.62923	
US Post Office	N	6030 Burley Olalla Rd			Govt Service	47.43148	-122.57371	
US Post Office	N	3985 Cherry St			Govt Service	47.51231	-122.50072	

US Post Office	N	9650 Southworth Dr			Govt Service	47.52222	-122.52355	
US Post Office	Y	1125 Bethel Ave	2	Govt Bldg	Govt Service	47.53128	-122.62993	
US Post Office	N	2325 Colchester Dr			Govt Service	47.55474	-122.54464	
US Post Office	Y	200 National Ave			Govt Service	47.56134	-122.66701	
Village Green Apts	Y	3888 Madrona Dr	2	Apt Complex	High Occ Structure - Location	47.53106	-122.5944	
Village Lane Apts	Y	1920 Larch			High Occ Structure - Location	47.53091	-122.59603	
Vista Motel	Y	1090 Bethel Ave			High Occ Structure - Location	47.53258	-122.63046	
WA ST Auditor	Y	600 Kitsap St			Govt Service	47.54044	-122.63899	
Walgreens	Y	3099 Bethel Rd	3	Business	High Occ Structure - Location	47.52012	-122.63041	
Wal-Mart	Y	3497 Bethel Rd	2	Business	High Occ Structure - Location	47.51688	-122.62775	
Wave Broadband	Y	4519 Mile Hill Dr			Utilities	47.53442	-122.59218	
West Hills Elementary School	Y	520 National Ave			School	47.5573	-122.66686	
West Sound Utility District	Y	2914 Lund Ave	2	Water Provider	Utilities	47.51916	-122.61307	
WSDOT	Y	8293 Spring Creek Rd	1	Public Works Facility	Public Works	47.47279	-122.62323	Diesel # 2, Gasoline
WSUD Lift Station	N	6319 Grandridge Dr			Utilities	47.50187	-122.61074	
WSUD Lift Station	N	5105 Bethel Rd			Utilities	47.5027	-122.63117	

WSUD Lift Station	N	1350 Carl Pickel			Utilities	47.51933	-122.63616	
WSUD Lift Station	N	4717 Conifer Park Dr			Utilities	47.52113	-122.59154	
WSUD Lift Station	N	1030 Olney Ave			Utilities	47.53859	-122.61105	
WSUD Lift Station	N	3939 Sandbar CT			Utilities	47.54087	-122.60048	
WSUD Well & Treatment	Y	2764 Water Ln			Utilities	47.51019	-122.61749	Chlorine
WSUD Well & Treatment	Y	2243 Karcher			Utilities	47.52771	-122.61777	
WSUD Well & Treatment	Y	1431 Retsil Rd			Utilities	47.53816	-122.61668	

Appendix E


Division 8
Tsunami
10
25
Fault Line
High Hazard Slide Area
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N
Miles
0 0.125 0.25 0.5
Puget Sound
Annapolis Apts
Ferry Annapolis to Bremerton
Retsil Vets Home (Kitchen)
Retsil Vets Home (Business)
SK Water Reclamation Facility
WSUD Lift Station
WSUD Well & Treatment
WSUD Lift Station
High School & Pool
Olympic Pointe Apts
Kitsap Transit South Base
PO Vista
Albertson's
Saar's
South Sound Cinema 10
SK Helpline
Overpass SR 166 - Mitchell
Premier Rentals
Olney Creek Condos
Wave Broadband
Vista Motel
SK Mall
Manchester Heights Apts
Conifer Ridge Apts
Big 5 Sporting Goods
Goodwill
PO Readiness Center
Holly & Hidden Terrace Apts
SKFR S08
QFC
South Park Pharmacy
McLendon's Hardware
Village Green Apts
SKSD Warehouse/Kitchen
Village Lane Apts
Madrona Manor Senior Apts
WSUD Well & Treatment
Madrona Hts Discovery Early HeadStart, Explorer Academy
Jr High School Marcus Whit
Elementary School / Boys Girls ClubOrch Hts
Mariners Glenn Apts
PO Valley Apts
WestSound Utility District
Park Vista Retirement Comm
Colonial Arms Apts
Colonial Lane Apts
Port Orchard
East Port Orchard
Jackson Lund Park

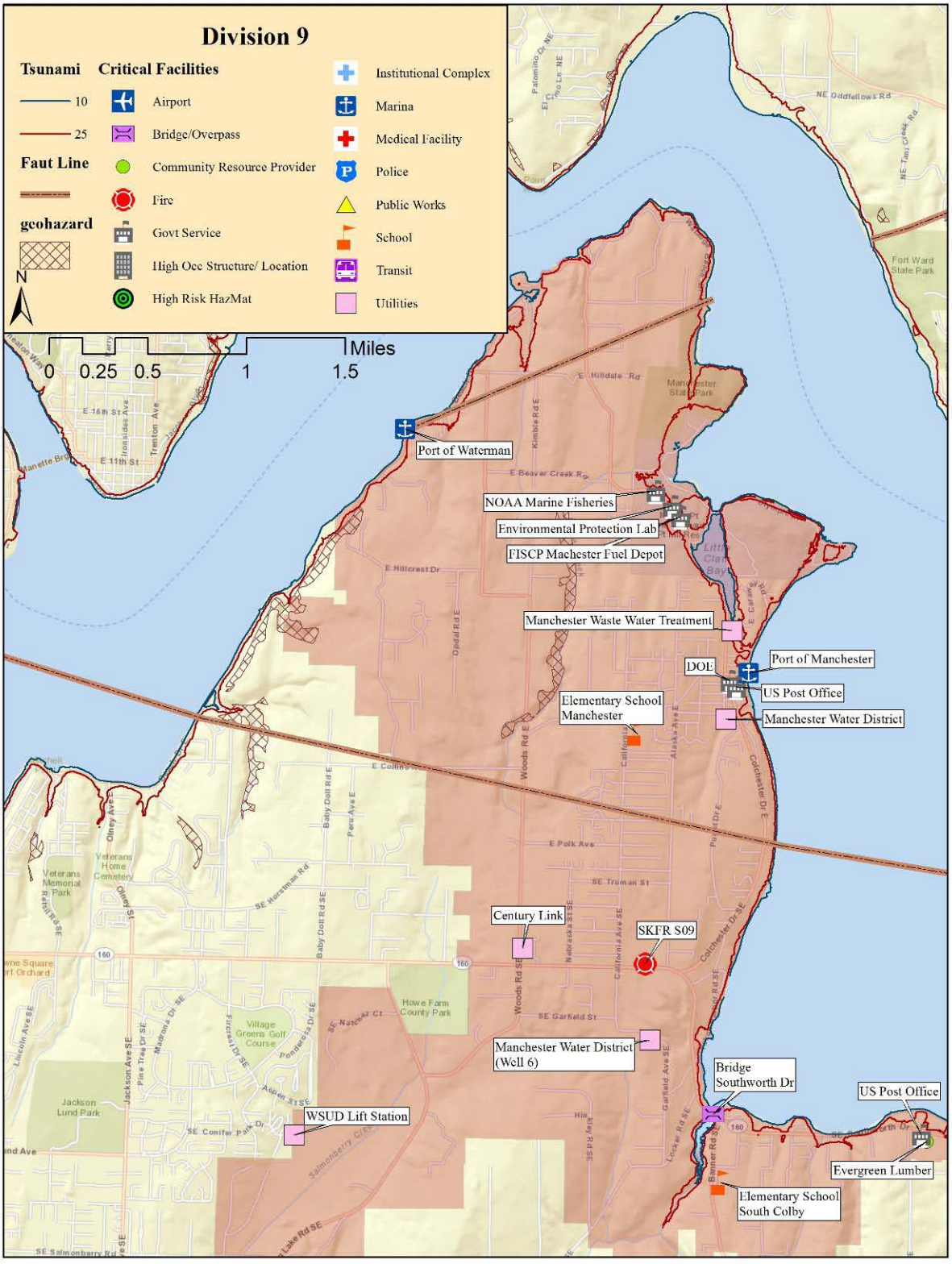
Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Albertson's 1434 Olney Ave	Prefire on file DEM Priority 2	Grocery Store High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search
Annapolis Apts 1833 Bay St	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Big 5 Sporting Goods 1027 Bethel Ave	Prefire on file DEM Priority 2	Business Community Resource Provider	POPD, KCSO Alarm upgrade Haz Mat	Evacuation Crowd control
Colonial Arms Apts 3620 Colonial Ln	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Colonial Lane Apts 3621 Colonial Ln	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade	Evacuation Buses for shelter Site liaison
Conifer Ridge Apts 1721 Fircrest Dr	Prefire on file DEM Priority 2	Apt Complex High Occupancy Structure - Location	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Elementary School / Boys Girls Club - Orchard Hts 2288 Fircrest Dr	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Ferry - Annapolis to Bremerton Beach Drive	DEM Priority 3	Ferry Terminal Marina	POPD, KCSO boats USCG, PSNS Kitsap Transit Alarm upgrade	Unified Com Patient care MCI tracking Site liaison
Goodwill 1720 Mile Hill Dr	Prefire on file	Community Resource Provider	POPD, KCSO Alarm upgrade	Evacuation Crowd control

High School & Pool 425 Mitchell Ave	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM, Haz Mat	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Holly & Hidden Terrace Apts 4106 Madrona Dr	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Jr High School - Marcus Whit 1887 Madrona Dr	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM, Haz Mat	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Kitsap Transit South Base 1430 Retsil Rd	DEM Priority 2	Transit	Alarm upgrade Haz Mat	Manage scene ID Haz Mat
Madrona Hts Discovery Early Head Start, Explorer Academy 2150 Fircrest Dr	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Madrona Manor Senior Apts 3900 Madrona Dr	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site Liaison
Manchester Heights Apts 1750 Jackson Ave	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Mariners Glenn Apts 3418 Navigation Ln	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
McLendon's Hardware 1692 Mile Hill Dr	Prefire on file	Community Resource Provider	POPD, KCSO Alarm upgrade Haz Mat	Evacuation Crowd control Manage scene ID Haz Mat
Olney Creek Condos 2929 Mile Hill Dr	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison

Olympic Pointe Apts 3100 Orlando St	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Overpass - SR 166 Mitchell SR 166 at Mitchell	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
Park Vista Retirement Comm 2944 Lund Ave	Prefire on file Tier 2 on file DEM Priority 2	Skilled Nursing Home Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison DOT guidebook
PO Readiness Center 1950 Mile Hill Dr	Prefire on file DEM Priority 2	Govt Service	DEM WA Nat Guard Alarm upgrade Haz Mat	Evacuation ID Haz Mat Manage scene
PO Valley Apts 4698 Conifer Park Dr	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
PO Vista 900 Mitchell Ave	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Premier Rentals 2618 Mile Hill Dr	Prefire on file	Community Resource Provider	Alarm upgrade Haz Mat	ID issue LS/IS/PC Manage scene
QFC 1735 Village Ln	Prefire on file DEM Priority 2	Grocery Store High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
Retsil Vets Home (Business) 1141 Beach Dr	Prefire on file DEM Priority 2	Skilled Nursing Home Institutional Complex	POPD, KCSO Alarm upgrade DEM MCI response Kitsap transit	Evacuation Manage scene Large area search Site liaison Shelter in place
Retsil Vets Home (Kitchen)1141 Beach Dr	Prefire on file	Community Resource Provider	POPD, KCSO Alarm upgrade DEM MCI response	Evacuation Manage scene Large area search

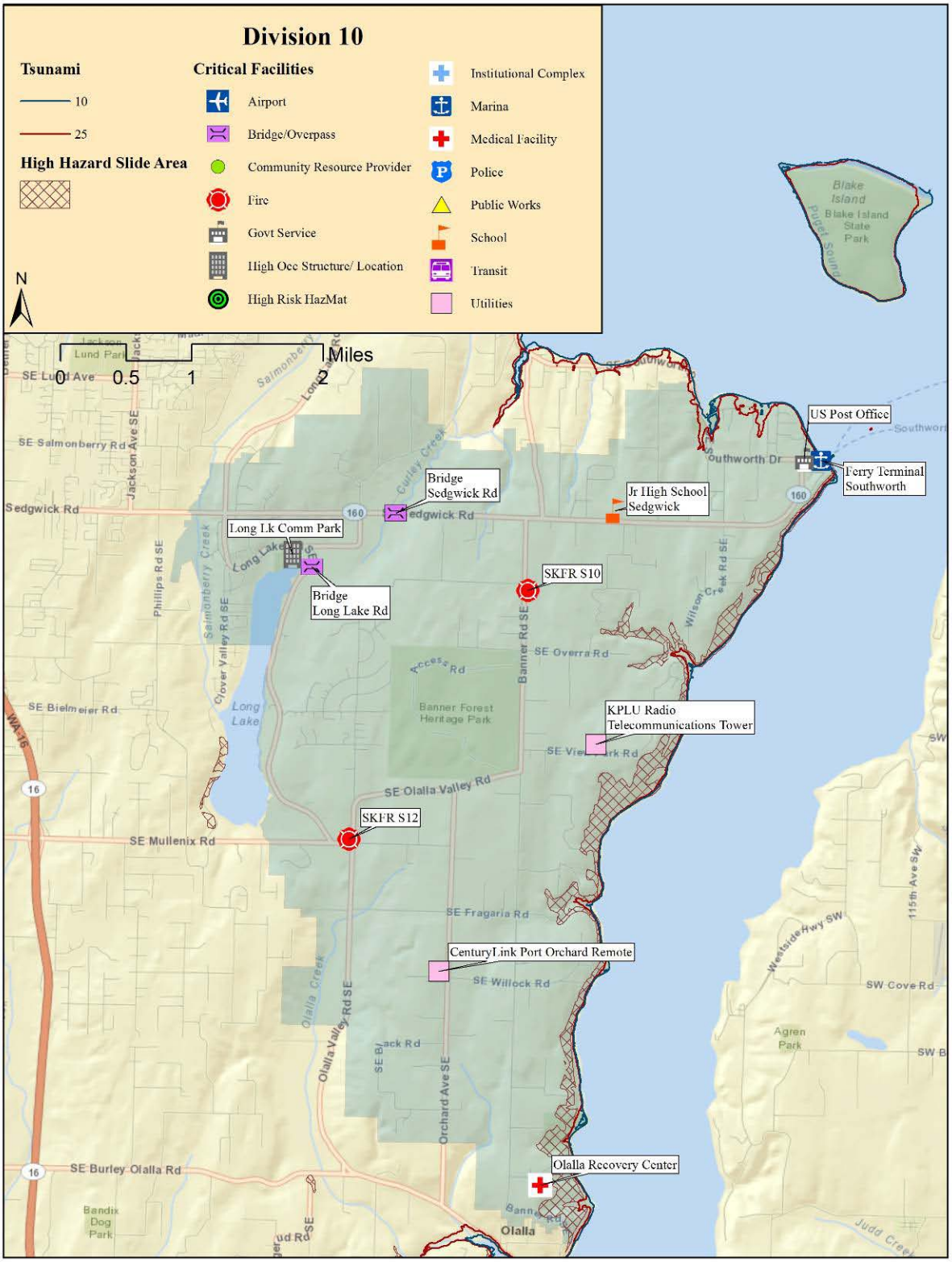
Saar's 1415 Olney Ave	Prefire on file	Community Resource Provider	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search
SK Helpline 1012 Mitchell Ave	Prefire on file DEM Priority 3	Food Bank Community Resource Provider	Alarm upgrade	Evacuation
SK Mall 1700 Mile Hill Dr	Prefire on file DEM Priority 2	Shopping Mall High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
SK Water Reclamation Facility 1165 Beach Dr	Prefire on file DEM Priority 2	Wastewater Treatment Plant Utilities	Alarm upgrade DEM Haz Mat Confined space	Manage scene ID issue LS/IS/PC Open tank hazards
SKFR S08 1974 Fircrest Dr	Prefire on file DEM Priority 2	Fire Station	Alarm upgrade	Evacuation Manage scene
SKSD Warehouse/Kitchen 1695 Madrona Dr	Prefire on file	Community Resource Provider	Alarm upgrade Haz Mat	Evacuation Manage scene Site liaison
South Park Pharmacy 1743 Village Ln	Prefire on file DEM Priority 2	Business - Pharmacy High Occupancy Structure - Location	Alarm upgrade	Evacuation ID issue LS/IS/PC
South Sound Cinema 10 1435 Olney Ave	Prefire on file DEM Priority 2	Business High Occupancy Structure - Location	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Village Green Apts 3888 Madrona Dr	Prefire on file DEM Priority 2	Apt Complex High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Village Lane Apts 1920 Larch	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison

Vista Motel 1090 Bethel Ave	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Wave Broadband 4519 Mile Hill Dr	Prefire on file	Utilities	Company rep contact	ID issue Fire control systems
West Sound Utility District 2914 Lund Ave	Prefire on file DEM Priority 2	Water Provider Utilities	Alarm upgrade Haz Mat	Manage scene
WSUD Lift Station 1030 Olney Ave		Utilities	PSE Confined space	ID issue Deny entry
WSUD Lift Station 3939 Sandbar CT		Utilities	PSE Confined space	ID issue Deny entry
WSUD Well & Treatment 1431 Retsil Rd	Prefire on file	Utilities	PSE WSUD contact Haz Mat	ID issue Deny entry
WSUD Well & Treatment 2243 Karcher	Prefire on file	Utilities	PSE WSUD contact Haz Mat	ID issue Deny entry


Division 9
Tsunami
10
25
Faut Line
geohazard
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N
0 0.25 0.5 1 1.5 Miles
Port of Waterman
NOAA Marine Fisheries
Environmental Protection Lab
FISCP Machester Fuel Depot
Manchester Waste Water Treatment
DOE
Port of Manchester
US Post Office
Manchester Water District
Elementary School Manchester
Century Link
SKFR S09
Manchester Water District (Well 6)
Bridge Southworth Dr
US Post Office
Evergreen Lumber
Elementary School South Colby
WSUD Lift Station
Howe Farm County Park
Jackson Lund Park
Veterans Memorial Park
Village Greens Golf Course
Fort Ward State Park
Manchester State Park
NE Oddfellows Rd
E Hillcrest Dr
E Beaver Creek Rd
E Polk Ave
SE Truman St
SE Garfield St
SE Salmonberry Rd

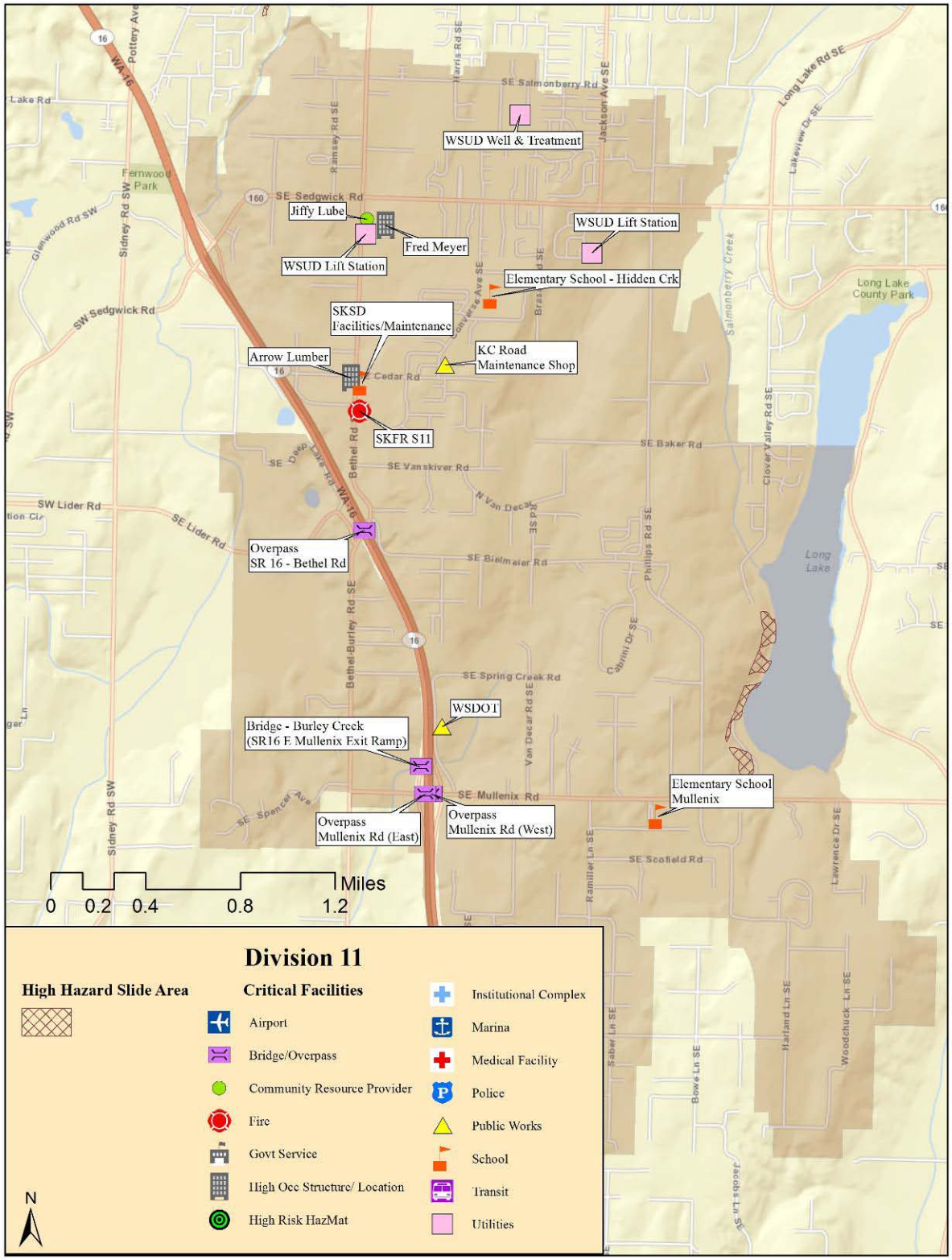
Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Bridge - Southworth Locker - Banner	DEM Priority 1	Bridge	DEM Kitsap road dept	Control access
Century Link 1475 Woods Rd	Prefire on file Tier 2 on file	Utilities	Company rep contact	ID issue Fire control systems DOT guidebook
Dept of Ecology 2350 Colchester Dr		Govt Service	DEM DOE rep Haz Mat Alarm upgrade	Manage scene ID issue Unified Comm Site liaison
Elementary School - Manchester 1901 California Ave	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Elementary School - South Co 3281 Banner Rd	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Environmental Protection Lab 7411 Beach Dr	Prefire on file Tier 2 on file DEM Priority 2	Govt Bldg Govt Service	DEM DOE rep Haz Mat Alarm upgrade	Manage scene ID issue Unified Comm Site liaison DOT guidebook
Evergreen Lumber 9654 Southworth Dr		Community Resource Provider	Alarm upgrade	Scene control
FISCP Manchester Fuel Depot 7501 Beach Dr	Tier 2 on file	Govt Service	DEM KCSO, WSP PSNS fire USCG, DOE Haz Mat	Unified comm. Scene control ID issue Evacuation of hazard area DOT guidebook
Manchester Waste Water Treatment 8020 Caraway Rd	Prefire on file DEM Priority 2	Wastewater Treatment Plant Utilities	Alarm upgrade DEM Haz Mat Confined space	Manage scene ID issue Open tank hazards

Manchester Water District (Well 6) 2160 Garfield Ave		Utilities	PSE Company rep contact Haz Mat	ID issue Deny entry
Manchester Water District 2081 Spring Ave	DEM Priority 2	Water Provider Utilities	Alarm upgrade Haz Mat	Scene control ID issue
NOAA Marine Fisheries 7305 Beach Dr	Tier 2 on file	Govt Service	DEM DOE, NOAA contact Haz Mat Alarm upgrade	Manage scene ID issue Unified Comm Site liaison DOT guidebook
Port of Manchester	DEM Priority 3	Port - Marina	POPD, KCSO boat USCG	Manage scene
Port of Waterman	DEM Priority 3	Port - Marina	POPD, KCSO boat USCG	Manage scene
SKFR S09 7433 Mile Hill Dr	Prefire on file DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
US Post Office2325 Colchester Dr		Govt Service	Alarm upgrade MCI DEM , KCSO	Manage scene Evacuation
US Post Office 9650 Southworth Dr		Govt Service	Alarm upgrade MCI DEM , KCSO	Manage scene Evacuation
WSUD Lift Station 4717 Conifer Park Dr		Utilities	PSE Confined space	ID issue Deny entry


Division 10
Tsunami
10
25
High Hazard Slide Area
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N
0 0.5 1 2 Miles
Blake Island
Blake Island State Park
US Post Office
Ferry Terminal Southworth
Jr High School Sedgwick
Bridge Sedgwick Rd
Long Lk Comm Park
Bridge Long Lake Rd
SKFR S10
KPLU Radio Telecommunications Tower
SKFR S12
CenturyLink Port Orchard Remote
Olalla Recovery Center
Olalla
Sedgwick Rd
SE Salmonberry Rd
SE Bielmeier Rd
SE Olalla Valley Rd
SE Mullenix Rd
SE Burley Olalla Rd
SE Overra Rd
SE Fragaria Rd
SE Willock Rd
Southworth Dr
Banner Forest Heritage Park
Long Lake
Curley Creek
Olalla Creek
Agren Park
Bandix Dog Park
Judd Creek
Westside Hwy SW
SW Cove Rd
115th Ave SW
Jackson Ave SE
Phillips Rd SE
Salmonberry Creek
Clover Valley Rd SE
Banner Rd SE
Wilson Creek Rd SE
Orchard Ave SE
Olalla Valley Rd SE
WA-16

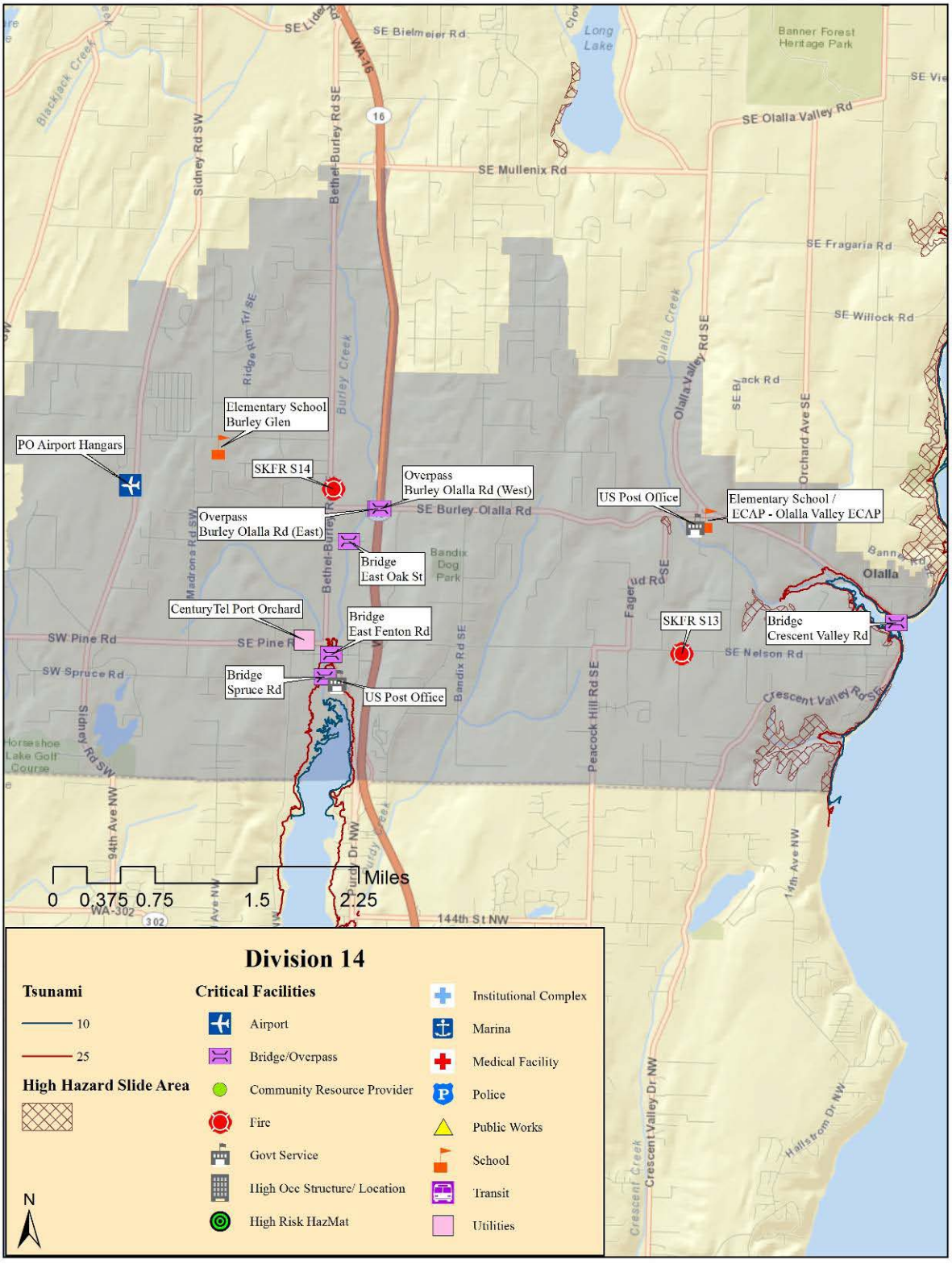
Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Bridge - Long Lk Rd S of Lake Valley Rd	DEM Priority 2	Bridge	DEM Kitsap Road dept KCSO	Control access
Bridge - Sedgwick Rd SR160 E	DEM Priority 1	Bridge	DEM WSDOT WSP	Control access
Century Link Port Orchard Remote 10324 Orchard Ave	Prefire on file Tier 2 on file	Utilities	Company rep contact	ID issue Fire control systems DOT guidebook
Ferry Terminal - Southworth 11425 Sedgwick Rd	DEM Priority 3	Ferry Terminal Marina	POPD, KCSO boats USCG, SFD/TFD Kitsap Transit	Unified Com Patient care MCI tracking Site liaison
Jr High School - Sedgwick 8995 Sedgwick Rd	Prefire on file DEM Priority 2	Public School	KCSO,WSP Alarm upgrade MCI response DEM, Haz Mat	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
KPLU Radio Telecommunications Tower 8869 View Park Rd	Tier 2 on file	Utilities	Company rep contact Haz Mat	ID issue Scene control Fire control systems DOT guidebook
Long Lake Comm Park 5448 Long Lake Rd	DEM Priority 2	Comm Center High Occupancy Structure - Location	KCSO, WSP Alarm upgrade Kitsap transit MCI	Evacuation Buses for shelter
Olalla Recovery Center 12851 Lala Cove Ln	Prefire on file DEM Priority 2	Medical Facility	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
SKFR S10 5629 Banner Rd	Prefire on file DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKFR S12 8696 Olalla Valley Rd	Prefire on file DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene

US Post Office 3985 Cherry St		Govt Service	Alarm upgrade MCI DEM, KCSO	Manage scene Evacuation


WSUD Well & Treatment
Jiffy Lube
Fred Meyer
WSUD Lift Station
WSUD Lift Station
Elementary School - Hidden Crk
SKSD Facilities/Maintenance
Arrow Lumber
KC Road Maintenance Shop
SKFR S11
Overpass SR 16 - Bethel Rd
WSDOT
Bridge - Burley Creek (SR16 E Mullenix Exit Ramp)
Overpass Mullenix Rd (East)
Overpass Mullenix Rd (West)
Elementary School Mullenix
Miles
0 0.2 0.4 0.8 1.2
Division 11
High Hazard Slide Area
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N

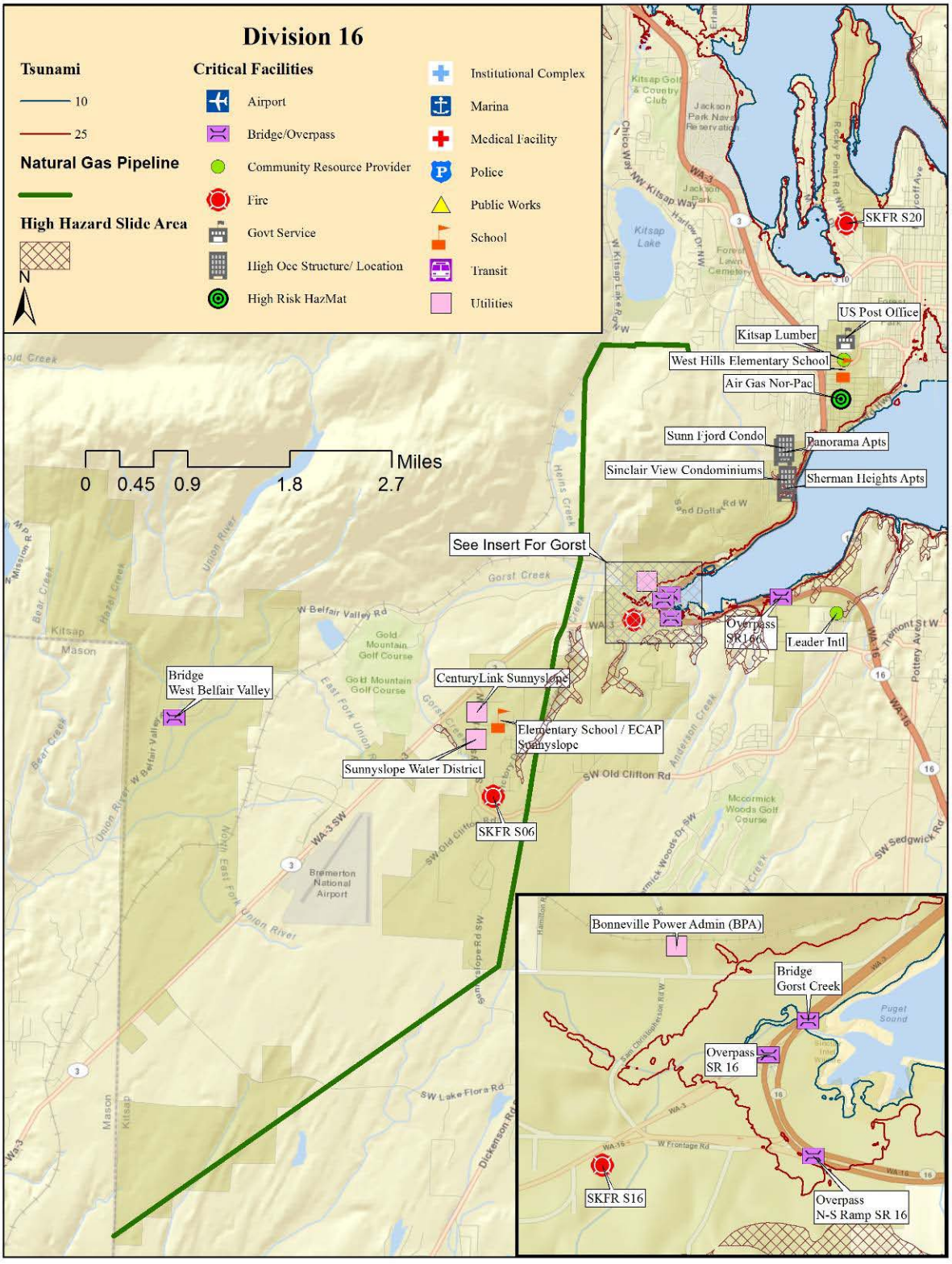
Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Arrow Lumber 6100 Bethel Rd	Prefire on file	High Occupancy Structure - Location	Alarm upgrade Haz Mat	Scene control
Bridge - Burley Creek SR 16	DEM Priority 2	Bridge	DEM WSDOT WSP	Control access
Elementary School - Hidden Crk 5455 Converse Ave	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Elementary School - Mullenix 3900 Mullenix Rd	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Fred Meyer 1900 Sedgwick Rd	Prefire on file DEM Priority 2	Grocery Store High Occupancy Structure - Location	Alarm upgrade Haz Mat Kitsap transit POPD, KCSO	Evacuation Scene control ID issue Site liaison
Jiffy Lube 5057 Bethel Rd	Prefire on file Tier 2 on file	Community Resource Provider	Haz Mat Confined space	Manage scene ID issue DOT guidebook
KC Road Maintenance Shop 2339 Cedar Rd	Prefire on file Tier 2 on file DEM Priority 1	Public Works Facility	Haz Mat Alarm upgrade	Manage scene ID issue DOT guidebook
Overpass - Mullenix Rd (West) SR 16	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
Overpass - SR 16 – Bethel Rd	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
SKFR S11 6249 Bethel Rd	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKSD Facilities - Maintenance 1650 Cedar Rd	Prefire on file	School Facility	Haz Mat Alarm upgrade	Manage scene ID issue Site liaison

WSDOT 8293 Spring Creek Rd	Prefire on file Tier 2 on file DEM Priority 1	Public Works Facility	Haz Mat Alarm upgrade WSDOT	Manage scene ID issue DOT guidebook
WSUD Lift Station 5105 Bethel Rd		Utilities	PSE Confined space	ID issue Deny entry
WSUD Lift Station 6319 Grandridge Dr		Utilities	PSE Confined space	ID issue Deny entry
WSUD Well & Treatment 2764 Water Ln	Prefire on file Tier 2 on file	Utilities	PSE Confined space Haz Mat	ID issue Deny entry DOT guidebook


Division 14
Tsunami
10
25
High Hazard Slide Area
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N
0 0.375 0.75 1.5 2.25 Miles
Elementary School Burley Glen
PO Airport Hangars
SKFR S14
Overpass Burley Olalla Rd (West)
Overpass Burley Olalla Rd (East)
Bridge East Oak St
US Post Office
Elementary School / ECAP - Olalla Valley ECAP
CenturyTel Port Orchard
Bridge East Fenton Rd
Bridge Spruce Rd
US Post Office
SKFR S13
Bridge Crescent Valley Rd
SE Burley Olalla Rd
SE Mullenix Rd
SE Olalla Valley Rd
SE Fragaria Rd
SE Willock Rd
SE Nelson Rd
SW Pine Rd
SW Spruce Rd
144th St NW
Olalla
Banner Forest Heritage Park
Long Lake
Bandix Dog Park
Horseshoe Lake Golf Course
Crescent Valley Rose Pit

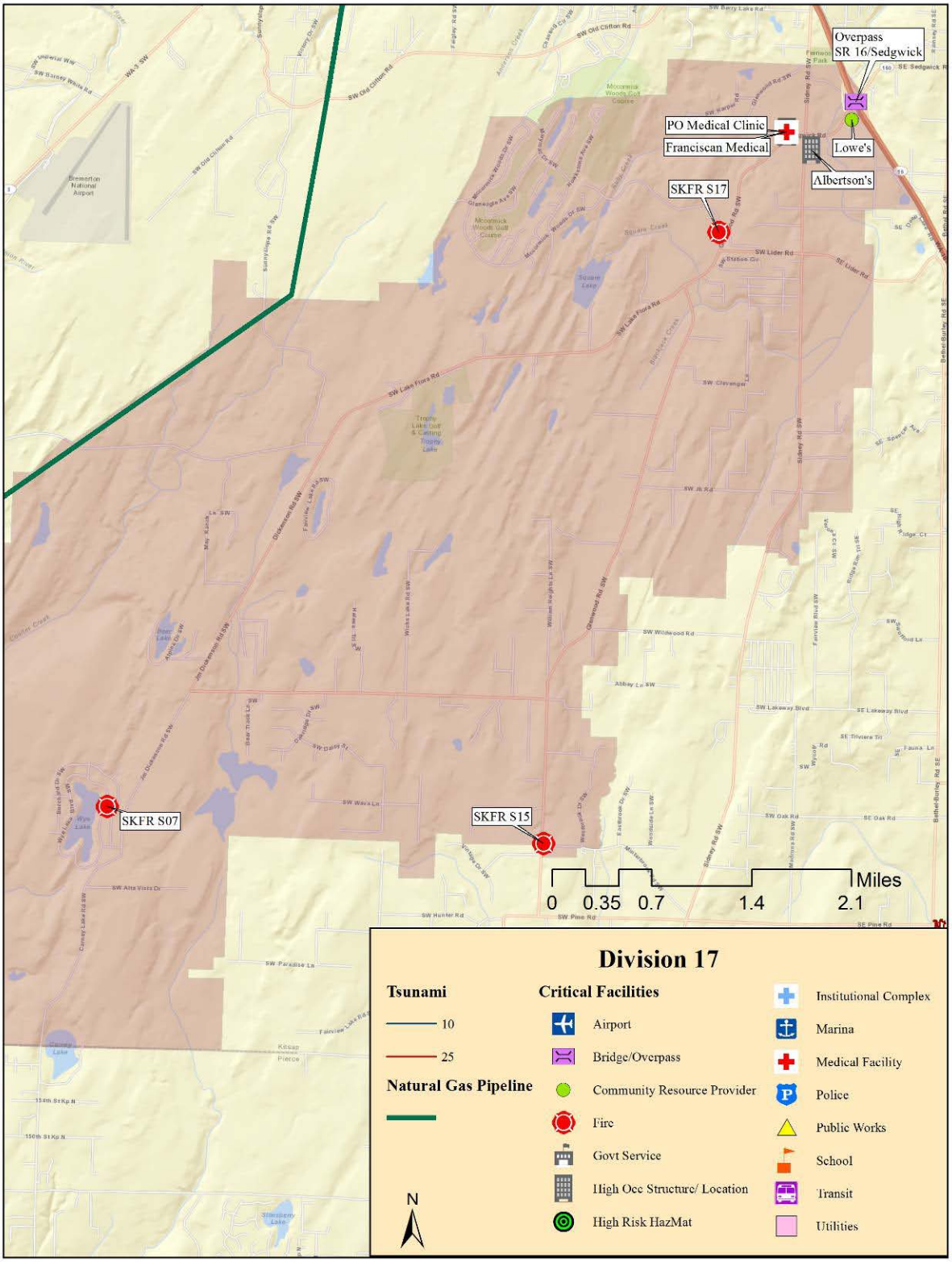
Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Bridge - Crescent Valley Rd S of Banner	DEM Priority 2	Bridge	DEM Kitsap road dept	Control access
Bridge - East Fenton Rd E of Bethel Burley	DEM Priority 2	Bridge	DEM Kitsap road dept	Control access
Bridge - East Oak St E of Bethel	DEM Priority 2	Bridge	DEM Kitsap road dept	Control access
Bridge - Spruce Rd W of Bethel Burley	DEM Priority 1	Bridge	DEM Kitsap road dept	Control access
CenturyTel Port Orchard Co. 14199 Colony Ave	Tier 2 on file	Utilities	Company rep contact	ID issue Fire control systems DOT guidebook
Elementary School - Burley Glen 100 Lakeway Blvd	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Elementary School ECAP - Olalla Valley 6100 Denny Bond Blvd	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Overpass - Burley Olalla Rd (East) SR 16 Burley Olalla	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
Overpass - Burley Olalla Rd (West) SR 16 at Burley Olalla - West	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
PO Airport Hangars 12300 Sidney Rd	Prefire on file DEM Priority 3	Airport Airport	Alarm upgrade Haz Mat	Scene control
SKFR S13 5770 Nelson Rd	Prefire on file DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene

SKFR S14 12685 Bethel Burley Rd	Prefire on file DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
US Post Office 14831 Burley Ave		Govt Service	Alarm upgrade MCI DEM , KCSO	Manage scene Evacuation
US Post Office 6030 Burley Olalla Rd		Govt Service	Alarm upgrade MCI DEM , KCSO	Manage scene Evacuation

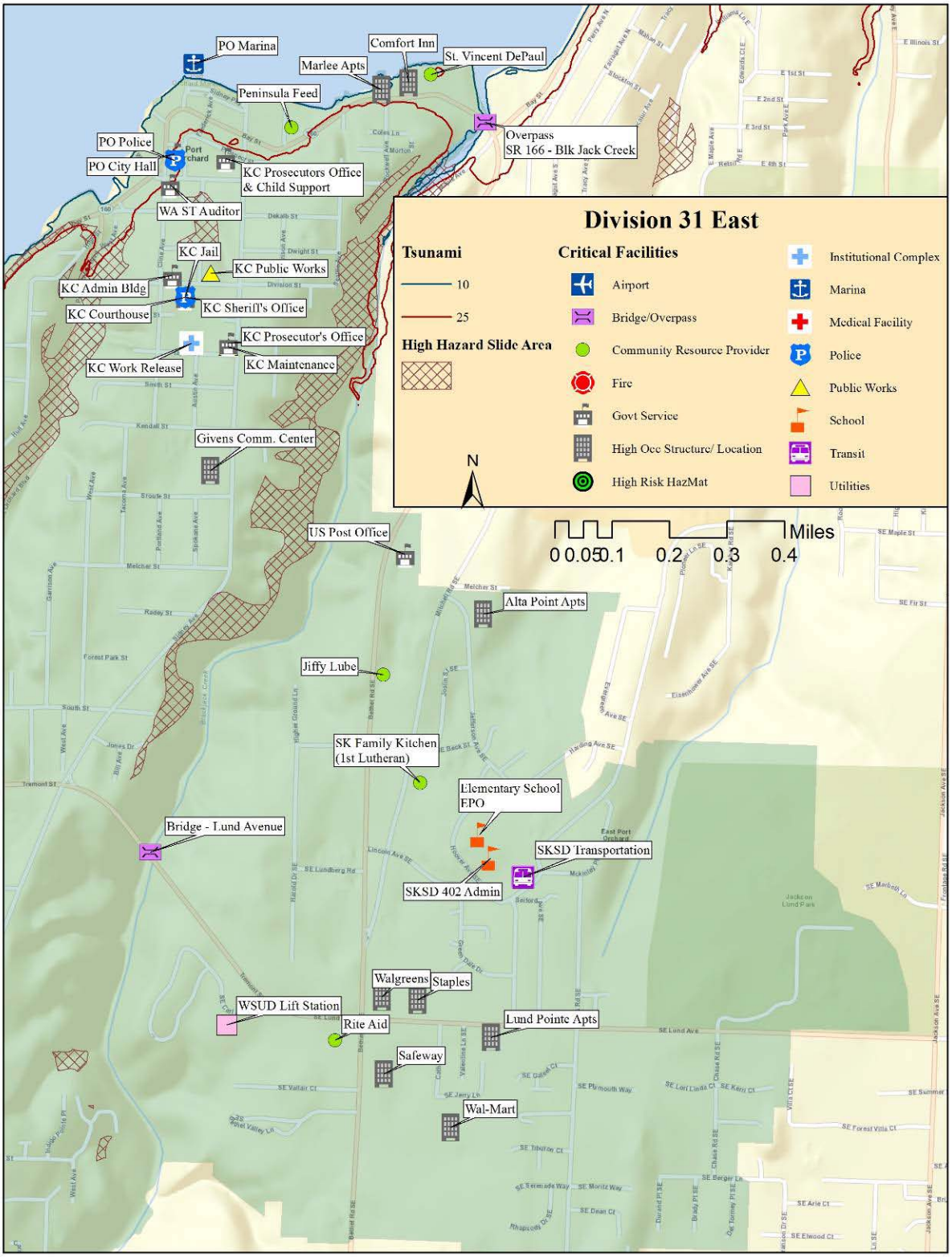

Division 16
Tsunami
10
25
Natural Gas Pipeline
High Hazard Slide Area
N
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
0 0.45 0.9 1.8 2.7 Miles
SKFR S20
US Post Office
Kitsap Lumber
West Hills Elementary School
Air Gas Nor-Pac
Sunn Fjord Condo
Panorama Apts
Sinclair View Condominiums
Sherman Heights Apts
See Insert For Gorst
Overpass SR 16
Leader Intl
Bridge West Belfair Valley
CenturyLink Sunnyslope
Elementary School / ECAP Sunnyslope
Sunnyslope Water District
SKFR S06
Bonneville Power Admin (BPA)
Bridge Gorst Creek
Overpass SR 16
SKFR S16
Overpass N-S Ramp SR 16

Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Air Gas Nor-Pac 912 National Ave	Prefire on file Tier 2 on file	High Risk HazMat	Alarm upgrade Haz Mat DEM	Manage scene DOT guidebook Evacuation Site liaison
Bonneville Power Admin (BPA) 3621 Solid Ln	Prefire on file DEM Priority 2	Electrical Provider Utilities	BPA, PSE Company rep contact Haz Mat	ID issue Deny entry Site liaison
Bridge - Gorst Creek SR 3 near SR 16 Junction	DEM Priority 3	Bridge	DEM Kitsap road dept KCSO	Control access
Bridge - West Belfair Valley Minard -Wilkinson	DEM Priority 1	Bridge	DEM Kitsap road dept KCSO	Control access
Cascade Natural Gas Corp - Pipeline		Utilities	Alarm upgrade Haz Mat Company rep contact DEM	Evacuation Manage scene DOT guidebook Site liaison
Century Link Sunnyslope Co. 4032 Sunnyslope Rd	Tier 2 on file	Utilities	Alarm upgrade Haz Mat Company rep contact DEM	ID issue DOT guidebook Fire control systems
Elementary School / ECAP - Sunnyslope 4183 Sunnyslope Rd	Prefire on file DEM Priority 2	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Elementary School - West Hill 520 National Ave	Prefire on file	Public School	KCSO, WSP Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Kitsap Lumber 450 National Ave	Prefire on file	Community Resource Provider	Alarm upgrade	Scene control Site liaison
Leader Intl 1540 Leader Intl Blvd	Prefire on file	Community Resource Provider	Alarm upgrade Haz Mat	Scene control Evacuation Site liaison

Overpass - N-S Ramp SR 16 SR 16 at SR 3	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
Overpass - SR 16 SR 3 at SR 16 Gorst	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
Overpass - SR 166 SR 16 at SR 166 Bay Street	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
Panorama Apts 1617 Admiralty Heights Ln	Prefire on file	High Occupancy Structure - Location	KCSO, WSP Alarm upgrade	Evacuation Buses for shelter Site liaison
Sherman Heights Apts 4606 Sherman Heights Rd	Prefire on file	High Occupancy Structure - Location	KCSO, WSP Alarm upgrade	Evacuation Buses for shelter Site liaison
Sinclair View Condominiums 2250 Highview	Prefire on file	High Occupancy Structure - Location	KCSO, WSP Alarm upgrade	Evacuation Buses for shelter Site liaison
SKFR S06 6170 Rhododendron Dr	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKFR S16 4058 State Hwy 3	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKFR S20 1550 Rocky Pt Rd	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
Sunn Fjord Condo 1730 Sunn Fjord	Prefire on file	High Occupancy Structure - Location	KCSO, WSP Alarm upgrade	Evacuation Buses for shelter Site liaison
Sunnyslope Water District 4401 Sunnyslope Rd	DEM Priority 2	Water Provider Utilities	Company rep contact Haz Mat Confined space	ID issue Fire control systems Site liaison
US Post Office 200 National Ave	Prefire on file	Govt Service	Alarm upgrade MCI DEM , KCSO	Manage scene Evacuation Site liaison


Overpass
SR 16/Sedgwick
PO Medical Clinic
Franciscan Medical
Lowe's
Albertson's
SKFR S17
SKFR S07
SKFR S15
Miles
0 0.35 0.7 1.4 2.1
Division 17
Tsunami
10
25
Natural Gas Pipeline
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N

Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Albertson's 370 Sedgwick Rd	Prefire on file DEM Priority 2	Grocery Store High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
Cascade Natural Gas Corp - Pipeline		Utilities	Alarm upgrade Haz Mat Company rep contact DEM	Evacuation Manage scene DOT guidebook Site liaison
Franciscan Medical 451 Sedgwick Rd	Prefire on file DEM Priority 2	Medical Facility High Occupancy Structure - Location	POPD, KCSO Alarm upgrade DEM MCI response	Evacuation Manage scene Large area search Site liaison
Lowe's 150 Sedgwick Rd	Prefire on file	Community Resource Provider	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
Overpass - SR 16 SR 160 at SR 16	DEM Priority 1	Overpass	DEM WSDOT WSP	Control access
PO Medical Clinic 451 Sedgwick Rd	Prefire on file Tier 2 on file	Medical Facility	POPD, KCSO Alarm upgrade DEM MCI response Haz Mat	Evacuation Manage scene Large area search DOT guidebook Site liaison
SKFR S07 7651 Sylvan St	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKFR S15 13591 Glenwood Rd	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKFR S17 7990 McCormick Woods Dr	DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene


PO Marina
Comfort Inn
St. Vincent DePaul
Marlee Apts
Peninsula Feed
Overpass
SR 166 - Blk Jack Creek
PO Police
PO City Hall
KC Prosecutors Office
& Child Support
WA ST Auditor
KC Jail
KC Public Works
KC Admin Bldg
KC Courthouse
KC Sheriff's Office
KC Prosecutor's Office
KC Work Release
KC Maintenance
Givens Comm. Center
US Post Office
Alta Point Apts
Jiffy Lube
SK Family Kitchen
(1st Lutheran)
Elementary School
EPO
Bridge - Lund Avenue
SKSD Transportation
SKSD 402 Admin
Walgreens
Staples
WSUD Lift Station
Rite Aid
Lund Pointe Apts
Safeway
Wal-Mart
Division 31 East
Tsunami
10
25
High Hazard Slide Area
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
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0 0.05 0.1 0.2 0.3 0.4
Miles


PO Public Works Shop
Mutual Materials
Ferrellgas
Evergreen Lumber
Peninsula Work Release
KC Juvenile Det Ctr
Overpass Tremont St (East)
Overpass Tremont St (West)
Farrell's Pharmacy
The Doctor's Clinic
SK Urgent Care Bldg
Group Health
Bethany Lutheran Church & School
SKFR S31
Orchard Pointe Memory Care
Stafford Suites
Arbor Terrace Apts
Cedar Heights Apts
Sydney House
Heritage Apts
Orchard Pointe Apts
Life Care Center
Public Works South Shed
Ridgemont Terrace Apts
Stafford at Ridgemont
Jr High - Cedar Hts
Orchard on the Green Apts
Overpass Sidney Rd (North)
Century Link Network Switching
Overpass (South)
Elementary School - Sid Glen
0 0.125 0.25 0.5 Miles
Division 31 West
Tsunami
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25
High Hazerd Slide Area
Critical Facilities
Airport
Bridge/Overpass
Community Resource Provider
Fire
Govt Service
High Occ Structure/ Location
High Risk HazMat
Institutional Complex
Marina
Medical Facility
Police
Public Works
School
Transit
Utilities
N

Site Name Address	Prefire on file Tier 2 on file DEM Priority	Site Characteristics	Resource Considerations	Initial Action Considerations
Alta Point Apts 2099 Jefferson Ave	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Arbor Terrace Apts 1800 Sidney Ave	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Bethany Lutheran Church & School 151 Tremont St	Prefire on file DEM Priority 2	Private School	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison
Bridge - Lund Avenue between Sidney - Bethel	DEM Priority 1	Bridge	DEM POPD POPW	Control access
Cedar Heights Apts 333 Lippert Dr	Prefire on file DEM Priority 2	Apt Complex High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Century Link Network Switching 2386 Sidney Ave	Prefire on file Tier 2 on file DEM Priority 2	Telephone Provider Utilities	Company rep contact Haz Mat	ID issue Fire control systems DOT Guidebook Site liaison
Comfort Inn 1121 Bay St	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Elementary School - EPO 2649 Hoover Ave	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Elementary School - Sidney Glen 500 Birch Rd	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
Evergreen Lumber 1325 Lloyd Pky	Prefire on file	Community Resource Provider	Alarm upgrade	Scene control

Farrell's Pharmacy 450 South Kitsap Blvd	Prefire on file	Community Resource Provider	Alarm upgrade Haz Mat	Manage scene Site liaison
Ferrellgas 1405 Lumsden Rd	Prefire on file Tier 2 on file	High Risk HazMat	Alarm upgrade Haz Mat POPD Company rep	Manage scene ID issue Evacuation DOT guidebook Site liaison
Givens Community Center 1026 Sidney Ave	Prefire on file DEM Priority 2	Comm Center High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit DEM	Evacuation Buses for shelter Large area search Crowd control
Group Health 1400 Pottery Ave	Prefire on file DEM Priority 2	Medical Facility	POPD, KCSO Alarm upgrade Haz Mat	Evacuation Manage scene Site liaison
Heritage Apts145 Lippert Dr	DEM Priority 2	Apt Complex High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Jiffy Lube 2253 Bethel Ave	Prefire on file Tier 2 on file	Community Resource Provider	Haz Mat Confined space	Manage scene ID issue LS/IS/PC
Jr High - Cedar Hts 2220 Pottery Ave	Prefire on file DEM Priority 2	Public School	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation Buses for shelter Unified Comm Site liaison Parent POC
KC Admin Bldg 619 Division St	Tier 2 on file	Govt Service	DEM KCSO, POPD Alarm upgrade MCI	Evacuation Shelter in place Buses for shelter Site liaison
KC Courthouse 614 Division St	Prefire on file Tier 2 on file	Govt Service	DEM KCSO, POPD Alarm upgrade MCI	Evacuation Shelter in place Buses for shelter Site liaison
KC Jail 614 Division St	Prefire on file DEM Priority 1	Police Station	POPD, KCSO DEM Alarm upgrade Kitsap transit	Evacuation Crowd control Search and rescue Unified comm. Site liaison

KC Juvenile Detention Center 1338 Old Clifton Rd	Prefire on file DEM Priority 2	Govt Service Institutional Complex	POPD, KCSO DEM Alarm upgrade	Evacuation Crowd control Search and rescue Unified comm. Site liaison
KC Maintenance 717 Taylor St	DEM Priority 1	Public Works Facility	Alarm upgrade Haz Mat	ID issue Manage scene
KC Prosecutors Office & Child Support 730 Prospect St	DEM Priority 2	Govt Service	DEM KCSO, POPD Alarm upgrade MCI	Evacuation Shelter in place Buses for shelter Site liaison
KC Prosecutor's Office 715 Sidney Ave	Prefire on file DEM Priority 1	Govt Service	DEM KCSO, POPD Alarm upgrade MCI	Evacuation Shelter in place Buses for shelter Site liaison
KC Public Works 507 Austin Ave	Prefire on file DEM Priority 1	Public Works Facility	DEM KCSO, POPD Alarm upgrade MCI	Evacuation Shelter in place Buses for shelter Site liaison
KC Sheriff's Office 614 Division St	Prefire on file DEM Priority 1	Police Station	DEM KCSO, POPD Alarm upgrade MCI	Evacuation Shelter in place Buses for shelter Site liaison
KC Work Release 661 Taylor St	Prefire on file DEM Priority 2	Govt Service Institutional Complex	POPD, KCSO DEM Alarm upgrade	Evacuation Crowd control Search and rescue Unified comm. Site liaison
Life Care Center 2031 Pottery Ave	Prefire on file DEM Priority 2	Skilled Nursing Home Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Lund Pointe Apts 3300 Valentine Ln	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Marlee Apts 1029 Bay St	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison

Mutual Materials 1515 Vivian Ct	Prefire on file Tier 2 on file	Community Resource Provider	Alarm upgrade	Scene control
Orchard on the Green Apts2250 Sidney Ave	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Orchard Pointe Apts 200 Lippert Dr	Prefire on file	High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Kitsap transit	Evacuation Buses for shelter Site liaison
Orchard Pointe Memory Care 300 South Kitsap Blvd	Prefire on file DEM Priority 2	Alzheimer's & Dementia Care Facility - Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Overpass - Sidney Rd (North) SR 16 over Sidney - Pottery	DEM Priority 1	Overpass	WSDOT WSP DEM	Control access
Overpass - Sidney Rd (South) SR 16 over Sidney - Pottery	DEM Priority 1	Overpass	WSDOT WSP DEM	Control access
Overpass - SR 166 Black Jack Crk	DEM Priority 1	Overpass	DEM POPW, POPD	Control access
Overpass - Tremont St (East) SR 16 at Tremont	DEM Priority 1	Overpass	WSDOT WSP DEM	Control access
Overpass - Tremont St (West) SR 16 at Tremont	DEM Priority 1	Overpass	WSDOT WSP DEM	Control access
Peninsula Feed 901 Bay St	Prefire on file	Community Resource Provider	Alarm upgrade Haz Mat POPD	Control scene ID issue LS/IS/PC
Peninsula Work Release 1340 Lloyd Pky	Prefire on file	Institutional Complex	POPD, KCSO DEM Alarm upgrade	Evacuation Crowd control Site liaison Unified comm.
PO City Hall 216 Prospect St	Prefire on file DEM Priority 1	Govt Service	POPD DEM Alarm upgrade Haz Mat	Evacuation Unified comm. ID issue Site liaison

PO Marina 707 Sidney Pky		Marina	POPD, KCSO boats USCG, PSNS Kitsap Transit	Unified Com Patient care MCI tracking Site liaison
PO Police 546 Bay	Prefire on file DEM Priority 1	Police Station	POPD DEM Alarm upgrade Haz Mat	Evacuation Unified comm. ID issue Site liaison
PO Public Works Shop 1535 Vivian Ct	DEM Priority 1	Public Works Facility	Alarm upgrade Haz Mat	Manage scene ID Haz Mat
Public Works South Shed 2051 Sidney Ave	DEM Priority 1	Public Works Facility	Alarm upgrade Haz Mat	Manage scene ID Haz Mat
Ridgemont Terrace Apts 2049 Pottery Ave	Prefire on fileDEM Priority 2	Asst Living Facility - Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Rite Aid 3282 Bethel Rd	Prefire on file DEM Priority 3	Business - Pharmacy Community Resource Provider	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
Safeway 3355 Bethel Rd	Prefire on file DEM Priority 2	Grocery Store - Pharmacy High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
SK Family Kitchen (1st Lutheran) 2483 Mitchell Ave	Prefire on file DEM Priority 3	Feeding Site Community Resource Provider	Alarm upgrade	Evacuation Crowd control
SK Urgent Care Bldg 450 South Kitsap Blvd	Prefire on file DEM Priority 2	Medical Facility	POPD, KCSO Alarm upgrade Haz Mat	Evacuation Manage scene Site liaison
SKFR S31 200 Tremont St	Prefire on file DEM Priority 1	Fire Station	Alarm upgrade	Evacuation Manage scene
SKSD 402 Admin 2689 Hoover Ave	Prefire on file DEM Priority 2	School - Admin	Alarm upgrade DEM	Manage scene Evacuation Site liaison
SKSD Transportation 2710 Lincoln Ave	Prefire on file	School - Transit	Alarm upgrade DEM Haz Mat	Manage scene Evacuation ID issue

St. Vincent DePaul 1209 Bay St	Prefire on file	Community Resource Provider	POPD, KCSO Alarm upgrade MCI response	Evacuation Manage scene Large area search Site liaison
Stafford at Ridgemont 2051 Pottery Ave	Prefire on file DEM Priority 2	Skilled Nursing Home - Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Stafford Suites 1761 Pottery Ave	Prefire on file DEM Priority 2	Skilled Nursing Home - Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
Staples 1805 Lund Ave	Prefire on file DEM Priority 2	Business High Occupancy Structure - Location	POPD, KCSO Alarm upgrade	Evacuation Crowd control Manage scene
Sydney House 155 Lippert Dr	Prefire on file DEM Priority 3	Skilled Nursing Home - Institutional Complex	POPD, KCSO Alarm upgrade MCI response DEM	Evacuation or Shelter in place Buses for shelter Site liaison
The Doctor's Clinic 450 South Kitsap Blvd	Prefire on file DEM Priority 2	Medical Facility	POPD, KCSO Alarm upgrade Haz Mat	Evacuation Manage scene Site liaison
US Post Office 1125 Bethel Ave	Prefire on file DEM Priority 2	Govt Service	Alarm upgrade MCI DEM , KCSO	Manage scene Evacuation Site liaison
WA ST Auditor 600 Kitsap St	Prefire on file	Govt Service	Alarm Upgrade POPD	Manage scene
Walgreens 3099 Bethel Rd	Prefire on file DEM Priority 3	Business - Pharmacy High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search
Wal-Mart 3497 Bethel Rd	Prefire on file DEM Priority 2	Business - Pharmacy High Occupancy Structure - Location	POPD, KCSO Alarm upgrade Haz Mat MCI response	Evacuation Manage scene Large area search Site liaison
WSUD Lift Station 1350 Carl Pickel		Utilities	PSE Confined space	ID issue Deny entry